Service Learning Student Project Opportunities
at Joshua’s Trust
Mansfield, CT
Beginning Fall 2017

1. Work with Joshua’s Trust office staff to do an inventory of all of the spatial data in the land trust’s databases. Create a written inventory guide for future reference, and identify gaps where the land trust may want to acquire more data in the future.
   ○ QUALIFICATIONS: This job would be appropriate for an internship or work-study assignment for a student with prior GIS experience who is comfortable working with spatial data files.

2. Fact-check Joshua’s Trust protected open space shapefiles. These files, originally from CT DEEP, may be out of date or incorrect.
   ○ As the first part of this project, the student will work with the land trust staff to decide on a consistent and clear definition for what the land trust considers “protected open space” – what counts as protected, what sub-categories should be identified for land trust purposes, etc. Once this is established, the student will review the existing files, make them consistent with the chosen categories, and check their accuracy.
   ○ QUALIFICATIONS: This job would be appropriate for an internship or work-study assignment for a student with prior GIS experience who is comfortable working with shapefiles, attribute tables, and GIS software.

3. Develop a proactive map design standard to establish a template for future Joshua’s Trust mapping projects.
   ○ This project would involve reviewing the existing Walk Book and other Joshua’s Trust maps as well as researching maps from other land trusts, towns, etc. to learn which mapping and display techniques are being used and what is most effective.
   ○ The final design template would include a standardized system for indicating information about properties – which are recreational, which have parking, which are mostly for wildlife, etc.
   ○ QUALIFICATIONS: This job would be appropriate for a capstone project or MAGIC internship for a student with prior GIS experience who is comfortable creating maps.

4. Review and organize baseline documents for Joshua’s Trust easements and properties, as well as land management plans.
   ○ For each document, create a brief summary of the key points/restrictions for future land trust reference.
   ○ Scan all the paper management plans to create digital copies.
   ○ QUALIFICATIONS: This job would be appropriate for a work-study assignment for a student with strong attention to detail and organization.
5. Standardize a methodology for doing natural resource inventories on Joshua’s Trust properties and in the larger Joshua’s Trust service area, and develop a template for future students to follow:
   o The final template will identify a list of requirements needed to develop a complete inventory, including what types of maps are needed, so that future interns and land trust staff can carry out inventories according to a consistent protocol.
   o The student may work on developing two types of methodologies, depending on time constraints and guidance from Joshua’s Trust staff:
     i. Small-scale natural resource inventories on individual properties.
     ii. Larger-scale natural resource inventories at the town/region level.
   o QUALIFICATIONS: This job would be appropriate for a capstone project or internship for a student with prior natural resources management experience. GIS knowledge is preferred. Site visits may be necessary.

6. Review and organize Joshua’s Trust’s office files, property binders, computer files, and other record-keeping material to make sure that all of the different information repositories are consistent.
   o The student will work closely with land trust staff to receive guidance on how to organize these documents to best suit the land trust work flow. The student will help to develop and implement an organizational system for Joshua’s Trust records so that the ever-changing roster of volunteers and record-keepers does not leave significant gaps or inconsistencies in the records.
   o QUALIFICATIONS: This job would be appropriate for a work-study assignment for a student with prior experience with computer systems and file management and a strong attention to detail and organization.

Students interested in applying for these positions should contact Mary Buchanan at mary.buchanan@uconn.edu. Students should indicate which position they are applying for and explain briefly why they would be a good fit for the position. Students may need to arrange their own transportation to the land trust office or properties if the position requires on-site work.