O in the Oaks '11 Course Setters' Notes

General Comments that Apply to Saturday and Sunday

Introduction

Welcome to Pacheco State Park. This is BAOC's second A-meet on our relatively new Pacheco map; this time we are visiting the park in the springtime. Now that the weather has gotten nice the wild flowers are peaking. You could not have chosen a more colorful time to visit this park. (On both Saturday and Sunday there will be a park naturalist present, giving tours, if you are interested.)

Pacheco is hilly, and courses will have climbs typical of the Bay Area — but previous experience suggests that it is fast, and likely will produce some of the fastest (climb adjusted) minutes-per-kilometer times of any Bay Area venue. The terrain is a mixture of lightly wooded and open, with pockets of rock detail, almost no fight or poison oak, and filled-in reentrant bottoms that provide running corridors and add interesting new options to route choices not typical of Bay Area terrain. Photographs of the terrain can be found at http://tinyurl.com/yjd6ojz (the password is "guest").

Because of the fast terrain, we've lengthened the courses to meet standard winning times. While we expect the terrain to favor the faster and fit orienteers, we have designed route choices and included pockets of complexity that should reward orienteers that can shift gears quickly and apply the appropriate thought and care to each leg of the course. We expect courses to favor fit orienteers that are also good navigators.

Model Event

There is a model event set up near the parking lot. (Please consult the event schedule to see when the model event is open.) The model event is set in an area that is more open than the terrain you will see on your courses. Nevertheless, it provides a good opportunity to look at the mapping conventions. Pay close attention to the mapping of lone trees and copses, which is discussed further below, and will be present throughout your courses.

Mapping

All the courses will be printed at 1:10000 with 5-m contours. The next few sections give some advice on interpreting the Pacheco map.

Reentrants

As mentioned already, the reentrant bottoms are open and very passable. Figure 1 (on the last page of these notes), shows a sample of a reentrant bottom that is on a route choice for several courses. (It's only a choice, no guarantee you'll actually take this route!) Because the area is high and dry, there is not the usual run-off that creates the steeply notched reentrants that are more common on Bay Area maps. You'll find these reentrants easy to cross and easy to use as hand-rails and running corridors.

This creates another significant route choice on some of the legs on the courses. Whereas in many Bay Areas venues you might worry about finding good reentrant crossings (and you certainly wouldn't think of running in a reentrant bottom), at Pacheco these reentrants

will add an additional dimension to the route choices, for example, you could contour a hillside, climb to a ridge line, or drop to a reentrant bottom.

Because of the novelty of the reentrants at Pacheco, and their potential impact on route choice, we should say a few more words. In many locations, the very bottom of the reentrant has leveled out with a mixture of dirt and small boulders, and the deer and elk have added trails, either directly in the bottom or on the nearby sides of the reentrants. However, for route-choice purposes you should not consider reentrant bottoms to be as fast as running in an open field; there are enough small rocks that you will have to watch your footing and run at slightly less than full speed (e.g., 80% – 90%). Where there is rock complexity shown near the reentrant bottom (e.g., at the north or south end of the reentrant in Figure 1), this also translates to additional rock material in the bottom of the reentrant. It is still very passable, but you will need to slow further (e.g., 50% – 80%), or use the nearby hillsides to bypass these areas.

Mapping of Lone Trees

A distinct lone tree is mapped as a green circle. This mapping is based on the tree standing out when viewed in the terrain. It is not necessarily based on a tree's physical size — small trees can also be mapped as lone trees — but mostly based on its distance to neighboring trees. When the trees are too close together, the mapper has shifted to using white area symbols with a distinct boundary (small black dots) on the borders of these white areas. The middle frame of Figure 2 (on the last page of these notes) illustrates the typical mapping convention for Pacheco State Park.

In areas like Pacheco, with predominantly large oak trees, this can create some ambiguity in how the oaks are mapped. Figure 2 shows three possible ways of mapping the same hilltop. An orienteer approaching the hilltop will not necessarily be able to see a one-to-one correspondence between trees in the field and trees on the map (shown on the left frame of Figure 2). Far more likely, the orienteer will find the situation in the middle frame, where only some of the trees seen in the terrain will be shown individually on the map. On almost all the courses at Pacheco, care must be taken when matching the larger oak trees with the map.

Also note that the small black dots on the boundary of the white areas help improve the readability of the map, where white can otherwise blend easily with yellow. However, in areas of rocky ground the black dots can become confusing. Regular spacing indicates a vegetation boundary.

For controls on a single tree (green circle on the map) the control description uses a lone tree symbol. For controls a small group of trees (small white area on the map) the control description uses a copse symbol (although the trees may still be distinct in the field they are not distinct on the map). For controls on the edge of a larger group of trees (a large white area on the map) the control description uses the vegetation boundary symbol.) Examples of these conventions can be found on the model event map.

