

Gabe Anderson

Spring Break Trip

Biomes Journal

March 20, 2004

8:45 Left Pittsburg, Kansas

We began our trip after weeks of preparation. Got started a little late due to some minor van problems. As we began to move southward into Missouri and Arkansas the transition from the prairie into the Ozarks began to take place with the fauna changing as we progressed along the way. We stopped for lunch at Spring Hill State Park and were able to enjoy a nice meal. As we came closer to Memphis the weather began to look very dreary as a storm approached our location. Our original plan was to camp in Memphis, however due to the weather we were forced to continue on into Mississippi where we made camp at Holmes County State Park.

Along the Way

- Saw transition of flora with progression
- Noticed unique geological outcroppings along the highway
- Received the world's slowest smoothie at an Arkansas gas station
- Saw a red-tailed hawk take a snake as we traveled down the road
- Viewed a wide variety of bird species

Ended up raining on us anyway, looks like it is going to be a long night. Dauphin Island hopefully will be nicer compared to this weather.

March 21, 2004

7:45 Left Holmes County State Park (Mississippi)

After a long cold, wet, and windy night we awoke to a fairly dry campsite due to early morning high winds. Was finally able to view the landscape in the area, as nightfall had prevented it the night before. Enjoyed the further progression into Southern Pine Forests and will be watching for the first large numbers of blooming wildflowers as we continue. We ate lunch at a Wal-mart parking lot and continued on our way stopping a few more times, one of which was at a¹⁴ Alabama tourist information center to get information.

3:30 Arrived at Dauphin Island

After two days of traveling we finally reached our destination. The drive along the coastal plains, as well as the trip out to the island was a totally new experience. Saw many offshore birds and noticed a lot of boat traffic in the area. After getting settled in at camp we made a quick walk down to the beach before dinner. On our way to the beach we saw a large number of wildflower species that gave me hope for a good week of collecting. The beach was very beautiful and differed slightly from what I had envisioned but very nice nonetheless. Today I was on cook crew so I arrived back at camp a bit early to fix dinner (Tacos). After a good dinner we decided to head back to the beach to see if we could find a few crabs. We found a large number of hermit crabs, blue crabs, and one other that I was not yet familiar with. We were even lucky enough to find a small tidal pool in which we were able to collect a few small fish ~~from~~ for our collection. So far things are going great and I am looking forward to tomorrow

when we can further explore the island. Our plan is to go out on the research vessel tomorrow so that should prove to be very interesting.

March 22, 2004

7:00-7:30 Breakfast

After eating breakfast today we began to key fish taken the night before. I took a brief walk along a nearby trail and found 5 flowering plants all of which were fairly common but I decided to add them to my collection anyway. After spending a moment to press and identify the plants we headed for the estuarium. At the estuarium we saw samples of the different wildlife that inhabit the estuary ecosystem. While there I got some great photographs and I completed the worksheet required for the trip. We then headed back to camp for lunch. Following lunch we had some free time in the afternoon to collect some fish from the saltwater side of the island. We had fairly good success catching different species of fish, and other things such as crabs. Upon returning we begin to key the freshly caught fish and I took a brief trip in search of some reptiles and amphibians. At this point in the trip I had an accident involving a rock and my ankle. Got a pretty bad sprained ankle so that should prove to be a bit interesting the rest of the trip. Later we ate dinner and headed to the beach in an attempt to catch some bait for fishing later that night. The weather and tide at this point was not very good for fishing so we decided to postpone our fishing until another night.

Along the way

- Had afternoon boat trip canceled due to high winds
- Enjoyed walk outside of Estuary

- I keyed my first fish successfully
- Sprained my ankle
- Talked to two fisherman as they had success catching sheepshead
- Had a raccoon visit camp for the second straight night
- Saw a bunch of washed up jelly fish along the sea shore

March 23, 2004

Woke this morning to find that the swelling in my ankle had reduced a slight bit so that was good. Must be getting used to the hard ground as I slept much better last night. I missed out on the bird watching hike that some of the group went on due to my sore ankle, however the rest was nice. I did take a brief trip into the woods but did not see anything new. Do not have anything planed until later in the day so using this time to catch up on things. After lunch we loaded up and went out on the research vessel, while on the vessel we learned a lot about the bay ecosystem and made three passes using the nets. The diversity of fish that we were able to catch was lower then what I had expected, but overall the collection was good. We caught one very large black drum that we quickly returned to the water, and saw numerous dolphins along the way. After arriving back at camp we had some free time and most us took a brief Dramamine induced nap. After dinner we keyed fish and I took a brief hike to the beach and by the freshwater pond in hopes of seeing the local alligator, however we had no luck and I retired early to bed.

Along the way

- Saw dolphins for the first time in the wild
- Learned Dramamine makes you really tired

- Rested ankle

March 24, 2004

After waking this morning we headed for the historic Fort Gaines. The fort's architecture and restoration was very interesting. After spending the morning at the fort we headed to the Airport salt marshes and to the public beach to do some seining. At the marsh we captured a number of fish and were even able to catch a snake. I also had a very interesting learning experience watching fire ants attack as we placed a stick into their hole. The ground was black with ants as they swarmed the stick in attack definitely better not to step in on one of those mounds. The ecosystem and biodiversity at the marsh proved to be very fascinating. We then continued on to the public beach to do some more seining the waves at the beach were fairly high and catching fish did not go very well. I am glad that my ankle injury prevented me from getting in the water and getting wet, as those that did looked extremely cold. Once we finished collecting we had some time to clean up eat dinner, and keep the day's fish. As I was preparing for bed I decided to join a few of the other guys for a late night trip to the nearby boat dock in hopes of catching a few more fish. The late night trip ended up being very productive producing 5 new species and one large toadfish that was really neat. I finally got back to camp nearly two hours later then when we had left and went to bed.

