# **Ecological Restoration Plan**

Project: A team of Agroecology students and I wrote an ecological restoration management plan that analyzed opportunities for Troy Gardens to integrate food production and ecological restoration. I authored and published an article about this partnership in the Rock River Coalition newsletter.

## Collaborators:

Shelly Strom, Land and Gardens Manager, Community GroundWorks Evelyn Howell, Restoration Ecology Professor, UW Madison David Bart, Restoration Ecology Professor, UW Madison Tracy Campbell, Agroecology Masters Candidate Carrie Leirl, Nelson Institute Alexandra Stuessy-Williams, Agroecology Masters Candidate Jane Carlson, President of Rock River Coalition Newsletter Dave Hoffman, Editor for Rock River Coalition Newsletter Madison Permaculture Guild

## Project Background:

In the fall of 2016 I began to assemble a portfolio of projects with Community GroundWorks. Meanwhile, I enrolled in a class about Restoration Ecology. I was excited to study how to analyze ecological degradation, and respond to degradation with practices that involve food production.

I was grateful to work with the professor Evelyn Howell. I had taken a previous class of hers on landscaping with native vegetation.

Restoration Ecology interested me because I wanted to learn how to design landscapes that are improved when people collectively address their material, social, and personal needs. Troy Gardens was born of such an effort. The founders redirected degraded land slated for development to be tended to by people growing food for themselves and their neighbors.

I took this class with a few other Agroecology students. They also wanted to explore the role of agriculture in nourishing ecosystems, and nourishing people as individuals and communities.

The class required that groups of students assist in ecological restoration projects in Wisconsin. Our professors had already arranged opportunities for students to assist ecological restoration projects around the state. My fellow Agroecologists and I asked our professors if we could build a project with organizations in Madison combining ecological restoration and equity-focused agriculture. We were given the go-ahead.

We ended up partnering with Community GroundWorks. As per the requirements of the project, we developed a site inventory and analysis of Troy Gardens. We offered three distinct ecological restoration management plans, and emphasized the plan that we determined would be the most feasible and effective for restoring various parts of Troy Gardens.

Our team had connected to many folks beyond Community GroundWorks, including the Madison Permaculture Guild. We let them know about the work we were trying to do.

They forwarded our information along to the Rock River Coalition The RRC organizes volunteer-based monitoring of water and wetland in our region, the Rock River Watershed. They support projects that restore wetlands.

The RRC contentious relationship with agriculture, since agriculture in the area contributes to a lot of erosion, and subsequent polluting of waterways. They were interested in sharing our research on how agriculture can actually contribute to ecosystem health.

# Project Timeline

# September 2016:

• I joined the Restoration Ecology class, along with a few Agroecology colleagues interested in restorative agriculture.

#### October 2016:

- Each student signed up for a group project collaborating with restoration ecology projects near our region of Wisconsin.
- My fellow Agroecologists and I requested to develop a project that supported local urban agriculture efforts, and the professors approved our request.
- Each team member spent a couple of weeks reaching out to potential partners through emails and phone calls.
- We reached out to people who could offer ideas of nearby farmers or land managers who could benefit from an ecological restoration plan.
- We contacted the Madison Permaculture Guild, who forwarded our information to their listserve.
- Our information reached Community GroundWorks, and they were interested in our project.
- Our team chose to work with them because we could easily access their land, and because they showed a willingness to share their time and research around ecological degradation at Troy Gardens.
- To kick off our collaboration, our team met with the Troy Gardens Land Manager, Shelly Strom. We assured that our goals and work aligned with Troy Gardens' needs.
- Shelly and our team agreed that the management plan would not necessarily be implemented. Instead, it would be "hypothetical," and still an opportunity for better understanding and nourishing the land.

## November 2016:

- We visited their site.
- We read prior studies of the landscapes origins and issues.
- We inventoried their issues and assets, and offered three hypothetical options for restoration plans.
- We divided the work of writing the management plan between each team member.
- We reviewed Community GroundWorks' restoration goals, and each wrote an ecological restoration plan that addressed these goals.
- We then compared our plans, and combined two similar plans, so as to offer three distinct, diverse options.
- We discussed our plan draft with Evelyn and integrated her comments.
- Jane Carlson from the RRC contacted me, asking if our team could write an article about our project. She wanted to include a piece on opportunities to integrate agriculture and ecological restoration in the RRC Winter Newsletter. At

first I agreed to write an article. But after a month, I let her know that we would prefer to write an article for the spring newsletter.