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Mapping of Brush

The Pacheco map contains very little fight. In areas where there are scattered bushes, the mapper has used scattered green dots. These bushes do not significantly affect runnability; otherwise the mapper would use fight (green area) or undergrowth (green lines). In areas of multiple dots (see the center of Figure 3 on the last page of these notes), these green dots should be treated in a manner similar to rocky-ground black dots — they are not meant to map individual bushes, instead their density on the map corresponds roughly to their density in the terrain. Unless they are *isolated* green dots, the orienteer should not try to match green dots with individual features in the field.

Boulders

In the more complex areas, the mapper has applied a 1-meter threshold to determine which boulders and cliffs are mapped. Elsewhere, isolated boulders might be mapped at a lower threshold (e.g., as low as 0.5 m). Be warned that on the hillsides, from above or below, it may be hard to judge boulder height. While the open woods will give you lots of visual information for navigation, making it possible to successfully use rock detail for navigation, if you ever disconnect from the map the mapping threshold can make it difficult to reconnect based on identifying rock features.

Proximity of Controls

We have followed IOF standards: no controls are closer than 30 meters, and controls on similar features are at least 60 meters apart. This is closer than OUSA standards, so please be careful to check your control codes.

Wildlife

Keep your eyes open and you may get to see a variety of wildlife. While course setting we have seen a bobcat (size of a small dog — he was hunting a ground squirrel), a boar (woke him up on a hilltop — he turned and ran), two rattlesnakes (see the Safety section), coyotes (they will slink away as soon as they see or hear you), deer, hawks, ground squirrels, song birds, frogs, and a herd of elk (six of these guys running on a hillside makes a lot of noise).

Natural Springs – Frog Habitat

In a few reentrant bottoms, there are natural springs that are habitats for frogs. Assuming it is not raining, please follow this rule: **Stay on dry ground.** That is, avoid running through puddles and muddy patches that could be a frog habitat.

Cattle

Cattle are regularly grazed in the areas used by the courses. We have made arrangements so that most of the cattle should be grazing in different paddocks than the area used by the courses. If you do see cattle, they are docile, but try to avoid approaching them, they will be encountering many more people than usual.

Start Procedure

The start sequence will be the same both days

Clear and check your e-stick when you arrive in the Start area.

T-4 minutes. (*Call Up*): Report to the call-up line. You'll be asked to check again in a special check unit (this ensures we have a record of all starters in one unit). You may obtain an extra copy of the control descriptions for your course at the call-up line (they will also be printed on the map).

T-2 minutes. (*Move to Start*): At two minutes before your start time you will move forward a short distance to the start line. Go to the bin for your course, and write your name and bib number on the back of the map. Leave the map in the bin. You may ask a meet worker to verify that the map is for the correct course, but **do not look at the map.** Please be aware that there are two Green courses and make sure you are on the correct course.

T minutes. (*Move to Start*): Pick up your map and punch the start unit. There may be more competitors than start units---let the faster runners punch first. Your time will begin when you punch this unit. There will be a short distance (<20 meters) to the start triangle, immediately ahead. The triangle will be shown on the ground. You must go first to this start triangle. (There is no advantage to be gained from avoiding this triangle, and it will help hide your departing direction from other waiting competitors.)

Please be on time for your start. It will help the start crew greatly if you are there for your scheduled start. If you miss your start, unlike the common international practice, we will not penalize you. You will get a new start time, but because of the popularity the start window is tightly scheduled and you will likely have to queue up for a wait for a new start time.

Safety

Rattlesnakes

There are rattlesnakes in the park. They will not attack easily, and you are likely to hear a warning before they strike. In the rare case you are bitten, avoid any additional exercise (to slow the spread of venom), and use your safety whistle to summon other orienteers to help you.

Ticks and Lyme Disease

We have not seen ticks while course setting, but some of the ticks in this area carry Lyme disease (ref. http://baoc.org/wiki/FAQ/What_is_Lyme_Disease%3F). Check after you orienteer, and if you find a tick, remove it quickly. Lyme disease can manifest with diverse, inconclusive, and easily confused symptoms, so if you do have tick bites, alert your doctor to your possible exposure to Lyme disease.

Mountain Lions

These are rarely ever seen, but they are active in the hills around the Bay Area. If you do see a mountain lion, **do not run** from the mountain lion or you risk triggering its pursuit response. Instead make yourself appear as large as possible, and back slowly away.

Poison Oak

There are only a few bushes of poison oak that we have come across in the park. It is easily avoidable.

Loose Rocks – Watch Your Ankles

There are areas of loose rock in the park, and they are sometimes hiding under the tall grasses. This can be true on hillsides as well as reentrant bottoms. Pay attention. Turning an ankle is not good for your time.

