<u>Vegetation Monitoring in the Kuiseb River</u> Report from Summer 2016 at Gobabeb Research and Training Centre, Namib Desert, Namibia Bryn E. Morgan

This past summer, I spent three months in Namibia at the Gobabeb Research and Training Centre, a joint venture between the Ministry of Environment and Tourism and the Desert Research Foundation of Namibia, located in the Namib-Naukluft National Park. While at Gobabeb, I primarily conducted fieldwork for my honors thesis in geography, which is concerned with mapping the vegetation distribution in the ephemeral Kuiseb River, which separates the southern Namib Sand Sea from the northern gravel plains. This comprised



flying an unmanned aerial vehicle (UAV) to collect aerial images of the riparian vegetation and conducting tree surveys. I used these tree surveys to visually identify other trees in the image and generate a map of species distribution across twelve sites along the riverbed. I also trained the



staff in the use of the UAV and consulted on other projects that may use similar remote sensing techniques in the future. In addition, I assisted with a long-term livestock monitoring project that Gobabeb is piloting, as part of a large grant to support engagement with the local Topnaar (≠Aonin) community. For this project, I assisted other staff members on biweekly trips to download GPS information from the collars on two goats and two cows owned by Topnaar people. Finally, I worked on a few of the other long-term research projects that Gobabeb is conducting, including collection of weather and climate data multiple times each day and maintenance of a Baseline Surface Radiation Network (BSRN) station.

My experience at Gobabeb was both challenging and extremely rewarding. During my time at this unique research station,

I developed a number of invaluable skills. As the architect of a research project in an isolated part of the world, I was confronted with numerous technical, personnel, and structural issues that I was challenged solve largely on my own. In addition to these problem-solving skills, I learned to prioritize and work with other staff members in a real-world setting. Overall, during my experience at Gobabeb, I gained confidence conducting research in a professional environment, which I know will be extremely important as I transition into a career.

