My internship for the summer of 2015 was a fantastic experience. While working for the University's Office of Domain Management under Nate Wilson, I learned many new skills and improved upon countless others. I split my time between cruising timber and helping out with Nate's other Domain Management interns and their daily activities. While cruising timber I collected valuable data to determine forest management decisions down the road for Sewanee including logging and prescribed fires. While working with the other Domain Management interns, we spanned many responsibilities including building a floating dock for the Lake Dimmick campsite, putting a new roof on the Cheston Cabin, and maintaining the roads and trails all around the Domain. It was rare to do the same thing any day of the week unless it was an ongoing project.

One very tedious project I worked on was to put permanent sampling plots around the Domain for LIDAR data. Light Detection And Ranging, or LIDAR, is a way to calculate the number of trees on a landscape and is critical in estimating carbon sequestration numbers. Since the University is trying to sell our forests annual sequestered carbon I took this project very seriously. Each plot averaged four hours to collect the data so it wasn't the most enjoyable part of my job. The interns and I collected fuel loading data, understory inventory, overstory data, and finally used a Total Station surveyor to survey in each tree in the plot. This was done to validate the LIDAR data because it has never been done in the southern hardwoods.

Throughout the summer I was constantly learning new skills and polishing others. My chainsaw skills improved with all of the summer storms knocking down old growth trees over trails and roads. Chainsaws require constant maintenance such as sharpening and taking them

apart to clean them. It's pretty scary to take a $700 machine apart and put it back together and then trust it to cut down a 100ft tree with it. Nate was a fantastic teacher who always took the time to properly teach me how to safely and efficiently use equipment. I've also picked up some other quick fixes for problems that occur far from a mechanics shop. While working on the Dimmick campsite, our John Deere Gator (off-road golf cart) had a serious failure: the steering bracket broke. Nate said no problem, we can get this out of the woods! Of course it started to rain to add to the urgency. With some small diameter trees and a ratchet tie-down strap we rigged the gator's steering and got it to work, getting it out of the woods without having to push it all the way back. Resourcefulness in my mind is an essential skill for young people entering the workforce. While working for Nate I've had many situations where something has broken down far into the woods where I have had to fix something with bubble gum and bailing wire.

In the other half of my work, cruising timber has been both challenging and fun. Cruising timber is a data collection and analysis to determine various measurable factors in a forest to properly inform management decisions. Accuracy is key, and so is efficiency. While cruising I visited predetermined plots to collect diameters and merchantability on each tree. It's easy to wrap a tape around a tree and get the diameter, but estimating heights to a specific top diameter is an acquired skill that takes time. I cruised with alumni John Mulloy, C'13, who was hired by Nate as an expert who has been cruising in Arkansas for the past 2 years. John keyed me into the secrets and tricks of cruising acreage. It is not easy.

I learned many things this summer- too many to count in fact. I learned that if you have chiggers from cruising all day that bleach and wool socks are a must. The low points were always surrounded by bugs and drenched in sweat, but at the end of the day it felt good to end a

project or finish cruising a thousand-acre compartment. Throughout the summer, my only real low point was that I picked over 200 ticks off of me, 50 in one afternoon. Most of the low points were either bugs or weather, but I thoroughly enjoyed my summer. Other lessons on the more important side would include collecting good data. At the end of a long hot day, the last plot is just as important as the first and accurate data is mandatory. This lesson will be taken back into my studies in the fall.

I had a frustrating experience cruising that enlightened me on my work ethic. While cruising below the bluff I walked all the way down to the bottom of the mountain and back up. Not an easy hike. My cruise plots were all in petty places with good-looking forest so it was going well. We packed our lunches to be out all day. After we were done, we went back to the office and uploaded our data, but there was a problem: mine was missing. I must have done something wrong with my GPS and lost all of my plots. Measure twice and cut once was the lesson of the day. Making sure that the job is done right and to the standards is everything in the real world. So I made up for my mistake by visiting all of the plots again and checking my work, along with a great hike up and down the mountain.

This internship was extremely important to my future. I've been talking with recent graduates who have been entering the field and all of the employers ask if you have cruising experience. Experience is everything and employers are looking for it. Having a few cruises on my resume sets me apart from the herd because most people entering the job market haven't had any experience and even a little experience is worth a lot more than someone with only lab class

experience. The 2500 acres I cruised was not only an enjoyable experience in the most beautiful mountain in Tennessee, but it really confirmed my choice to pursue a forestry career.