Whistles

Every entrant must carry a whistle in case of an emergency. If you do not have one, they are available free at registration.

Please note that whistles are not toys. They should be blown **only** to signal an emergency.

The emergency signal is three short blasts, repeated every minute.

Orienteers hearing an emergency call are **required** to respond.

Saturday Middle Distance Courses

Course Setters:
> Dan Greene, Derek Maclean

Vetters:
> Kelly Wells, Rory Maclean

Course Consultant:
> Francis Hogle

Time Limit: 3 hours

Safety Bearing: North until you hit a road — follow it to the parking lot at the north end of the park.

Course Statistics

Course	Length	Climb	Controls	Winning Time (100-pt runner)
White	2.1 km	90 m	12	
Yellow	2.2 km	100 m	13	
Orange	3.7 km	160 m	12	35 min
Brown	3.2 km	125 m	11	30 min
GreenX	3.9 km	200 m	12	35 min
GreenY	3.7 km	200 m	13	35 min
Red	5.0 km	260 m	17	40 min
Blue	5.7 km	320 m	17	40 min

Start

There is a separate Start for White and Yellow that is 150 meters from the registration area. Go South through the gate, and then turn immediately West. Follow the yellow flagging 150 meters to your Start.

All other orienteers (Intermediate and Advanced) have a walk of 1.3 km (50 meters climb) to reach your Start. From the registration area go South through the gate and continue South following the orange/red flagging. Allow approximately 20 minutes.

We expect good weather so there is no clothing return from the Start. If it is rainy or unusually cold we will provide clothing return.

Warm-Up

As you leave the registration area, the area of the model map, on your left, is available for warm-up. Once you get further along towards the start you are entirely within the area of the courses, so you can warm-up only within a narrow 20 meters corridor of your route to the Start.

Finish

The Finish is a 350-meter, flat walk from the registration area. Spectators wishing to go directly to the Finish should proceed southwest on the gravel road for 300 meters to the first gate on the left. There is a natural, open bowl where the Finish can be viewed.

Course-Specific Notes

White and Yellow

Please be careful to go to the White/Yellow Start; it is within sight of the registration area, only a short, 150-meter walk up a hill to the southwest.

Unlike most White courses that follow trails, the first half of the Pacheco middle white course will follow a fence. This is a linear feature like a trail; in fact, it's even easier to follow than a trail. Just keep the fence within sight on your right side. From control number 4 to 5, there is a short flagged rout: at control 4 follow yellow streamers in the trees and short yellow flags in the ground for approximately 90 meters until you reach control 5. We hope you will enjoy this route along the fence; it has great views of the park.

Orange, Brown, GreenX, GreenY, Red, Blue

All the advanced courses will offer a good mix of orienteering techniques. Some sections will be extremely fast, rewarding good map simplification and route choice skills, while other sections will require care with technical detail. Be prepared to adjust your technique multiple times throughout your course.

We recommend reading the earlier section on lone trees and copses. All of the advanced courses have these as control sites, and it is also helpful to know this mapping convention when you are navigating between control sites.

The middle courses have packed many controls into some of the more detailed areas of the map. Be careful, do your own navigation, other orienteers may be going to nearby controls. Be especially careful to check the control codes as you punch.

If there are no cattle in the area, we will tie open the more commonly used gates on your courses. You do not need to close these gates; the control pick-up crew will close them later.

Sunday Long Distance Courses

Course Setters:
>   Tapio Karras, Toby Ferguson
Vetters:
>   Kelly Wells
Course Consultant:
>   Francis Hogle
Map Extensions:
>   Bob Cooley

Time Limit: 3 hours

Safety Bearing: North until you hit a road — follow it to the parking lot at the north end of the park.

Course Statistics

Course	Length	Climb	Controls	Winning Time (100-pt runner)
White	3.1 km	90 m	14	
Yellow	3.6 km	135 m	17	
Orange	6.6 km	325 m	16	60 min
Brown	4.9 km	225 m	14	55 min
GreenX	6.3 km	335 m	15	65 min
GreenY	6.3 km	335 m	17	65 min
Red	9.1 km	480 m	23	80 min
Blue	11.4 km	690 m	30	90 min

General Comments

These are true long courses with expected winning times for 100-point runners to match OUSA guidelines. The courses are designed to provide a mix of long and short legs. The focus in this park tends to be on large-scale route choice and execution, as opposed to detailed technical orienteering. Even having poured over the map for several hours we still aren't sure which the most competitive routes are, so it'll be interesting for us all to see how you do out there! Be sure to enter your routes to our RouteGadget afterwards.

To reduce the climb, all courses start high and stay high for the first few bags. However, be warned, some of the valleys are very deep, and the end of the course is a climb for virtually everyone. Depending on the temperatures you might wish to think through energy conservation and plan accordingly. We think it unlikely that the person with the shortest splits at the beginning will also be the person who wins their class!

