

Altitude Training at the Olympic Training Center in Colorado Springs

Well I haven't written in here for awhile because much didn't change. I took a couple weeks off after Lake Erie Champs and then hit the pool again. I've been much more motivated lately because I can finally see the end. But as of a few days ago, the scenery has changed. Myself and 5 other Florida State swimmers have made the journey out to Colorado Springs to train at altitude for 2 weeks. Altitude training has a lot of benefits to it. Here is some educational background for those who don't fully understand how it works.

Educational background: First off it is known that Oxygen is very important to breathe in because oxygen is used to change substrates in your body (carbs and fats (lil protein)) into useable energy form that your body uses, including your muscles... Sooo at altitude, there is less oxygen in the atmosphere. There is the same percentage, but the total barometric pressure is decreased, therefore less oxygen. Now oxygen enters the body because of a difference pressure difference of oxygen. Everything travels high to low. So higher pressure of oxygen in the air travels to the less pressure in your lungs and the oxygen is then traveled through the body by red blood cells. Hemoglobin, more specifically carries the oxygen in the red blood cells. Soooo if there is less oxygen at altitude, there is less oxygen that travels into your lungs and transported to your muscles. Training with less oxygen than normal, your body will respond and adapt to the change. To help offset the less oxygen, more hemoglobin and red blood cells are produced. Therefore, when you come down from altitude, *you will have elevated hemoglobin levels and more red blood cells then normal and your body can more efficiently utilize the oxygen then before training at altitude.* Got it? Maybe?

Day 1: The first day didn't contain much. We arrived at 8:30 at night. The sun was setting way in the distance, and the silhouette of the mountain side could barely be seen. No real difference was felt the first day. We got to our hotel and went to sleep.

Day 2: We woke up, ate, and got a ride to the Colorado Springs Olympic Training Center. This place is pretty cool. There are so many different facilities with athletes from all around the world training here. The best of the best come here to train and they are all around us. Club Wolverine, including Michael Phelps and other Olympic medalists, swims before us. Olympic level volleyball players, speed skaters, runners, cyclists, and many others are all enjoying their time up here. We are staying in a dorm with three of us in a room. The cafeteria is close by and is open all day. They have the healthiest and most variety of food that I have ever seen in a buffet line. We can eat as many times as we want, and believe me, we do. Chocolate milk, desserts, ice cream, the best meats and fish always provide us with ample energy for the long training hours.

We swim twice a day and have 2 afternoons off during the 2 weeks we are here. The first few days are meant to be easy so we can get used to the different elements and to not overload the system. It was hard to hold back on the first day because I desperately wanted to feel the difference from training up here. We kept up our volume on the first day, but the intensity was very low. Most sets were just long working on technique and getting our body adapted to the change.

Weighed 168 lbs
Swam 6400 meters

Day 3: The third day at altitude was very similar to day 2. Everything was long in morning. We did about 4000 meters of pulling. Ha-ha. We would told to take it easy, but my training partners couldn't hold back

any more and picked up the pace. It was hard, but I tried to hold myself back and take it easy. There were 3 meals in between practices. The cafeteria has three 50 inch plasma TVs that make it a very welcoming place to be.

The second practice brought a lot of descending. I finally let loose and tried working the ends of some of the descends. The feeling was quite different. It felt like the end of a mile at the end of 200. My arms were feeling very fatigued very quickly. It was not harder to breath, just harder to swim. I could tell that doing a long set would definitely hurt, but for the time being we kept the distances low. I was able to pop some good times during that practice and was hoping it didn't take too much out of me.

7700 and 7500 meters

Day 4: Yup, it did. I was definitely feeling it for morning practice. The morning practice was the first hard practice which he gave us. It was 4 x 200s, 4 x 150s, 4 x 100s, and 3 sets of 4 x 50s. Each had a short warm down after each and were all fast. My body didn't recover as fast and I felt really tight. My body couldn't hold pace. I was able to sprint well on the 100s and 50s but the longer swims got to me at the end. I'd be fine for the first half, then my body would get really tight and I would fall off a bit.

Between workouts is very chill with a lot of resting. I've been reading a book (Wheel of Time) and watching ton of movies. It's been quite nice and relaxing

The second practice came and it was a doozy. We are now swimming our hard practice at night and an easier practice at night (different than during college swimming because we are preparing for trials). Tonight's workout was only a warm up and 3 long sets that added to 7500. It wasn't too hard, but man did it destroy me. On the last set I totally hit the wall. All my energy was gone and my glycogen (stored energy) was completely depleted. I didn't have much left and relied on my technique to get me through the last set. I still held decent times but could not push any harder. Afterwards, I was cold and shivering, which is a good sign of completely depleting glycogen stores and my energy. It was a rough day overall but I'm still enjoying it. Tomorrow we have a hard practice in the morning and the afternoon off. So hopefully my body will recover.

Weighed 167 lbs

7900 and 7400 meters

Day 5: I was dead from the moment I woke up. After a good breakfast I started trying to convince myself to push through practice. Practice ended up being not that bad. It was still 7400 meters but most of it was either a long pull set or long fin set. At the end we had 3 x 100s all out and I ended up doing well. 100.9 101.2 and 59.0. I rarely ever go under a minute from a push. So I guess I wasn't as dead as I thought or just pushed through the tired pain. It's very crucial to eat and drink well. A lot of carbs and a lot of PowerAde truly help from day to day.

We finally got an afternoon off and man did it help. My body had been aching. We have done dryland in between workouts and I have gotten really sore from them. During our afternoon off we visited the Air Force Academy and the Garden of the Gods. Both were very nice, especially because it was near 80 and sunny. The campus was quite unique with many airplane replicas scattered all throughout campus (as you can imagine). They have a huge beautiful chapel there, it has 4 different religious parts in the building; Protestant, Catholic, Buddhism, and Jewish. Next, the Garden of the Gods was basically huge red clay rock formations. They were huge and I took a lot of pictures. We could have

spent all day there roaming around the place but coach didn't want us to. The view of Pike's Pike was also very nice to see. The peak is right beside Colorado Springs. We are at 6,000 ft of elevation while the peak is at 14,000 ft. It is snow capped and sticks up almost through the clouds. It was a very nice sight indeed.

7400 meters

Day 6: Day 6 brought a lot of pain. Practice was not fun... I started out really sore and tried to keep everything very long. By the time the main set came I thought I was ready to rock and roll but my body had other plans. We did 12 x 300s in sets of 4. We were supposed to hold 3:30 for 4, 3:27 for 4 and 3:20 for four. Yeah, that would have been nice, but I didn't. I felt really tight, and faded real fast. I mainly held 3:31s and got down to 3:28. My body was not working too well for me. I think the biggest element that my body is facing right now is the increased volume. At FSU, I had class Monday and Wednesday, and didn't train, and I had class Tuesday and Thursday that cut into some of the workout. So I haven't had the yardage this last semester. Plus we are going doubles on Saturday and even one practice on Sunday. I've been eating great and getting plenty of sleep but the yardage and altitude is kicking my butt.

Briefly after practice, we were videotaped underwater from a side angle. We were instructed to do a dive, swim about 30 meters, stop, rest, and then come back, do a flip turn and swim 15 meters. We got to see the footage once and it was really cool. They had about a 56 inch flat screen tv that we watched it on. A biomechanic will be analyzing our stroke over a few days and will give us advice to improve our stroke.

After a nice movie in the afternoon, we headed back to the pool. The practice wasn't too bad. I was really tight from the morning but managed to get through the workout. It was basically a really long warm-up, a long pull set, and a long fins set. It wasn't hard but it took a lot out of me.

It also snowed today. It didn't really stick but it was nice to see the flurries.

7800 and 7600 meters

Day 7: Day 7 started off really another really hard active rest set. It was 3 x 300 fast, 4 x 200s fast, and 6 x 100s fast. Each had a 100 easy in between. My coach said a mean comment to me and fired me up. I had a really good workout and I was very pleased with all my times.

Afterwards, I ate and napped the rest of the day. We came back for the afternoon practice. Again it was over 7000 of swimming, nothing too crazy. We have switched our training schedule since we got up here. We usually have a hard practice at night, and an easier one in the morning, but since we probably won't final at Olympic Trials we are trying to train ourselves to swim fast in the morning. I've always been a night swimmer so trying to go fast in the first practice of the day has been a challenge for me.

