

A Look Back from Rock Gap:

The Landscape and Agricultural History of a Family Farm in Northwest Missouri

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On his fortieth wedding anniversary, someone asked my grandfather what he thought had changed the most in all his years on the farm.

“Ponds,” he said. “Every farmer’s got ponds now.”<sup>1</sup>

My grandfather’s answer shows he was someone who paid attention to landscapes. Because he was right. My parents’ farm in Gentry County, Missouri, just across the road from my grandparents’ farm, has 19 ponds. I counted them on Google Earth, but if I’d had enough time I expect I could have named them all from memory.<sup>2</sup> I can remember playing in the deep, crater-like bottoms of some of those empty ponds before they filled in with rainwater. I can remember riding on the bulldozers that built those ponds, and the smell of fresh, wet soil as they dug into the ground. It was bulldozers that were responsible for the proliferation of ponds my grandfather witnessed – bulldozers, like countless advancements before them, allowed farmers to reshape their land to make farming easier.<sup>3</sup>

The landscape of rural northern Missouri is a landscape shaped by agriculture. As I investigate why my local landscape features are the way they are, I find myself repeatedly coming back to agricultural practices. Yet when I try to uncover the origins of these agricultural practices, I often find myself led back to landscape. This curious circular loop reminds me of similar co-causal forces in American history: those of frontier and metropolis, railroads and mining, cars and roads. I realized early on that if I wanted to understand the landscape I grew up in, I’d need to investigate the progression of farming practices that have taken place upon it.

History is usually told from start to finish, past to present. That is, after all, how events were experienced by the people living them. Their journey into the unknown was from the present into the future. But in my historical research, the opposite is the case: the present is the clearest, and the journey into the unknown for me is a journey backwards in time. As shown by

Wheatley and Rawlins's book *My Place* or Aldo Leopold's essay "Good Oak", moving backwards in time can be a powerful way to describe a place's history, offering a fresh perspective that brings significant events more sharply into focus.<sup>4</sup> Perhaps most importantly, I find that it helps remove the sense of inevitability or teleology that I often notice in my own thinking about history. To update Fredrick Jackson Turner's analogy of the landscape as a palimpsest, I find myself visualizing a "digitized palimpsest" of the landscape in which I can type "Edit – Undo" and watch the landscape revert to previous versions.

It is now 2016, and I'm standing at one of the geographical high points on my parents' farm. A row of round, shoulder-high hay bales has been placed along a fence-line here. I'm reminded that the shift from small, square bales moved by hand to large, round bales moved by machinery is another major change my grandfather mentioned at his fortieth anniversary. However, my goal right now is not to move these bales, but to climb one.

I give myself some room and take a run at the hay bales. I leap – my shoes slip on the smooth, round sides of the hay bale and its plastic mesh bale wrap, but I'm able to sink my fingers into the soft, dusty dried hay at the top of the bale and pull myself up. Some lumps of dried raccoon scat are already lying on top of the bale, showing that I'm not the first to choose this particular seat. I pick a different bale.

Gazing out over the corner of rural northwest Missouri that I call home, I see a landscape organized according to a grid system of fences and roads. My hay bale sits on a corner we refer to as Rock Gap. Perpendicular fences converge at this point, with gates opening in all directions (the "gaps"). The corner's namesake sits on top of one of the wooden fence posts: a melon-sized chunk of pink granite that was dug out of a nearby field. No one but my family members would know the name of this spot. We use family place names like this for giving each other directions,

and I can't help but wonder how many other place names have been given to this land, and forgotten, over the years.

