



Beyond the Basics: Youth Backpacking and Outdoor Skills Camp by Sabrina Carlson

Day 1: On Monday July 11, 2016, ten youth between the ages of 13-17 arrived at our designated ‘basecamp’ near the Bismarck Lake Trailhead northwest of Flagstaff. Everyone was excited and a little nervous for the next six days as we would be learning new outdoor skills and taking a group backpacking trip.

To kick off our week, we got acquainted with one another through a series of teambuilding games. First, we made a human scavenger hunt by lining ourselves up by height, age, and number of family members.

After getting to know each other, we learned about leave no trace ethics and why they are important. A quick look around camp revealed that the last group to use this campsite had not taken LNT very seriously.



Studying the map

Next, we invited the students to grab their daypacks and prepare for a one-day imaginary adventure. They should however, pack as though they really are going somewhere. We did not tell them where they would be going or what the conditions would be, but that they should pack the best they can. When everyone returned, our first fantasy adventure was revealed. We would be going ice climbing on a glacier! We asked everyone to empty their packs, and decide how prepared they were for the journey. As we explored what to bring for an assortment of environments, a few items stood out as being needed in every environment like water, an emergency blanket, and a headlamp.

After lunch with our tents set up, it was time to learn how to use a map and compass. We got comfortable with our compasses and learned to adjust the azimuth to line up with our direction of travel. We practiced navigating using landmarks, finding north, orienting our maps and figuring out where we were on them. Once we were comfortable with each of these pieces of equipment, we learned how to put them together to set a bearing to dead reckon our way to something on the map. In this case, we wanted to travel from Bismarck Lake to the historic Little Spring.



Getting the hang of our compasses!

After setting our bearings, and checking the accuracy, we set off on a hike to the spring. When we arrived we discussed the historical significance of this being the base camp for C. Hart Merriam’s study of the San Francisco Peaks. It was here that he developed his “Life Zones” archetype, which is still widely used to describe the plant and animal life found at different elevations today. Although we noticed the abundant plant life around the spring, we

also noticed how very little water came out during our stay. We spent a while talking about how different the springs on the San Francisco Peaks are now, in comparison to when European settlers first came to this area. Almost all of the springs have been piped or diverted in some way to provide water to the city of Flagstaff, and to area ranches and farms. Scientists also believe that the overgrowth of ponderosa pines in the Coconino National Forest has contributed to a negative impact on the output of the springs.

Day 2: After our navigation lessons from the day before, we got out our maps and compasses again to set a course south toward the Nature Conservancy's Hart Prairie Preserve. We discussed the importance of knowing the declination for your area, how to find it on the map, and how to adjust the compass for it. There was discussion of what distance one would need to travel for the declination to make an impact. Since the distance to our destination was only about a mile, it was not expected to make a huge difference. Since we had GPS for backup navigation, we decided to try navigating without adjusting the declination to see what would happen. Halfway to the preserve we stopped to do a check with the GPS and we found we were off course by 32 degrees! Declination here in Flagstaff is 13.5 and in only a half-mile we had doubled our inaccuracy. If we had continued without course correction we would have ended up on the wrong side of Fern Mountain altogether. It was an important navigation lesson better experienced than explained!



Journaling



Al shows us his favorite shelter design

Once we arrived at Hart Prairie, caretaker Blair Foust greeted us and took us on a tour. We visited the historic homestead building, viewed the many scientific instruments that they use to collect data on phenology, water chemistry and temperature. We also observed restored prairie where there used to be ponderosa overgrowth, and we ambled through the Aspen Island, visiting the world's largest bebb willow community.

After thanking our host for the tour, we made our way back to camp for snacks and some rest. By the time we arrived, Treven Hooker, the new Seeds of Stewardship Coordinator for Southern Arizona and co-er for the trip, had arrived at camp. That evening he set about teaching the students how to select wood for carving, and how to use their pocket knives to begin making their own wooden spoons. Our evening ended with a modest campfire and roasted marshmallows.

Day 3: Eager to learn more about fire and knives, our guest presenters arrived with perfect timing! Allen Cornell, an extremely skilled gentleman whom I had the pleasure to meet during my wilderness first responder training, arrived with an assortment of materials. He came with handouts, and with as many fire making tools as you can imagine! He and his friend Michael are both retired military veterans, and currently volunteer with the Verde Valley Search and Rescue team.

They began their presentation by covering the basics. How do hikers get into trouble in the woods? What's the right equipment to keep in your pack for outings in order to take care of yourself if you get lost or injured?

Al showed the group his favorite improvised shelter design, and why he always carries aluminum foil with him in his daypack. They experimented with putting leaves and pine needles in a plastic bag to insulate their bodies from the ground.

Next, Al enlightened us with stories on all the ways your fire making implements can become waterlogged and ineffective. He advised that we should always carry at least three different ways to make fire, all of which should be waterproofed in some way. We each got to practice with a variety of different fire making techniques. One is with cotton balls soaked in petroleum jelly and lit with a flint and steel. Another way is with steel wool and batteries to spark some toilet paper. A Fresnel lens magnifier was tried out. And most fun of all, was a traditional bow drill! It was exciting and extremely engaging for all.



