

# Aggie Mainsheet

## The Board

Executive Officer  
Alana McSween

Executive Sailing Officer  
Sabrina Perell

VP Public Relations  
Ishita Singh

VP Finances  
Josh Leung

VP Records  
Hayley Palmer

VP Equipment  
Joseph Naro

## Inside This Issue

Captain's Report	2
------------------	---

My Time at the Anteater Open	5
------------------------------	---

Why I Sail	7
------------	---

Pacific Coast Championships	7
-----------------------------	---

Priorities	8
------------	---

First Time Skipper	9
--------------------	---

Why I Joined DST	10
------------------	----

Sailing Is...	10
---------------	----

DST Is...	11
-----------	----

Dream Wings	12
-------------	----

## Davis Sailing Team 2015-2016

*Dear Reader,*

My first impression of sailing was made on an old, leaky, pea-green Laser. I was in high school and a family friend was selling the boat (I found out later that she was actually replacing it because it needed so much work). After one "test drive", I learned how to pull in the mainsheet and a little about steering with the rudder. My family bought the boat, and I spent the next months of summer studying several pictures in a book and sailing around the lake completely out of control. I am surprised that the old Laser still floats considering how little I knew and how many collisions I got into. While it was a chaotic start, I had tons of fun with sailing, and I knew it was something I wanted to continue for many years.

The Davis Sailing Team at UC Davis, is great way to get involved in the sport of sailing. We are a student-run team funded by membership dues as well as donations from others in the sailing community. There is no experience necessary to join the team, and we learn by teaching one another. The more experienced members are expected to teach the newer members how to rig the boats, to sail, to race, and eventually to lead the team. This year was my third year on the team, and I served as the president.

It has been a great experience to be a member and a leader on this team. I have made many friends and many memories. I can't imagine my college experience without this team, and I hope to see it continue on for many more years being a positive influence in the lives of other students.

- Alana McSween

---

## Captain's Report

By Sabrina Perell

---

One of my favorite events this year was the Mustang Open. This is an annual event hosted by Cal Poly at Morro Bay. This year, the event fell on the first weekend in March. The Cal Poly Team and Morro Bay Yacht Club kindly opened their doors to let, UC San Diego, and Cal State Monterey Bay, and us, stay upstairs at the Yacht Club. It was like one giant sleepover. This event was also one of the best turnouts our team had for any event all year; we sent nine sailors. We were also accompanied by our grad-school advisor and former team member, Lucas Murray, whose continued contributions to the team certainly do don't go unnoticed.



*Sabrina, Hayley, and Ishita on the triple stack.*

Lucas, Ishita, Hayley and I left in Lucas' truck late on a rainy Friday afternoon, ready for a long drive with the triple stack trailer behind us. We made the most of the long drive by telling stories, taking cute pictures on the trailer while stopping for gas (as seen), and eating some delicious snacks. The next day, we awoke to the expected grey clouds that were hanging low and preparing for the downpour. We crawled out of our sleeping bags, put on our new fleece-lined, waterproof team jackets and went outside to begin unloading the trailer. Working together and sharing mutual excitement for the event, we were able to motivate one another to work diligently as a team, with a smile on our faces.



*The team found a colorful spot to take a picture!*

Once we hit the water, the current was ripping hard. I would argue this was our team's biggest challenge for the weekend. If boats did not tack over to starboard just before the mark, the current would force them down and they would miss the layline. If they anticipated the current too early, overshot the layline too far away from the mark, the boat would get stuck in shallow waters that were difficult to see. While half the team was on the water, the other half watched with excitement from the land near the leeward gate. There, we discussed strategy and cheered our team on. This report would simply feel incomplete without congratulating our Team President, Alana, who finished the weekend with six top ten races.



*The girls of DST rocking their spray gear in Morro Bay.*

The next day, the weather cleared up. We still had a solid southwesterly breeze to sail in under the sun (go rain) while the current calmed down quite a bit from the prior day. The teams aggressively pushed the line during starts which lead to multiple general recalls. After the regatta was over and most teams were busy working together to get boats out of the water and pack up, Cal and Cal Poly were going head-to-head in the protest room. To me, this particular event demonstrates the increasing level of completion in the Pacific Coast Collegiate Sailing Conference (PCCSC). Whichever team won in the protest room would receive first place in the regatta. Ultimately, the Cal Bears won. Still, I must say, both teams have had stellar performances this season. Our team looks forward to competing against and learning along side such teams while continuing to improve our skill level.