To the northwest, my bale overlooks nearly 80 acres of waving prairie grasses. My parents raise and sell native prairie plants, making this an unusual farm for northern Missouri. About 80% of Gentry County's land is in agricultural production, and over 60% of that is cropland. Over two thirds of this cropland grows only two plants: corn and soybeans, both annual crops that must be replanted every year.<sup>5</sup> Native prairies are partially responsible for creating the rich, fertile soil that makes this region so desirable for corn and soybean production.<sup>6</sup>

To my northeast is a forested north-facing slope we call "the Twenty": 20 acres of young oak-hickory forest. A good portion of our firewood for the winter comes from this timber. At the base of the slope is a large pond we call "Crossing Pond," because its dam is one of the few easy ways to cross a large runoff ditch bisecting this section of the farm. Crossing Pond, which has a rope swing and good bass fishing, was originally built to slow the growth of this ditch, which was the result of decades of cultivating annual crops.<sup>7</sup>

If I face southeast from my bale, I can look down on a cattle pasture and a herd of about eighty Black Angus cattle. My parents graze beef cattle, as do nearly a third of the 700 farms in Gentry County.<sup>8</sup> Black Angus are the most common cattle breed in the U.S. and do well in cool, wet weather. Cattle grazing can be a profitable use for land that is too steep to plant with crops, and Gentry County's rolling landscape makes grazing the only option on many fields.<sup>9</sup>

The land to the southwest of Rock Gap belongs to our neighbor, Barry Steinman. The land is not farmed, but set aside as part of the U.S. Farm Service Agency's Conservation Reserve Program (CRP), which offers payments to landowners who agree take land out of agricultural production and conserve soil. Barry rents out his land for whitetail deer hunting in the fall, an

increasingly common land use practice in north Missouri that takes advantage of the 1.4 million whitetail deer found in Missouri.<sup>10</sup>

As I survey my surroundings from the hay bale at Rock Gap, I try to think like an environmental historian. Why are things the way they are? What is missing? I mentally place my fingers over the “Ctrl + Z” on the digitized palimpsest of the landscape.

As we move backwards in time towards 1988, the year my parents moved onto this farm, three significant changes are visible on the landscape. First, the land my parents planted with native grasses and forbs is turning back into crop fields and pastures. Second, the ponds are disappearing: the two ponds to my southeast disappear in 1994 and 1992, and Crossing Pond turns back into a growing ravine in 1986. Finally, I see the small paddocks built for rotational grazing turn back into large, continuously grazed cattle pastures.<sup>11</sup>

This last landscape change is one that I have not only watched, but been intimately involved with making. Rotational grazing requires many small paddocks, like the one to my southeast, which are grazed intensively for a short period of time followed by a long recovery period. The challenge of rotational grazing is that each paddock requires individual fencing and water access. This is made possible on our farm by an extensive network of electric fences and underground water lines. (Obviously, the latter depend on electricity as well – the third and final change my grandfather mentioned on his fortieth anniversary.) This partially unseen system, built by my family with a lot of sweat and swearing, makes it possible to move cattle across the landscape differently. This can influence larger landscape features – like ponds.

When cattle use a pond as a water source, they destroy it over time. Their foot traffic erodes the banks, and their wallowing eventually begins to fill in the pond. Southeast of my hay bale is a pond my family used to call Island Pond. It got its name because land was visible in the

center of it, and it lost its name because my parents had it drained. Island Pond had reached the end of its life as a pond, with steep, unstable banks and shallow water. By comparison, Crossing Pond, just north of Island Pond, has never been used by cattle. Rotational grazing takes the pressure off of ponds, making them a nice place to fish or swim.<sup>12</sup>

We are in 1987 at this point, so Island Pond holds water once again. My grandparents are celebrating their fortieth anniversary this year. The house that would later become my home is now owned by my grandparents, and as we pass backwards in time we see a series of renters come and go.<sup>13</sup> The USDA has just created the CRP program, which is taking thousands of acres out of agricultural production and attempting to ease an ongoing farm crisis created by overproduction of commodity grains.<sup>14</sup> My grandfather is managing the farm, which is now a mix of cropland and pasture. The old stumps I can see from Rock Gap are springing back into woody shrubs. My grandfather and other relatives put considerable effort into clearing the brush off this farmland, and many of the sturdier tree trunks went on to become fence posts, like those in the barbed-wire fences at Rock Gap. The electric fences are all gone.<sup>15</sup>