7800 and 7200 meters

Day 8: Today is Saturday, which would normally be the last practice of the week, but we have doubles and one on Sunday. Saturday morning's practice was all sprints. We did 3 x 100's all out on 1:40, 200 easy, 6 x 50s all out on :50 and a 200 easy. We did that 3 times through. I was actually really happy with

my swims. I was able to break a minute in a few of the 100s and a bunch of 50s under 30. So I was very content with the practice.

At night we were given a nice easy practice. It was only a warm-up and 3 small sets. So that was very good. I definitely needed the break.

6800 and 4500 meters

Day 9: TODAY I BROKE THE WORLD RECORD.... Not too shabby huh. Yup, I here by Steve Roof broke the world record in the 50 meter freestyle. To even top off the amazing achievement... I did it in a drag suit. Yup, that is correct. A small boy from Canton, Ohio broke the 50 world record with a time of 21.1. That's pretty quick, I know I know. The bad thing is that it was on a watch, so it won't count. But still 21.1 is fast. The record is (was 21.2). So yeah...

Now for the hidden explanation: Here at the Olympic Training Center, they have a pulley system that can pull you through the water at crazy fast speeds. So after a short loosen up practice, we each strapped into the pulley system to see how it would feel to swim as fast as the fastest in the world. So when I strapped in, I swam (got pulled) to go 21.1... in a drag suit. Ha-ha... It was really fun. I could play with that thing all day long.

During the afternoon, we went and saw Iron Man; which was an awesome film. I was actually really surprised. It wasn't as corny as I thought it would be.

4000 meters

Day 10: Well after a long day of rest, we got back into the hard training again. We did a long threshold, with tight interval swimming. We did 20 x 100s (6 on 1:20, 8 on 1:15, and 6 on 1:10). Then took a minute rest and did 10 x 200s (3 on 2:40, 3 on 2:30, and 2:20). I made all the intervals and actually did fairly well. Training with James (my old FSU coach) we did a lot of tight interval swims, so I really like these kind of sets (if I'm feeling good). I held 1:10s, 1:09s, and 1:07s, and then 2:20s, 2:17, and 2:13. It hurt a lot but I feel the most important thing to handling these sets is to relax the whole time and have perfect technique. When you get tired it's hard to maintain a long body with good rotation but if you can, you should be able to fight through the workout a lot better.

Afternoon practice came and I still felt really good. It was mostly pulling and nothing too fast. But since I felt good I pushed myself on a couple set.

8400 and 6800 meters

166.5 lbs

Day 11: We had another challenging workout. We did 4 x 500s fast, 4 x 300s fast, and 8 x 50s descend 1-4 and hold to 8. It was really tough. I've learn a lot over the years on how to handle sets like these and was able to perform really well. Knowing how important to not attack the long set from the beginning, I started fast, but a pace I knew I could hold. I concentrated on my relaxing, breathing often, rotating my body, keeping my arms long, and trying to keep a steady kick. It proved to work and I had another good workout.

Between practices we visited the biomechanic who analyzed our stroke. His biggest advice was for me to kick a little more. The best distance swimmers have 6-beat kick... I do not. I've tried learning it,

but it always throws my rhythm off. He said my body rotation, head alignment and body position were all good. My streamline, and flip turns were good as well, but need a little tweaking.

That afternoon we did our usual long pulling set; about 3600 of it. It wasn't too bad.

8600 and 7000 meters

Day 12: Our last practice. We did a bunch of 100s fast from a push. 12 total. I held all 1.01s and a couple 1.00. So I was pleased. It was a good way to end the training trip. We had the afternoon off and I left the next morning.

7000 meters

Day 13: I left at 4:30 in morning. It was sad to leave but I was curious to see how I would feel back down at sea level. When I got into Atlanta, I could definitely tell a difference. The air felt clear, crisp, and easy to breath. I didn't have to take deep breathes anymore if I tried walking and talking. At practice I noticed a big difference. It was hard to get my heart rate up, or to breathe heavily. Everything seemed a little easier and again I didn't have to take big breathes now and again.

The trip was a good experience and I'm lucky and grateful to have experienced it.