## **Proposal Brief**

## **Cory Shenk**

I plan on working with Open Source Ecology on the Tractor Development Project for eight weeks at the Factor e Farm. The project is proposed to begin with learning to use Google Sketchup 3D for use in the design stage. These designs will be used to fabricate components of the tractor which will then be tested through various means. Some possible additions/components to this overall project could be producing a bulldozer attachment, designing and building metal wheels, different types of engines/power sources and a gear system. There is also a possibility of engaging in other projects if time permits.

The design stage will be detailed and thorough and then lead to fabricating all necessary parts and components for the actual building of the tractor. One of the goals is to be able to assemble the tractor as quickly and efficiently as possible. Followed by the testing of the prototype, all aspects of the project will be documented through photos and video for use in final publication. I and my fellow interns from Berea will also utilize the documentation for the proposed project this coming fall where the Technology and Applied Design department will build a tractor using the Open Source Ecology design.

I hope to increase my knowledge and hands-on skills in the areas of metalwork and hydraulic, power and electrical systems in a highly innovative industrial setting. In doing so I will be better equipped to diagnose mechanical issues and fix them through problem solving and testing. Along with these physical elements I will also be learning (and have begun learning before arriving) how to use computer programs like Google Sketchup 3D and other open source software. Learning in these areas is one of my personal short-term goals. An internship with Open Source Ecology also correlates with my long-term goal which is teach people and communities how to create and build their own tools and machines to aid in increasing their ability to produce their own food, homes and lives. It will be an invaluable experience for me to be a part of a group that is already engaging in this type of work.

As this is specifically an internship, a large component of my eight weeks will be focused on learning. This will be done while still contributing to the project due to the fact that this type of learning is hands-on. My time will be dedicated to any area of the project that is needed, as per directed by the Product Lead/Workshop Manager. However, I hope to participate in all areas as much as possible so as to increase my skills, ability and knowledge.