---

## *My Time at the Anteater Open*

*By Joseph Naro*

---

The highlights of most competitive sailors' sailing experiences occur at regattas, both on and off the water. Regattas are always fun, and everyone who's ever been to one has a few special memories from their experience. My favorite regatta this year was the Anteater Open.

In terms of how I finished the regatta, my scores were nothing special; I beat a few boats, but lost to far more. My first day of sailing went poorly, but the second day went less poorly. That doesn't matter much to me though; in retrospect, how I placed in a regatta rarely reflects my opinion about it. Rather, it is the less quantifiable experiences that I enjoy reflecting on; things like who went to the regatta, who I talked with, the weather conditions, what I did off the water, and whether or not everyone else enjoyed themselves, weigh much more heavily on my mind when determining which regattas I liked most. The Anteater Open had an excellent combination of all those factors, which made it a great regatta.

One of my most fond memories of the regatta included spending my time between rotations on the floating dock twenty yards dead downwind of the windward mark. The dock was likely in violation of safety code, as we must to have averaged a person per square foot or two on the thing. While it was not the most ideal location to rest between races, it was certainly a situation, which encouraged socialization, both amongst teammates and with other teams. Between races, I became better acquainted with one of the sailors on the UC San Diego team, and discussed the race with him and his teammates, whom I had already known from previous regattas, as well as with our friends on the CSU Monterey team.

Perhaps the most entertaining thing to do between rotations was to watch the fleet get as close as possible to the dock before roll tacking at the very last minute; each boat attempted to get closer to the dock than the last and each boat was met with the cheers of its teammates. The first day of the regatta, the marks were positioned so that after rounding the windward and reach mark the boats were then on the other side of the dock; it was almost like the boats were rounding the dock. Being able to see how a fleet of twenty-five boats approaches the windward mark was both interesting and an excellent opportunity to teach the newer members of the team.

After the first day of racing, we went out for burritos at Great Mex. Unfortunately, it wasn't until after ordering that we realized we missed the opportunity to join the Fifteen Inch Club by consuming obscenely large burritos. We were determined to add our group photo to the bulletin board of people who had gorged themselves before us, the prize for those who enter the Fifteen Inch Club, but that would have to wait. Disappointed, but still feeling well fed after eating our regular sized burritos, we then went back to the teammate's house we were staying at.

It didn't take long for us to grow restless, and after much fruitless brainstorming, we resorted to the only thing we could think of doing in Long Beach after dark on a Saturday night, walking a few miles to the beach. After our teammate recommended a beach to us, and informed us that if we went the wrong way for too long we would end up in Compton, we set off...for about a mile until we got lost and ended up asking a police officer for directions. He redirected us around the block we were about to head down and stated that we should be fine if we followed his directions, because we would be going through "good neighborhoods." When we finally made it to the beach, we were quite disappointed with the recommendation; we later found out that this was because we were on the wrong side a thin peninsula with beaches on both sides. But, it's the journey and not the destination, and in this case the journey involved strolling through a park in Long Beach after dark while discussing which country in Europe was the sketchiest, what our high schools were like, and other trivial topics that didn't matter but were fun to talk about nonetheless.

We soon grew tired of the beach; more importantly, we were hungry, so we decided that the best way to console ourselves after our disappointment with the beach was with frozen yogurt before we went back to our teammate's house for the night.

The second day on the dock was much the same as the first but with higher spirits, because of our improved performance on the water. We finished sailing and stopped by a Great Mex on the way home. We were disappointed to find out that the Great Mex we went to did not have the Fifteen Inch Club, like the other one did, so after eating regular sized burritos again, we left for Davis, intent on returning next year to add a group picture to the bulletin board.



---

## *Why I Sail*

*By Sovisal Sameth*

---

The Davis Sailing Team has provided me the opportunities to REACH out and grow as a person. We are a balance of social, athletics, and community involvement. I have met some of my closest friends from the team who are as strong as a 100 mph wind. We stick together like tell-tails and be there for each other whenever one needs. We travel to different cities to sail and compete in regattas, which is my favorite part of being a part of the team.

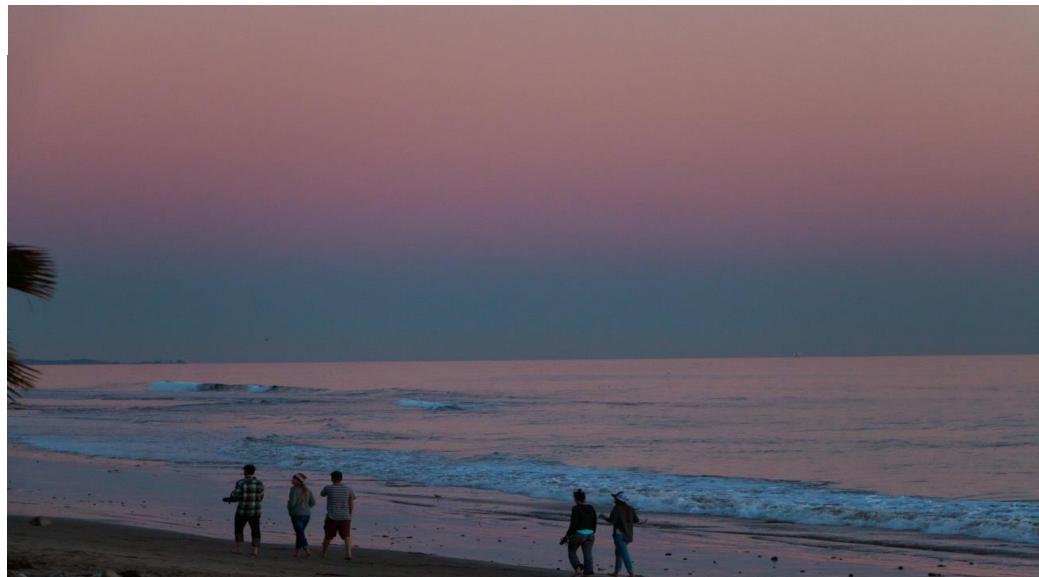
---

## *Pacific Coast Championships: A Unique Experience*

*By Josh Leung*

---

When I was on the team last year, Pacific Coast Championships was my favorite regatta throughout my first year at UC Davis. The wind was great, and the stars were amazing. We had driven south late into the night, arriving at the campsite early morning around 3 am. This year, we once again arrived around 2am, groggily crawling into our tents to prepare for the day's racing. However, we arrived during the calm before a storm. Beautifully sunlit beaches were all that awaited us as there was not a lick of breeze moving across the ocean. Races were postponed all day, and I got a chance to catch up on some fun reading instead.



*The beaches in Santa Barbara were breathtakingly beautiful.*

Later that day we got burritos at Freebirds, which were fantastic! We walked around Isla Vista, and people watched all the UCSB students walking to a soccer game.

The following morning, dark clouds loomed ominously on the horizon and rain began pelting down, and the winds grew to a roar. The racing was tough—initially conditions were rough and frigid, with races being postponed until it died down a little. Once the rain subsided and the winds became a little friendlier, the RC attempted to complete as many races as possible, resulting in a handful of

very scary beach landings to do rotations with the team. We concluded the day by getting steaming bowls of clam chowder near Monterey, and made it back to Davis by midnight.

---

## Priorities

By Hayley Palmer

---

As a junior I find myself with commitments to school, work, and other extracurricular activities. Gone are the days of freshman year when I had the time to go to the port for several hours in the middle of a random weekday. A lot of my friends outside of the team question my commitment to sailing. Unsurprisingly, we a rather obscure sport here at Davis, and most don't understand exactly what it is we do all weekend long at practice and regattas. In their view, the time I spend on the water might be better spent studying. However, as overwhelming as it sometimes is to balance school and sailing, I know there's no way I could ever bring myself to quit the team. Aside from the fact that I love this sport unlike any other, I've met some of my closest friends on the team. Though being cold and wet and bruised may be what initially drew us together, we've found ourselves spending significant amounts of time with each other outside of the boat. From simple study dates to excursions downtown, where we seem to end up consuming copious amounts of sugar, we always have fun together. In short, sailing takes up a significant amount of my free time, but I wouldn't trade it for the world.



*The team stopped for a quick photo before de-rigging at a regatta.*

---

## First Time Skipper

By Sierra Madden

---

This spring quarter I skippered in a regatta for the first time. Even though I am used to racing lasers in regattas, I had skippered an FJ only twice during practice. Needless to say, I was terrified. Luckily I was sailing with one of my friends and sailing mentors, Joey. One day I hope to be half as patient as him. Joey is one of those people that ask one hundred percent out of his teammates and always keeps me on my toes. I learned more during that regatta than any others I've attended. Every time I look up and see my jib tell tails flapping in the wind, I hear Joey's voice in my head yelling, 'you're pinching!' (to be fair, I was pinching way too much in our first few races). Throughout the day our placings improved and we worked on more racing tactics like roll tacks and mark roundings. I noticed that in the beginning I would always ask Joey which mark to round at the gate or which side of the start line was favoured. Joey forced me to make my own decisions and support them with reasoning which at first frustrated me. By Sunday afternoon I realized that I was making those decisions on my own. Besides teaching me the technical aspects of sailing, Joey taught me how to think for myself on the water and be confident in my decisions. So I would like to take this opportunity to thank my older teammates and all the alumni that may be reading this for teaching, inspiring, and having patience with all of us freshmen sailors.



*Team photo taken at Cal Team Races in February.*

---

## **Why I Joined DST**

**By Ivana Morris**

---

The UC Davis Sailing Team is great! I have gained so many great memories and new friends. Lake Washington is a fantastic place to sail and improve my skills. We have team bonding events which bring us closer together as a team. For one of them we even went camping in Rio Vista. It was a beautiful drive along the delta and we had s'mores as we told stories around a campfire. We took some boats with us and sailed the next day. Before starting on the team I had never even been on a sailboat and now I can say I have competed at several regattas around California. I am nowhere near being the best but I am improving and that is all that matters.



*Alana, Hayley, and Suhaila having a blast while waiting for the next rotation at the Mustang Open in Morro Bay.*

---

## **Sailing Is...**

**By Jenna Rutledge**

---

In high school, I was a sailing instructor. I taught children who often times hadn't even hit double digits how to sail sabots and how to hold the jib sheet on the occasional Lido-14 (though we always had them cleated), but that encompasses my prior sailing experience. A boat caught in irons had simply "sailed into the no-go zone" in my world, and the "coach boat" was me or one of the other counselors in our kayaks, towing single sabots down the channel when our kiddos threw tantrums, or sticking my 5'7" self in a sabot *with* the child (sometimes two!) and sailing back to our little base myself.

Before this year, I'd never sailed competitively. Moreover, I'd never sailed with anybody my own age, and I'd never set foot in a sailboat rigged for racing. To be honest, I'd never even thought of trying. Then I saw a Facebook post from one of my now-teammates about the sailing team. My hopeful and overwhelmed fresh-outta-highschool self wanted something to do, and sailing sounded like something to do, so I messaged her. Fast forward a few months and I found myself at Lake Washington at the first team practice/barbecue of the year.

Fast forward 9 months and although I'm still learning, I've sailed in my first college regatta, dealt with a 7 hour drive to Lake Tahoe (for those of you who don't know, Tahoe is a 2 hour drive away), roadtripped to Orange County and back in a single weekend in an old Mercedes, and laughed the whole way through all of it. For a group of college kids balancing their education and responsibilities while simultaneously funding themselves and this program and keeping us up and running, I think the Davis Sailing Team is doing a pretty darn good job.



*Davis Sailing Team Banquet 2016.*

### **DST is...**

**By Ishita Singh**

What words describe the Davis Sailing Team?

Crazy, fun, an adventure, weird, family...and the list goes on. Over the past three years I've come to learn that there are never enough words to describe this team, the experiences, or the people. This team went from friends to family without even a second thought.

And like a family, we're utterly dysfunctional in the best way possible. Being that my parents and brother live on the other side of the country, I constantly go through periods of missing them and counting down the days till I get to see them. But with the sailing team, I always have a shoulder to lean on, a laugh to share, and a family to go to when I can't go back to "home-home."

All my best friends I have met through the sailing team. All of our "Fancy-food" endeavors, girl's nights, and day trips have been some of my best memories of college. This year alone, the team trip to Tahoe and spending a weekend in a cabin, or the trips to San Francisco and San Louis Obispo have all been a different adventure each time.

