The Nature Conservancy seeks a graduate student extern to work on a meta-analysis to synthesize existing data examining the role of prescribed fire on multiple ecosystem aspects. The externship will run from mid-May to mid-August 2020 and will provide a $6000 grant to pay the student’s summer salary plus additional fringe benefits. The project is jointly led by Dr. Elizabeth Bach, Ecosystem Restoration Scientist at Nachusa Grasslands in Illinois, and Dr. Clare Kazanski, North America Region Scientist.

**Project description**
The North American tallgrass prairie is one of the most endangered and charismatic ecosystems in the world. Tallgrass prairie is a disturbance-dependent ecosystem that has been shaped by grazing and fire throughout its evolutionary history. Today, prescribed fire is an important restoration and management tool, yet the full suite of ecological impacts of prescribed fire, beyond productivity or plant diversity, is not well understood. With growing interest in managing grasslands for multiple conservation outcomes – from pollinators to carbon storage – land managers need comprehensive guidance on the impacts of prescribed fire regimes in their landscape.

This review and meta-analysis will examine the impacts of regular prescribed fire on several ecosystem properties, including measures of biodiversity and functions like soil carbon storage and plant productivity, across the North American tallgrass prairie, and test the following key questions:

1. How do different prescribed fire regimes (defined by fire return intervals) affect multiple ecological outcomes (e.g. soil carbon, plant diversity, plant production, pollinator abundance and diversity, bird abundance and diversity, and livestock weight gain)?
2. Do the effects of prescribed fire differ by climate or landscape within tallgrass prairie?

**Externship details**
The externship will support the graduate student to conduct an extensive literature search to identify and compile datasets for the meta-analysis. Both the graduate student extern and her/his advisor would be full collaborators and authors on the project. Dr. Elizabeth Bach will work closely with the extern and her/his advisor throughout the summer to provide mentorship and support project progress. The extern will be able to work from her/his current location in accordance with all local COVID-19 ordinances.

The stipend money will be awarded as an externship grant to the student’s home university to be paid as salary, allowing the graduate student to remain enrolled at the home university and to continue receiving benefits, including health insurance.

**To apply:**
The Nature Conservancy’s commitment to diversity includes the recognition that our conservation mission is best advanced by the leadership and contributions of people of diverse backgrounds, beliefs and culture. We encourage applicants from all cultures, races, colors, religions, sexes, national
or regional origins, ages, disability status, sexual orientation, gender identity, military, protected veteran status or other status protected by law. This externship is open to all currently enrolled graduate students who express interest in the topic, including MSc and PhD students.

To apply, submit the following to Elizabeth Bach (elizabeth.bach@tnc.org) no later than May 1, 2020:

1. a CV or resume,
2. a letter of support from his/her academic advisor,
3. 1 page cover letter articulating the applicant’s interest in the position, including how this position would help meet the applicant’s career goals.

Please contact Elizabeth Bach directly with questions or to express interest in the position.