All of my grandfather's cropping and tree-cutting has disappeared by 1973, the year he and my grandmother bought this farm. My father would have been a senior in high school. A drought was causing grain prices to climb and farmers across the country were eagerly planting as much land as they could. USDA Secretary Earl Butz was encouraging farmers to "plant fence row to fence row" and "get big or get out".<sup>16</sup> Not surprisingly, Gentry County has about 400 more farms in 1973 than it will have by 2012.<sup>17</sup>

My grandparents bought the farm in 1973 from the descendants of Dick Williams and his wife, who owned and operated the farm for a good portion of the 20<sup>th</sup> century. My grandmother remembers the Williamses as friendly neighbors, though apparently Dick was never willing to

get a telephone in his home. If one of his daughters wanted to call him from town, they would call my grandparents' house, and my grandfather would holler down the road to Dick that he was wanted on the telephone.<sup>18</sup>

A USDA aerial photo from 1958 shows the farm as it would have looked during Dick Williams's day.<sup>19</sup> It would be hard to identify or count ponds in the grainy black and white photo, but Rock Gap's location is easy to pick out from the four right angles of the corner. Contrasting shades of gray mark it like a crosshairs. In 1958 there were different forms of agriculture in all four corners of Rock Gap, just as there will be in 2016. The northeast section appears to still be timber, and the land to the southeast is a light shade that suggests some sort of crop field. If so, it was likely corn: around 44,000 acres of Gentry County were planted to corn in 1959, compared to 19,000 acres of soybeans (more than double the acreage of soybeans in 1954), 14,000 acres of wheat, and 5,000 acres of oats (only a third of the acreage of oats in 1954).<sup>20</sup>

Crops and livestock are changing all across the county as we continue backwards in time. The corn, wheat, and beef cattle that will dominate the landscape by the 21<sup>st</sup> century are now sharing space with cool season annual crops like wheat, oats, barley, and rye and livestock such as hogs, sheep, and dairy cows. Sharing the landscape wasn't always easy. Shadows in the 1958 aerial photo reveal the house and barn of Elmer Dills, a farmer who lived southwest of Rock Gap. When Elmer's dog attacked my grandparents' sheep one day, my grandfather shot it. My grandmother says that Elmer never got along with them after that.<sup>21</sup>

Other demographics are changing too. In 1955, the year my dad was born, Gentry County has twice as many residents as it will have in 2016.<sup>22</sup> Continuing backwards in time, size and amount of farm machinery steadily decreases, and without it most of the major earthworks such as ponds or terraces disappear from the landscape. In 1951 the paved road between the

Williamses and my grandparents becomes a dirt road once again, and around 1949 the electric lines disappear from the roadsides – their farms and houses no longer have electricity.<sup>23</sup> With less machinery and no electricity, labor needs are increasing, and the number of working people and working animals on farms steadily increases. The one-room schoolhouse that once stood south of my parents' house reappears around this time, and classes resume.<sup>24</sup>

My grandparents marry in 1947, and my grandmother moves onto my grandfather's farm. This event represents a subtle but significant point in our trip backwards in time: the edge of living memory. Beyond this point, any information about the landscape must come from documents, second-hand reports, or from the land itself.

We reach the 1930s, the era of the Dust Bowl and the Great Depression. Dick Williams and his family rode them out in my childhood home, struggling with a landscape that was losing topsoil by the ton. The once-fertile soil was draining away off the hillsides around Rock Gap, and cropland was being abandoned or converted to pasture. Shrubs were starting to grow.<sup>25</sup> Far from Dick's farm, scientists were experimenting with a relatively unknown crop that could return nitrogen to the soil, a crop that would cover a quarter of Gentry County by 2016: soybeans.<sup>26</sup>