#### December 2016:

- We completed our Ecological Restoration Plan, and shared it with Shelly, asking for feedback.
- We presented on our project for the Restoration Ecology class. Shelly attended this presentation, and shared her side of the experience with the class.

## February 2017:

- Dave Hoffman, the editor of the RRC Newsletter, emailed me. He was still interested in our team submitting an article.
- I decided to submit an article, and incorporate this project into my Community GroundWorks portfolio of Agroecological projects. I was excited to include a land-based approach to nourishing an urban farm.
- I asked Shelly if she was comfortable with me sharing out our partnership in an article. She said she was, and reminded me to emphasize that this restoration plan was hypothetical.
- I contacted my team mates, and asked if they would be interested in contributing to this article, or if they minded if I wrote such an article. They said they did not mind me taking on this article, and were interested in supporting it.

## March 2017:

- Each team member wrote an outline for an article, and offered ideas of what information or stories to include.
- I reviewed each outline.
- I did more research on soil-water dynamics.
- I drafted an article based on the ideas we brought to the table, and asked for the team to provide any edits or suggestions.

### April 2017:

- I submitted my article to Dave, and he provided a few edits that I incorporated. July 2017:
- I spoke on the phone with Dave, and asked for his feedback on our collaboration.
  August 2017:
  - I met with Shelly, and asked for her feedback on our collaboration.

### Success Stories

- We learned from and with agricultural and restoration practitioners outside of academia. We cultivated a wider audience for our class project by writing for RRC. I value Agroecology commitment to public scholarship, where we share knowledge in ways that reaches people beyond an academic audience. I learned about the power of public scholarship after taking an Agroecology seminar with Professor Mike Bell.
- We increased awareness of an issue and modeled a collaborative relationship. Dave Hoffman shared that the timing of the article coincided with their work on "Actually Restorable Wetlands." Funded by the DNR, they explore "What farm fields could be ideal for wetland restoration?" Dave points out that environmentalist organizations like RRC have contentious relationship with farmers. But restoration "benefits the both of us...keep soil, keep nutrients, phosophorus that is binding on those soils out of those waterways...it would benefit everyone to do something like Troy farms...We try to have

- a board member on the board that is a farm. We had one retire...we haven't found someone to take his spot. There are certainly farmers out there doing good work."
- We visioned a more collaborative Community GroundWorks as they are visioning their future. After the project I asked Shelly about how our restoration plan could be useful for Community GroundWorks. The organization is trying to evolve, to ensure that they leverage their resources to meet their goals. Our plan is an example of visioning a more collaborative Troy Gardens, that Shelly can share with stakeholders as they plan for the future.
- We pushed the boundaries of Restoration Ecology to include food production. Shelly offered that one valuable outcome of our project was uniting ecological restoration and agriculture. She was excited, calling that intersection her "passion." She was also glad for the opportunity to revisit other management plans and documents.

### Lessons Learned:

- 1. Plan for integration, and leverage multiplicity. Troy Gardens has many pieces, and they are not well-integrated. Shelly shares, "The people piece is not integrated...and eco systems...it was set up that way." At the origins of Troy Gardens, leaders said, "Let's just have these stand alone projects." Shelly criticizes the outcome, describing herself "a systems thinker." However, she also praises that Troy Gardens has "lots of different points for entry. The more ways to enter, the better... Form follows function...how can we force physical integration, in a good way...make opportunities to interact by design...maybe have family lots next to the farm."
- Organizations find university's collaborative process to be exploitative. Shelly commented that our plan-writing process could have been more collaborative. Our team could have shared more drafts and incorporated her edits. I agreed that this dynamic was not very respectful of Shelly. Shelly clarified that she felt respected, and is used to this type of dynamic from university-based and semester-based projects, which are rushed, and directed towards satisfying class requirements rather than meeting organizational goals.
- Let it go if you want it to live. This project story provides many cases of issues in working with others. I felt anxiety during the collaborative process with my Agroecology team, and took on a lot of responsibility for writing the ecological restoration plan. Shelly agrees that "collaboration is hard...it doesn't get easier." And Dave finds the need to have more farmers help lead ecological restoration plans in order to move these efforts forward. Our management plan affirms that the long, complex work of restoration at Troy Gardens can only be sustained by integrating the needs and leadership of Troy Gardens volunteers, gardeners, and visitors.