Along the way

- Saw gulf marsh snake
- Had my tent zipper break
- Saw thousands of fire ants

- Learned how fish are aged
- Watched the others fight big waves for just a couple of fish

March 25, 2004

This morning after awakening we loaded up and headed for the Bon Secure Wildlife refuge. At the refuge we hiked the trails and saw a wide variety of birds, but only a few wildflowers. After catching the ferry back to Dauphin Island we got back just in time for lunch. After lunch we went seining at the pier near the bridge heading out to the island. While seining we had decent success and caught a few new species to identify. The roadside near the pier also held a number of different wildflowers for me to add to my collection. Upon returning to camp we had more time to key before we prepared for a shrimp dinner. The dinner was by far the best meal we have eaten on the island thus far. As I prepared for bed later in the evening I had a raccoon attempt to get inside my broken tent to get at a bit of food I had left inside. I was able to run him off for the most part and continue the rest of the night in relative peace.

The smell of shrimp in the area must have brought an unusually high number of raccoons into camp as I could ~~here~~ see them most of the night.

Along the way

- Took ferry to Bon Secure
- Collected a shrimp eel at the pier
- Had shrimp for dinner
- Got a lot of valuable practice keying fish

March 26, 2004

Today we begin our journey home. After deciding the previous night the route we would be taking we headed off early this morning. We decided to travel through the city of New Orleans on our way back to Pittsburg. When we arrived in New Orleans we were given some money and a time frame and then we were allowed to explore the French quarters at our leisure. While looking for a place to eat we asked a few locals what they would suggest and they suggested a restaurant that they had a partnership with so they gave a coupon for a free appetizer. The restaurant we went to was called The Alpine and was extremely good. I had the best, blackened shrimp Fettuccine Alfredo. After way to full we continued to explore Bourbon street and other parts of the area. After gathering back up we finally got out on the open road. We traveled for nearly twenty hours until we arrived in Pittsburg again at 6:30 am. We got everything unloaded and everyone headed off for the own ways. In my case I headed straight for my bed as I was in need for some serious rest after a long and exciting week.

Along the way

- Visited Bourbon Street
- Ate at The Alpine
- Saw Louisiana marshes
- Saw above ground cemetery tombs

Gabe Anderson

Spring Break (Biomes)

Estuarium Worksheet

- 1.) The four rivers that the delta in Alabama drain through are the Mobile, Tensaw, Blakeley, and Apalachee
- 2.) The presence of the zebra mussel threatens the possible elimination of already threatened species.
- 3.) The zebra mussel is so successful in this new ecosystem, because there are no natural predators to control the population growth of the mussels.
- 4.) SMZ stands for Streamside management zone
- 5.) Three ecologically important aspects of the are that the SMZ prevents water temperatures from rising, tree roots in the zone absorb nutrients, and the roots also prevent further erosion by holding the soil in place.
- 6.) The major rivers that drain into the Mobile Bay are the Warrior, Tombigbee, Corsa, Tallapoosa, Alabama, and Mobile rivers.
- 7.) A jubilee is large scale animal event that occurs when environmental factors reduce dissolved oxygen levels in the water and trap bottom dwelling animals between the shore and a mass low oxygenated water forcing animals into extremely shallow water and even onto the shore.
- 8.) Sand dunes are formed on barrier islands as high winds hit the island and slow, dropping their sand load. This sand is then stabilized by the growth of plants and the dune formation takes place.

- 9.) Five characteristic plants capable of surviving the sand dune environment are Portulaca pilosa, Centrosema virginianum, Galactia volubilis, Ipomoea brasiliensis, and Panicum amarum.
- 10.) Swamps and marshes are similar in that they both have a high amount of water associated with them, however swamps are areas with permanent standing water usually associated with hard wood forests, and marshes are similar however they have a higher salinity content in there soils.
- 11.) Some plants are capable of tolerating unusually high salt concentrations in the soil one such plant Batis is able to due this because of its highly effective active transport system that is able to maintain equilibrium even when salinity is very high.
- 12.) Savannas differ from Midwestern prairies in that savannas are characterized by grasses and scattered pines and have relatively low levels of nitrogen in the soil, where as Midwestern prairies lack significant pine growth and have high levels of nitrogen in the soil.
- 13.) Five plants characteristic of both Kansas and the gulf coastal region are Sassafras albidum, Viola, Nymphaea odorata, Cercis canadensis, and Solanum americanum.
- 14.) Estuaries are important to humans because they trap massive amounts of nutrient sediments, support large scale fishing operations, and purify and clean pollutants from the water as they pass through.
- 15.) Eight woody plants characteristic of the coastal region and Kansas are Quercus (Oaks), Asimina parviflora (Pawpaw), Pinus (Pines), Froelichia Floridana (Cottonwood), Rosa, Xanthoxylum clava, Oxalis, and Cercis canadensis (Red Bud)

- 16.) Five birds characteristic of the gulf shoreline are Least sandpiper, Least tern, Ruddy turnstone, Red-winged blackbird, and Skimmer
- 17.) Five invertebrates characteristic of the gulf region are oysters, horseshoe crab, blue crab, Portuguese manowar, and sea horses.
- 18.) Marshes smell like rotten eggs due to the decomposition of plant matter that is done by bacteria. The lack of oxygen creates a sulfur byproduct creating the rotten egg smell.
- 19.) Eight animals found in the coastal regions and in Kansas are White pelican, Bald eagle, Greater egret, Horned owl, Great blue heron, Red-winged blackbird, rabbits, and muskrat.
- 20.) The adverse affect of bulkheads is that neighboring property is eroded at an unusually high rate, and that it prevents gradual change in the shoreline ecosystem.