Carpenter Paul Sheaffer was hired to build Williams' future house and a barn in 1929, the same house and barn in which my parents still live and work.<sup>27</sup> A plat map from 1930 shows Williams owning the 80 acres southeast of Rock Gap, the present day cattle pasture. Elmer Dills owns 40 acres to the southwest.<sup>28</sup> I don't know what this land was used for in 1930, but I know it wasn't rented for whitetail deer hunting. There were only about 400 whitetail deer in Missouri at this time, and almost certainly none in Gentry County.<sup>29</sup> There probably would not have been raccoon scat at Rock Gap either – raccoon populations in the 1930s were only about 5% what they would be by 1980, thanks in part to the spread of corn production.<sup>30</sup>



Williams is still listed as the owner of the future home site on a 1914 plat map, but a 1896 map shows the 80 acres split between J.G. Davis and William Green, who also owns Elmer Dills' future 40 acres.<sup>31</sup> In 1877, around the time the Chicago, Burlington and Quincy Railroad connected Gentry County with the outside world and its markets, an atlas for Gentry County lists William Green, J. Gibbany, and J.E. Farthing as owners of the four corners of Rock Gap.<sup>32</sup>

The 1877 county atlas provides a glimpse into the Gentry County of nearly 150 years ago. The landscape is described as “pretty well divided between timber and prairie land” and notes that “all kinds of grain, grass, and vegetables are grown with success.”<sup>33</sup> Greater crop diversity is just one sign of the increasingly unfamiliar agricultural landscape. The barbed wire now stretching through Rock Gap would have been absent before the 1860s, and Black Angus cattle are absent from the U.S. before 1873.<sup>34</sup> A more unsettling change can also be found. One of the few detailed census records available online for Gentry County is a slave schedule, listing county residents who owned slaves in 1860.<sup>35</sup> While none of the owners' names matched the landowners near Rock Gap, I had never considered the fact that my parents' farm, barely 25 miles from the Iowa border, could once have been legally farmed with slave labor.

Proceeding back in time, we reach December 19<sup>th</sup>, 1850, the day William Green bought 160 acres, including the land southeast of Rock Gap, from the federal government.<sup>36</sup> This almost certainly makes him the first private owner of the land that would go on to become my parents' home site and farm. Though Rock Gap was probably not a physical boundary in 1850, its location had already been predetermined by the grid system that Green used to buy his land. But the land could have had other residents before William Green. The 1877 atlas describes early settlement of Gentry County, which began in late 1833 or early 1834, and became more rapid by 1836. “The first settlers were principally from Virginia, Kentucky and Tennessee,” writes the

author, “and being in very moderate circumstances, selected as their homes, the timbered portion of the country that being the easiest at the time to cultivate, as but few of them had teams sufficient to put the prairies in cultivation.”<sup>37</sup>

This sentence is particularly revealing of the patterns of early settlement. The sod of native prairies such as those currently northwest of Rock Gap would have thwarted the farm implements of most early settlers, so they built homes near timber that could provide them with fuel, building material, and eventually with tillable farmland. The atlas lists the main agricultural products of the early pioneers as “beeswax and honey, venison, deer-hides, coon skins and hickory nuts.”<sup>38</sup> These compact products were likely the only ones that remained profitable when they had to be transported to market in small quantities on foot, with livestock, or via waterways. The appearance of deer hides and coon skins on the list indicates that deer and raccoons were common enough for market hunting in the 1800s, a practice that would drastically reduce their numbers over the next 100 years. These early settlers also shared the landscape with bison, elk, bears, wolves – species that would all be gone from north Missouri by the turn of the century.<sup>39</sup>

These early settlers disappear from the landscape as we pass the 1830s, and we are now truly in historical outer space. Rock Gap would be nearly unrecognizable without fences, ponds, roads or buildings. The agricultural landscape that would cover 80% of Gentry County in two hundred years has completely disappeared. The corn, soybeans, and cereal crops are gone, as well as the cattle, sheep, hogs, and other livestock. Even the grasses that will cover most north Missouri pastures, including the one southeast of Rock Gap, are now gone – common forage grasses such as tall fescue, smooth brome, and Kentucky bluegrass all arrived from Europe.<sup>40</sup> However, I do know one thing was still here 200 years ago, though it has moved slightly: a chunk of pink granite that now rests on a fence post to my right.