It's sad to think I only have one year left with the team, especially since I had spent a majority of this year focusing on school/work/internships and the other half injured and unable to compete. Being on board, again, as the vice president, really kept me connected with the team for another year. My fellow board members were not only supportive, but even with all the stress and struggle, they understood I have a busy work load and tried to work with all the complications. For that I am eternally grateful. Even with being MIA for weeks here and there, the support I have gotten from the team always motivates me to come back, no matter how exhausted I am.

When we all say the people make the team, it's true. Without the friendships DST wouldn't be what we are today- a family. Here's to another fantastic year of adventure for the Davis Sailing Team!

## *Dream Wings*

*By Sean Wu*

Camber, efficiency. Roughness, transition. Kutta condition, circulation. Lift.

Flying vehicles, aircraft, have always fascinated me.

I learned to fly at the same time as I learned to drive. The creation of lift, the modification of the pressure distribution around a wing through careful aerodynamic design, is a topic of great interest to me, so much so that I'm pursuing a Ph.D. focusing on Aerodynamics and Aircraft Design.

When I first started sailing, I thought about the generation of lift over the sails. About the shape of the sail and its trim, its camber and angle of attack.

Sail controls fulfill an aerodynamicists dream: a variable camber wing.

The shape of an airfoil, its camber (draft), has a huge effect on the lift and drag characteristics of wings and sails. Through careful application of theoretical, computational and experimental fluid dynamics, sail controls may be optimized for a great number of atmospheric, water and loading conditions. Does the Davis Sailing Team do that? Obviously not.

Sailors are a stubborn group of people. Everyone has their own opinions on how best to sail the boat; how best to rig the boat. What jib tension to use. Where to sit. When to tack. Some of these habits are based on personal experience, others on what they've been taught, some because that's the way everyone does it. Most are not quantitatively based.

Everything you do on a sailboat, every sail adjustment you make, directly affects the sail's camber and angle of attack; lift; speed. The topic of optimal sail adjustment and shape is one for a lengthier discussion, but let's talk about trim.

Draft, bubbles, tell tails. Speed.

Most sailors don't realize it, but when we read the tell tails, feel the pressure, watch for bubbles, we are monitoring specific aerodynamic phenomena associated with the creation of lift.

The tell tail that flies off the leech of the main sail monitors the Kutta condition,

the smooth flow of air off of the airfoil trailing edge; the circulation of air around the sail; the inviscid generation of lift.

The tell tails on the luff of the jib monitor the formation, growth and propagation of separation bubbles from the luff aft. When the tell tail flutters, it has become enveloped in a separation bubble. With the positioning of most jib tell tails, that indicates the separation of flow across most of the airflow aft of that point, a ‘burst’ bubble indicating a significant reduction in lift. So that tells you when you’ve gone too far. But what about when you’re just right?

Ideally, you want a very small bubble right on the airfoil leading edge, right on the luff. That corresponds to maximum flow circulation around the sail; maximum lift; maximum speed. Adding more, smaller tell tails starting at the luff would allow for more precise monitoring of bubble propagation; more precise sailing.

Understanding what you are doing allows you to do it better. Each time you rig a boat, each time you adjust a sail control, you are creating a unique sail shape, a custom, variable camber wing. Airfoil and wing design is of great importance to aircraft designers. Sail adjustment and tuning *should* be of great importance to sailors.

*For a complete discussion of sailboat aero-hydro dynamics, common misconceptions and practical sailing tips, lookup Arvel Gentry’s articles in SAIL. Also see the text Sailing Theory and Practice by C.A. Marchaj*



*Testing some of the aero-dynamics discussed above.*

The Davis Sailing Team at the University of California, Davis is a 503(c)3 non-profit, student organization that races competitively against other universities. Our focus is racing but we teach all members basic seamanship skills that can be applied to any type of sailing. We are based out of Lake Washington Sailing Club (LWSC) in West Sacramento, which is only twenty minutes from the UC Davis campus.

For more information concerning membership, donations, production or distribution of the newsletter, or anything else, you may contact the Davis Sailing Team at  
[davis.sailingteam@gmail.com](mailto:davis.sailingteam@gmail.com).

To be removed from the mailing list please email the team at [davis.sailingteam@gmail.com](mailto:davis.sailingteam@gmail.com).