

## A Week in the Life of an NRCS Pathways Intern in Madison County, Iowa



*My name is Chrystal Patten and I am a senior at Northwest Missouri State University majoring in agricultural business. I grew up on a farm north of Orient, Iowa and graduated from Orient-Macksburg High School in 2013. During high school I was very active in year round sports and working for The Wallace Centers of Iowa. There I helped plant, weed, and harvest four acres of organic produce and I helped maintain an apple orchard of 100+ trees. After graduation I attended Graceland University where I majored in business and played volleyball. The following spring I decided to change my major to science education and transferred to Southwestern Community College where I served as vice president of Phi Theta Kappa Honor Society and a member of the Student Senate committee. After completing my associate's degree I transferred to Northwest Missouri State University for my bachelor's in agricultural business. I've taken on this internship through the NRCS to help me complete my bachelor's degree and to gain experience in this career field. While carrying out this internship I found that this is a field I would enjoy to fully work in someday in the near future after graduation.*

### Summer 2016

#### **Monday:**

We had a staff meeting to start off the busy week, and I completed all my testing that needed to be done for new interns. In the afternoon we went out to inspect a pond construction project to make sure the right amount of clay was present in the core of the dam in order for them to complete the pond. They actually didn't have enough clay in some of the area of the core so they will have to scrape some up from a different location and bring it in. After we checked the pond we went out to the other side of the county and checked some waterways with trees in them to see if they were possible wetlands. In order to do this we took the soil probe out and took samples in certain areas and pulled the cores out to see if we could find orange/red colored iron deposits in the soil- meaning wet soil. We found none in the three locations we checked so it wasn't determined a wetland. Another way to determine a wetland would be to check the trees and plants for water specific vegetation and to see what other structures (ponds or rivers) that might affect the area.

#### **Tuesday:**

We went out to check some wetland structures being built as part of the Conservation Reserve Program (CRP) in the southeast part of the county. One was being measured incorrectly so we measured it again so it will hopefully be built to the right specifications now. The other wetlands are being scraped out and structured and they will look great once they're filled in with shallow water in the middle of the CRP fields.

**Wednesday:**

The crew went on the Badger Creek Watershed Operation and Maintenance Tour of Flood Control Structures. The commissioners of the county, a supervisor of Warren County, and a supervisor of Madison County and the staff went on this tour which was a drive to five different locations in the watershed. At each spot was a different structure that needed to be rebuilt or have some new idea implemented in it. Whether it be the road eroding due to a cut in the ditch from the field, or a box culvert that is a potential hazard for cars, it was really neat to be a part of this and hear everyone work together to brainstorm solutions for these issues.



**Thursday:**

Most of the staff including me went to the Atlantic Public Library to be trained on Threatened and Endangered (T&E) Species Assessments for Conservation Planning. We watched a slide show of the different threatened, endangered and protected species found in Area 4 (including Indiana Bat and Northern Long-eared Bat) and their habitats, and then went over the process of determining if T&E species' habitat is present and whether a project could negatively affect it. After this we all drove out to a park north of town and walked down a hiking trail to find potential bat trees. It was a very informative training and it was neat to see the steps that people have to take to determine protected species habitat.



**Friday:**

We went out to Pammel Park with a net and some guides on what macroinvertebrates we could possibly find in Middle River. The bug ID guides distinguished pollutant free bugs, bugs that could tolerate pollutant infested waters, and bugs that are commonly found in polluted waters. So we went out with the net and caught some baby catfish and minnows. We picked up some rocks and found lots of damselfly nymphs and caddisflies. These are both indicators of fairly clean water so this helps tell us that this river in this particular area is clean.

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