Sitting on my hay bale at Rock Gap, I return from my trip backwards through the digitized land palimpsest and consider the landscape of 2016 one again: waving prairie grasses, timber and ponds, grazing cattle and abandoned fields. The pre-settlement landscape would have looked much like what I see to the north: an even mix of tallgrass prairie and temperate deciduous forest. The tribes of Missouria Indians that passed through this area would have hunted bison, managing their movements with strategic prairie fires, a practice that is similar in many ways to the rotational grazing going on to my southeast.<sup>41</sup> The Missouria likely hunted whitetail deer as well, the same species that people now pay to hunt in the field to my southwest.

Despite major changes in agriculture, the current landscape of Rock Gap echoes many of its pre-settlement features. Glaciation deposited rich soil here half a million years ago, and what hasn't eroded in the last 200 years still remains. The seasonal climate and 30 to 40 inches of annual rainfall have not changed much – at least not yet.<sup>42</sup> Though William Green, Dick Williams, and my grandfather may not have thought much about it, the agricultural landscape they established over the decades was a result of ancient glaciation, geologic events, and climate conditions that favored the crops and livestock they were familiar with. In turn, their farming shaped the landscape and constrained what agriculture could take place there in the future.

But I bet my grandfather did think about these things. He was someone who paid attention to landscapes. Trying to understand even a place as local as Rock Gap takes a lifetime – a lifetime of watching new technology come and go, hay bales get bigger, ponds appear. As I try to imagine what Rock Gap will look like by the end of my lifetime, there's only one prediction I feel confident about: that somewhere on the hillside there will be a chunk of pink granite, ready to wait out the next half million years.

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Notes

- <sup>1</sup> Jim Grace (father) in discussion with author, November 2016.
- <sup>2</sup> Google Earth, imagery date March 11, 2015. <<http://www.earth.google.com>>.
- <sup>3</sup> Jim Grace, 2016
- <sup>4</sup> Nadia Wheatley & Donna Rawlins, *My Place* (Long Beach, CA: Australia in Print Inc, 1989). Aldo Leopold, *A Sand County Almanac* (New York, NY: Oxford University Press, 1949), 6-18.
- <sup>5</sup> Census of Agriculture 2012, "Gentry County, Missouri County Profile". (US Department of Agriculture, National Agricultural Statistics Service). <[https://www.agcensus.usda.gov/Publications/2012/Online\\_Resources/County\\_Profiles/Missouri/cp29075.pdf](https://www.agcensus.usda.gov/Publications/2012/Online_Resources/County_Profiles/Missouri/cp29075.pdf)>.
- <sup>6</sup> Jim Grace, 2016.
- <sup>7</sup> Ibid.
- <sup>8</sup> Census of Agriculture 2012.
- <sup>9</sup> Jim Grace, 2016.
- <sup>10</sup> Robert A. Pierce II, Emily Flinn, and Jason Sumners, "G9488- Estimating Deer Populations on Your Property: Population Dynamics" (University of Missouri Extension website, March 2012), <<http://extension.missouri.edu/p/g9488>>.
- <sup>11</sup> Jim Grace, 2016.
- <sup>12</sup> Ibid.
- <sup>13</sup> Lois Grace (grandmother), in discussion with author, November 2016.
- <sup>14</sup> Tom Philpott, "A reflection on the lasting legacy of 1970s USDA Secretary Earl Butz" (Grist magazine, February 8<sup>th</sup>, 2008). <<http://grist.org/article/the-butz-stops-here/>>.
- <sup>15</sup> Jim Grace, 2016.
- <sup>16</sup> Tom Philpott, "Earl Butz," 2008.
- <sup>17</sup> Census of Agriculture 1974, "Missouri" (US Department of Agriculture, National Agricultural Statistics Service). <<http://agcensus.mannlib.cornell.edu/AgCensus/censusParts.do?year=1974>>. The average farm size in Gentry County has increased moderately since 1973, but acres in farmland have actually decreased.
- <sup>18</sup> Lois Grace, 2016.
- <sup>19</sup> "Gentry58-01" The State Historical Society of Missouri Aerial Photograph Collection. (Department of Agriculture, Farm Service Agency, 1958). <<http://digital.shsmo.org/cdm/compoundobject/collection/aerial/id/4211/show/3869/rec/1>>.
- <sup>20</sup> Census of Agriculture 1959, "Missouri" (US Department of Agriculture, National Agricultural Statistics Service). <<http://agcensus.mannlib.cornell.edu/AgCensus/censusParts.do?year=1959>>.
- <sup>21</sup> Lois Grace, November 2016.
- <sup>22</sup> "Missouri Population: By County 1900-2000" (Missouri Census Data Center) <<http://mcdc.missouri.edu/trends/historical.shtml>>.
- <sup>23</sup> Lois Grace, 2016.
- <sup>24</sup> Ibid.
- <sup>25</sup> Jim Grace, 2016.
- <sup>26</sup> Ibid.
- <sup>27</sup> Lois Grace, 2016.
- <sup>28</sup> *Plat book of Gentry County, Missouri* (Rockford, IL: Hixon W.W. and Company, 1930). <<http://cdm16795.contentdm.oclc.org/cdm/ref/collection/moplatbooks/id/739>>.

