Curriculum Vitae

Jacob Sigren

jsigren@gmail.com

200 Seawolf Parkway, Galveston, TX 7755

Education Texas A&M University at Galveston......Fall 2012 - In Progress Doctor of Philosophy - Marine Biology The University of Texas at Austin......Fall 2009 – Spring 2011 Bachelor of Science in Biology - Emphasis on Ecology, Evolution, & Behavior Texas A&M University at Corpus Christi......Fall 2007 – Spring 2009 Biology Major - Emphasis on Ecology **Professional Experience** Texas A&M University at Galveston, Galveston, TX......May 2012 – August 2012 Lab Technician Identified and quantified plants, fish, crustaceans, and mollusks of a brackish marsh restoration site. Participated in field excursions to sample flora, fauna, soils, and water from a brackish marsh restoration site. Baylor College of Medicine Center for Educational Outreach, Houston, TX..... Summer 2010 & June 2011 – May 2012 Office Support Specialist Built and edited websites, wrote an online course on environmental science, created an online biology curriculum for teachers seeking alternative certification, and created ecology lessons for elementary school students. Organized office and bought supplies for shipments. Texas A&M University at Corpus Christi, Corpus Christi, TX...... Spring 2009 Science Tutor Tutored large groups of college students in chemistry, organic chemistry, physics, biology, ecology, microbiology, and genetics. **Volunteer Work Texas A&M University at Galveston,** Galveston, TX.....November 2011 – May 2012 Volunteer Identified gastropod species for research on sea grass eutrophication and community structure in Dr. Armitage's lab. Aided in field work regarding the effect of Spartina alterniflora diversity on restoration success. Sheldon Lake State Park, Houston, TX.....October 2011 – May 2012 Volunteer

(832) 216-6608

Planted native flora in restored coastal prairie communities, planted native freshwater flora in restored wetland, removed the exotic species, *Triadica sebifera*, from the park, and in general weeded and maintained trails.

Texas Natural History Collections, Austin, TX......Spring 2011 Student Volunteer

Surveyed and took tissue samples of fish, reptile, and amphibian species at Mustang Island. Aided in surveying the fish and reptile species of Wilbarger Creek. Captured, tracked, and tagged *Nerodia erythrogaster transversa* along Waller Creek.

Publications

- Sigren, J. M., Figlus, J., and Armitage, A. R., 2014. Coastal sand dunes and dune vegetation: restoration, erosion, and storm protection, *Shore and Beach*, 82(4), 5-12.
- Figlus, J., **Sigren, J. M.**, Armitage, A. R., Tyler, R. C., 2014. Erosion of vegetated coastal dunes. *Coastal Engineering Proceedings No. 34*.
- Feagin, R. A., Figlus, J., Zinnert, J. C., Sigren, J., Martínez, M. L., Silva, R., Smith, W. K., Cox, D., Young, D. R., Carter, G., 2015. Going with the flow or against the grain? The promise of vegetation for protecting beaches, dunes, and barrier islands from erosion. Accepted to *Frontiers in Ecology and the Environment*.

Presentations

The Role of Coastal Dune Vegetation in Erosion and Wave Resistance: Jacob Sigren (presenter), Dr. Jens Figlus, and Dr. Anna Armitage *Presented at*.

ASBPA Conference 2013 - PowerPoint Presentation TAMU Pathways Symposium 2013 - Poster Presentation TAMU MARB Retreat 2013 - Poster Presentation

Achievements and Awards

MARB Mini-Grant 2014-2015 MARB Mini-Grant 2013-2014 ASBPA Joe Moseley Memorial Student Grant 2013 MARB Mini-Grant 2012-2013 The University of Texas at Austin University Honors Spring 2010, Fall 2011, & Spring 2011 Texas A&M University at Corpus Christi Honor's Program Spring 2007 – Spring 2009 Texas A&M University at Corpus Christi Dean's List Fall 2007

<u>Skills</u>

- * Proficient in SPSS, R, ArcGIS, descriptive and inferential statistics
- * Educated in using microbiology and genetics lab equipment
- * Trained in surveying, identifying, tagging, and handling numerous vertebrate species, and various other field ecology techniques
- * Capable in topographical map reading and using GPS technology