

Research Position Available: Archbold Biological Station-University of Florida Range Cattle Research Center, Long Term Agroecosystem Research

Archbold Biological Station and its partner site University of Florida Range Cattle Research Center (UF RCREC) are part of the Long-term Agroecosystem Research Network (LTAR <https://ltar.nal.usda.gov>), a network of 18 agroecosystems across the United States that seek to address the grand challenge of maintaining multiple ecosystem services in food production systems.

The Archbold—UF RCREC sites (www.maerc.org; rcrec-ona.ifas.ufl.edu) have a >70-year history of research, conservation, and education programs focused on enhancing agricultural production and preserving natural resources associated with subtropical humid grassland and shrub landscapes in Florida. Interdisciplinary research at the Archbold—UF RCREC address the complex functioning of agricultural and natural lands within the region. Educational programs provide science-based information that supports decision-making strategies to maintain the sustainability of agroecosystems in this region. Climate is characterized by subtropical conditions with an average annual precipitation of ~ 1650 mm (> 65% occurring from June to October) and average minimum and maximum daily temperatures ranging from 16.9 to 28.2° C.

The Archbold—UF RCREC consists of three research sites dispersed across agricultural and conservation lands throughout south central Florida, totaling nearly 9,000 ha. Land use includes ~ 6,500-ha sown and semi-native pastures and native rangelands, and ~2,500-ha of globally-threatened Florida scrub ecosystem of the Lake Wales Ridge. The sites are strategically located in an ecologically-sensitive region, including the headwaters of the Everglades. Encompassing 3 working ranches with 4,800 cattle, they serve as living laboratories to understand the impacts of agriculture on water and soil resources, and biodiversity. From the production perspective, sites reside in the heart of Florida's grazing lands, with nearly 80% of Florida's cow-calf production found within 240 km, as well as surrounding lands dedicated to citrus and row crops. Additionally, because of the strong educational and outreach components of the Archbold—UF RCREC mission there is a close relationship with a diverse clientele. Archbold—UF RCREC work closely with ranchers, conservationists, and policy makers. Research-based information is disseminated widely to rural and urban stakeholders. Partners include federal, state and local government agencies, trade organizations (e.g., Florida Cattlemen's Association) conservation groups (e.g. The Nature Conservancy) and other academic institutions.

We are in search of one motivated individual to fulfill a research assistant position based at the UF RCREC site. The position will be renewable contingent upon continued funding and the expectation is that these positions will remain in place for multiple years.

The Archbold-UF LTAR Research Assistant will collect data in support of LTAR activities. In 2017, the main goal is to collect baseline data to characterize three landuse types.

General Tasks:

- Responsible for collection and processing of plant, soil, and greenhouse gas samples.
- Responsible for plant aboveground and belowground biomass data collection on a monthly schedule.
- Responsible for drying, sorting (live and dead biomass), and weighing biomass and entering data into excel spreadsheets in an organized manner.

- Responsible for assisting with plant diversity and composition data within different grazing land types: improved pasture, semi-native pasture, and native rangeland.
- Prepares samples and documentation for shipping samples and ships to the analytical laboratory,
- Responsible for assisting and/or performing laboratory analysis of soil, plant, and gas samples
- Maintains excellent records of all activities and data files.
- Performs other reasonable duties in cooperation with the LTAR Research Scientists, as needed.

It is expected that the research assistant will be able to perform most tasks independently as needed after initial training in tasks has been acquired. The research assistant will be willing to collect data in the field, drive field trucks between data collection sites, organize data into required formats, and perform all task in a highly professional manner. Travel between the cooperating sites is expected.

Tasks for 2017 (not limited to):

Task 1. Soil Microbial Diversity, September

Task 2. Fall Plant Diversity (Aug-Sep-Oct) following LTAR-NEON plant diversity protocol.

Task 3. Conducting GHG measurements. After training, should be able to independently conduct GHG sampling and deliver samples to lab for analyses.

Task 4. Undertake wetland species composition surveys if time permits.

Task 5. Assist team to collect biomass and forage measurements.

Task 6. Assist team to undertake controlled burns of pasture and rangeland sites

Minimum Requirements:

1. A bachelor degree in science, biology, agro-ecology, agriculture or equivalent.
2. A valid driver license
3. Willingness to work long hours in the field in sub-tropical Florida environment
4. Must have authorization for US employment.

Start-Date:

As soon as possible

To apply send cover letter, a resume or CV and three names, phone numbers or emails for three references to Dr. Elizabeth Boughton at eboughton@archbold-station.org. Competitive salary with full benefits. Equal Opportunity Employer. Women, Minorities, Veterans and Disabled Persons are encouraged to apply.

Applications due by March 3, 2017.