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<sup>29</sup> Pierce, Flinn, and Summers, “Deer Populations,” 2008.

<sup>30</sup> Samuel I. Zveloff, *Raccoons: A Natural History* (Washington, D.C.: Smithsonian Books, 2002), 75-79.

<sup>31</sup> “Missouri: Gentry County 1896” (W.P. Bullock, Historical Map Works website).  
<<http://www.historicmapworks.com/Atlas/US/12133/>>.

“Missouri: Gentry County 1914” (G.A. Ogle & Co., Historic Map Works website).  
<<http://www.historicmapworks.com/Atlas/US/7854/>>.

<sup>32</sup> *An Illustrated Historical Atlas of Gentry County, Missouri, 1877* (Philadelphia, PA: Edwards Brothers of Missouri, 1877). State Historical Society of Missouri:  
<<http://digital.shsmo.org/cdm/ref/collection/plat/id/147>>.

This charming atlas contains the following anecdote: “This mill...ground very slowly, a whole day probably being consumed in grinding two bushels of corn, and it is said that Levi Baldock had an old hound, that sometimes would lick up the meal as fast as the mill ground it, and look up towards the hopper and bark for more.”

<sup>33</sup> Ibid.

<sup>34</sup> “Angus” (Breeds of Livestock, Department of Animal Science, Oklahoma State University).  
<<http://www.ansi.okstate.edu/breeds/cattle/angus>>.

<sup>35</sup> Ancestry.com. *1860 U.S. Federal Census - Slave Schedules* [database on-line] (Provo, UT, USA: Ancestry.com Operations Inc, 2010). Original data: United States of America, Bureau of the Census. *Eighth Census of the United States, 1860* (Washington, D.C.: National Archives and Records Administration, 1860). M653, 1,438 rolls.

<sup>36</sup> “Land Records: 1777 – 1969” (Missouri State Archives, Office of the Secretary of State).  
<<http://s1.sos.mo.gov/records/archives/archivesdb/land/Detail.aspx?id=3648>>.

<sup>37</sup> *Historical Atlas*, 1877.

<sup>38</sup> Ibid.

<sup>39</sup> Richard Manning, *Grassland: The History, Biology, Politics and Promise of the American Prairie* (New York, NY: Penguin Books, 1995).

<sup>40</sup> Clair L. Kucera, *The Grasses of Missouri* (Columbia, MO: University of Missouri Press, 1998).

<sup>41</sup> “Native American Tribes in Missouri,” (Native Languages of the Americas website).  
<<http://www.native-languages.org/missouri.htm>>.

<sup>42</sup> Kucera, *The Grasses of Missouri*, 7-8.

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