Start and Finish

There is a single Start and Finish for all courses. The streamered route to the Start is 1.5 km long and includes a notable amount of climb. Allow 30 minutes to reach the Start.

The Finish is right next to the main parking lot, so clothing and other items can be left there and picked up at the end.

Warm-Up

Your warm up area is anywhere on the walk in - once you get to the Start then if you need to warm up you'll have to turn around and run back the way you came. But we think the walk to the Start will get your heart a little elevated, both in pace and altitude!

Water

There is ample water for everyone at the Start. Drink it and enjoy the wonderful scenery! It'll save us having to carry the water back! Likewise at the Finish.

There is no water on the White/Yellow courses, but the courses aren't so long that you'll dehydrate before getting to the Finish.

Orange and all advanced courses share the final water station (close to an Orange control) on a linear feature. We've split the water to either end of the feature and duplicated the water symbols appropriately placed on the map.

All other water stations are at controls on specific courses, marked appropriately with the water symbol in control descriptions.

Course Specific Notes

White & Yellow Courses
There are mandatory fence crossings - White: immediately before #10; Yellow: immediately after #10. These fence crossings are through barbed wire fences. We have carefully marked where the crossing is and protected you from the barbed wire using pipe insulation. Please use these crossing points for these fences so as to avoid damage to the fence and to you!

Orange Course
This is a long course and strenuous in parts. Although we have tried to avoid the steepest climbs there is still some serious altitude to be gained, especially later in the course. So pace yourself accordingly and take water when you can get it if it's a warm day!

Brown – Red
Enjoy the courses. Everything we might say to you is included in the common information above!

Blue
There are 30 controls on the course. This is at the upper limit of the original SI-5 e-stick capacity (i.e. a stick whose number is LESS THAN 500 000). From what we know no Blue runner should be using an SI-5 stick but, just in case, the start crew will be checking
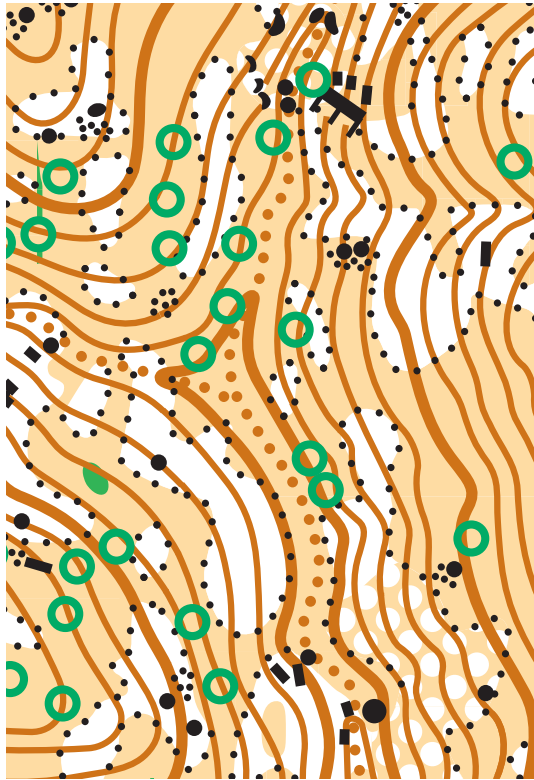
your stick at the check station at the Start. If, inadvertently, you did bring your old SI-5 then the start crew will have some SI-6 sticks for you to borrow - if this happens to you then please let the e-punch crew know when you download, and please return the SI-6 stick to us.
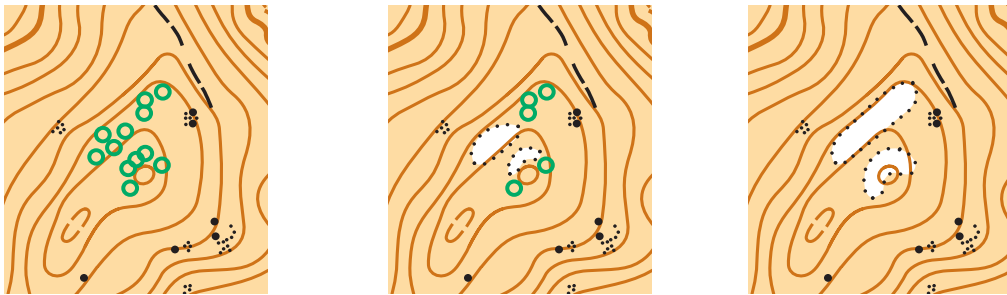
We hope you enjoy the courses!

Figures

Figure 1.
Reentrant Bottoms

Figure 2. Mapping alternatives for large oak trees

Figure 3.
Areas of green dots encode
density, not individual bushes