Treven helps Dawson work on his bow drill technique

Before Al and Michael left, they gifted everyone with their own bow drill, magnifying glass, and container of steel wool for their packs. As you can imagine, fire making was the task of choice during every spare moment for the rest of the trip.



Bryanna making it look easy!

That evening, we began our preparations for the backpacking portion of our trip. To start, every backpack was emptied and looked through to help each student decide which items should come along, and what should stay behind. It is tough to understand the importance of trimming weight, especially when you need to carry lots of water. But they would learn soon enough.

Day 4: The day of our backpacking trip had finally arrived. After finalizing our pack contents and eating a simple breakfast of bagels and cream cheese, we headed up the Bismarck Lake Trail toward Passage 34 of the Arizona Trail. As we hiked south toward Humphrey's Trailhead, we passed the Nature Conservancy

property from above. It was fun to look straight below at where we had been two days before. We encountered several groups of day hikers who were extremely impressed by the loads these youth were carrying, and by the proposed route they were endeavoring to accomplish. As we headed up the Humphrey's Trail, we paused to take in the beauty of the glorious mountain and the bursting wildflower colors all around.

While the participants had certainly worked hard on the climb from Bismarck Lake to Humphrey's, the steep grade and slippery rock slabs on the Humphrey's Trail slowed our pace considerably. It was in this stretch that all the advice we had been giving these students began to sink in. The things we had suggested they leave behind at camp felt really heavy, and the ones who stayed up too late the night before playing flashlight tag were wishing they had gotten more sleep. But they all pressed forward with remarkably positive attitudes. Part way up the Humphrey's Trail, we located the water I had cached the week before. Finding all of our precious water supply intact was a huge blessing because though the mountain is cooler and gets more precipitation than many other parts of Arizona, surface water is nowhere to be found.

After a snack, a water refill and a talk about water cache etiquette, we began our ascent again. We could REALLY feel that fresh water weight supply in our packs!

After a few switchbacks, the group's pace had slowed again and we paused for a short break. In surveying the group I began to notice some signs of altitude sickness in some people. Even though we had spent a few days at 8,500 ft, suddenly being at 10,500 ft. was quite taxing. It wasn't wise to go up any higher for the moment. We spent some time resting and considering our options. With another 1,200 vertical feet of climbing to reach the tree line where we had planned to camp, we would need to alter our plan. Despite our intact water supply, I was also beginning to worry about water viability. Our group of 13 had blown through 16 gallons of water already, and our next cache wasn't reachable until the end of day 2. We decided to make camp early to allow the folks who weren't feeling well to rest, and to assess the water situation.



Sunset after a long day on the trail

That evening, we set up our camp stoves for a lesson on backcountry cooking. Everyone learned how to prime and light the stoves they had brought, and how to rehydrate a delicious potato flake meal. After dinner and sunset, Treven gave a star navigation lesson to everyone who was still awake. We went to bed satisfied with our decision to change plans, and open minded to what the next day would bring.

Day 5: Upon waking, the leaders discussed options for the day. Even with the extra water all of the adults had been carrying, we thought it would be doubtful that we would safely have enough water to make it through the day. In the initial plan we would have found water about 12 miles into the day's hike. Now, with making camp sooner, that distance had stretched to 13 miles, with the first mile being a very steep and difficult climb to the saddle. We decided to check in with everyone's water and see if we all had enough to make a summit attempt on Humphrey's, with leaving our heaviest gear at our campsite.



Backpacking cookery demo!

A water check showed there was about one liter per person – a summit attempt was not on the list for today. The days had been hot and dry, so we gathered everyone together and talked about when and why adventure plans sometimes have to change. Not enough water is a very good reason to change your plans. We discussed the concept of “summit fever” and how even skilled hikers get themselves into unsafe situations when their desire to complete the stated goal clouds their best judgment. Everyone was in agreement that heading back to basecamp a day early was the best decision. I was so proud of how well everyone handled the news. Not a single person complained or got upset. They all completely understood the need to change course.

We ambled down the hill toward Agassiz Lodge, where we were hopeful an open sky ride would mean access to water. Kelley and I explained the situation to the staff at the Snowbowl and they were gracious to invite us to refill water, use the restroom, and sit in the shade for as long as we needed. All the highest gratitude for their hospitality! After a water refill, we made our way back to the Arizona Trail, and into basecamp once again. When it was all said and done, we had completed a 16-mile round-trip backpack. Not too bad for a group where almost no one had ever backpacked



Nate and Treven, the Ninja champions face off!

before. Everyone felt accomplished. That evening back at camp, we presented the students with some Arizona Trail gear and did a round of acknowledgments for each one in the group. Every student had shown unique skills and talents, and they all had transformed by the end of the week

Day 6: After a slow and relaxed pack up, we gathered for a camp clean sweep. We walked altogether in a line looking for trash so that we could leave our basecamp better than we found it.

As we waited for parents to arrive, we played games around camp. My personal favorite is camouflage, in which the players act out being predator or prey animals in a hide and seek meets tag format. Treven taught us how to play Ninja, a fast paced game that takes a sharp eye and quick reflexes.

When the last of the participants climbed into their cars, amid exclamations of how dirty they all were from the parents, we couldn't help but feel immensely satisfied by the work we had done, and all that everyone had learned!



This Seeds of Stewardship outing made possible by grants from:

