I spent the summer (May-July) working in Yankton, South Dakota with Piping Plovers nesting on the Missouri River. Yankton is the far eastern part of the state, and before human development was part of one of the richest and largest tall grass prairie systems in the world. Now almost all of this fertile soil has been converted to agriculture making it mostly uninteresting for finding many of the fascinating species of the great plains. On my weekends I made several trips out to other locations out west and was able to see some interesting species over the summer.

SE South Dakota (Clay Co, Yankton Co.)/NE Nebraska (Cedar Co, Knox Co.)

This region is characterized by the mighty Missouri River which over years of spring flooding has deposited rich sediments throughout the region. The flooding also creates wide and perpetually changing sandbars in the river. This is where the Piping Plovers nest. Lewis and Clark passed through this area on their famous expedition west. Here they reported seeing enormous herds of Bison, Grizzly Bears, Elk, and Wolves, but now all of the prairie megafauna is gone from this part of the state. **Coyotes** were common out on the sandbars and were a major nest predator of the Piping Plover, swimming out to the islands to feed on chicks and eggs. I also occasionally saw **Racoon** and **Mink** on the sandbars, also likely predating the shorebirds. While boating around the river I would also occasionally see **River Otters**. Various turtles such as Spiny Softshell, False Map Turtle, and American Snapping Turtle came onto the sandbars to lay eggs as well. Once I found a **Western Deer Mouse** at the office, and the university dorm I lived in had **Norway Rats**. Probably the most interesting event in this region is the first major summer thunderstorm, when thousands of Plains Spadefoot Toads, Great Plains Toads, and Boreal Chorus Frogs suddenly emerge to breed in farm field puddles.

Nebraska Sandhills

The Nebraska Sandhill ecosystem is probably the most intact and most beautiful remaining section of the Great Plains. It is made up of rolling grass-covered sand dunes and numerous wetland "potholes" carved by glaciers and fed by the enormous underground Ogallala aquifer. I made two trips here, one in May and one later in June both to Valentine NWR. Valentine is remote and has no facilities, but it does have a system of dirt tracks crisscrossing the prairie. Driving along these roads is a good way to see mammals. At night Ord's Kangaroo Rats are fairly common, I saw 2-3 every night shooting across the road. One night in May I had decent views of a Plains Pocket Mouse first crossing the road then watched it disappear into the grass. I also spotted a Porcupine feeding on some willow buds along the road. Coyotes are also abundant and often can be heard calling at dusk. I watched one Coyote stalk Sharp-Tailed Grouse displaying at their lek. Pronghorn are much more common at other spots like Badlands NP and Wind Cave NP, but small herds are present in this area as well. During the day Thirteen-Lined Ground Squirrels are common. Also watch for Muskrats and Beavers which build their lodges in the many wetland ponds, Trumpeter Swans often nest on top of old ones. This area has the highest density in the world of the endangered Blanding's Turtle. I saw one crossing the road between wetlands in May.

Badlands National Park

Visiting Badlands National Park is a lot of fun, the short grass prairie during the spring and summer is ablaze with a variety of beautiful wildflowers and the backdrop of the sharply rising badlands formation is stunning. I visited twice, once in May and once in July. My main goal was to find the Black-Footed Ferrets, which frustratingly I never did. In May I had one night to shine at Roberts Prairie Dog town. This is the spot most mammals watchers have visited and seen them with some regularity. I shined from about midnight to dawn, as this is the time I heard they were most active. There are always Bison, Pronghorn and Mule Deer here as well as large numbers of tourists. At dusk I watched an American Badger hunting. When I returned in July I decided to shine the prairie dog towns off Conata Basin Road (43.763024, -102.205469). Even though I never saw any ferrets this was much more fun, I could drive around the prairie using the dirt tracks used by the Ferret researchers and shine from the car. At both locations shining I saw Western Small Footed Myotis, Coyotes, and Pronghorn. This area is out of the park boundaries and is almost never visited by regular tourists. Another bonus is that since it is outside of the park, there is a lot of dumped tin and wood. By flipping this I found a variety of rodents: Western Deer Mouse, Northern Grasshopper Mouse, Plains Harvest Mouse, and Prairie Vole. With rodents there were also a number of snakes under this trash: Yellow Bellied Racer, Gopher Snake, Prairie Rattlesnake, and Plains Garter Snake. Along this road there are often herds of Bison and Pronghorn and of course the ever present Black-Tailed Prairie **Dogs.** In May I also saw a **White-Tailed Jack Rabbit** very far off the main road at (43.757946, -102.130571). Along the main park highway **Bighorn Sheep** are regularly spotted at the Pinnacles Overlook and the Ancient Hunters Overlook. I also saw the beautiful Badlands subspecies of Least Chipmunk.

Black Hills

I also visited the Black Hills mostly for birding, but I did see the "Black Hills" Red Squirrel and Mountain Goat while hiking the Harney Peak Trail in Custer SP.





Northern Grasshopper Mouse

Plains Harvest Mouse





Western Deer Mouse

Baby Prairie Dogs





American Badger

Prairie Rattlesnake





Blanding's Turtle

Porcupine