

# THE ANASTASIA MOSQUITO CONTROL DISTRICT OF ST. JOHNS COUNTY

## JOB DISCRIPTION

<u>Job Title</u>	<u>Department</u>	<u>Status</u>	<u>Reports to (Title):</u>
Biological Technician	Science Dept. (applied research)	Non-Exempt	Biologist/Entomologist

### **PURPOSE OF JOB:**

Conduct applied research in the field of data science using historical district datasets and developing statistical models to understand the population dynamics of nuisance and vector mosquito species. May also provide assistance in activities involving molecular detection of arbovirus and other pathogens, insecticide resistance, and screening and evaluation of commercial and new equipment and tools, products and reagents for detection of vector-borne pathogens and insecticide resistance to assist in the scientific analysis of collection data and identification of mosquito species. To assist in the in-house training of district personnel and in the development and presentation of community awareness programs. To assist in enhancing knowledge of mosquito biology and furthering the understanding of the District's mission and goals.

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### **Essential Duties and Responsibilities:**

1. Utilize historical district records of mosquito and arbovirus surveillance programs for spatiotemporal analyses according to grant objectives.
2. Provide guidance and input into the collection and data storage of incoming operational activities and other research studies in the field.
3. Utilize GIS and statistical software tools to mine, organize, and analyze district data in conjunction with publicly- available online datasets of environment, climate, and other applicable modeling or mapping parameters.
4. Utilize GIS software to develop maps for the use of surveillance and operational personnel and for district record keeping.
5. Prepare documentation, including data books, scientific reports, specifications, and presentations that capture the activities and interests of the District
6. May assist in conducting and developing light trap surveillance and identification of mosquito species
7. May assist in conducting and developing the sentinel chicken and arbovirus surveillance program
8. Implement plans of action to satisfy grants received by the District. To assist the Entomologist and Biologist in applying for grants to further the mission of the District
9. Recommend procedures and expenditures for technical and operational studies for the benefit of the District

10. Maintain and promote professional ties with local intergovernmental entities and to promote interjurisdictional and regional mosquito control harmony and cooperation
  11. Prepare reports and data summaries in a timely manner as requested by the Entomologist and/or Biologist
  12. Assist the Entomologist and/or Biologist in maintaining and cleaning scientific equipment, materials, and supplies
  13. Maintain membership (at District expense) and promote active participation in FMCA
  14. Other projects and duties as assigned
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### **QUALIFICATIONS:**

1. A M.S. degree in entomology, zoology, biology, or related basic science from an accredited four-year college or university or 5 years of directly related experience is required.
  2. Proficiency in Microsoft Office components to include MS Word, Excel, and PowerPoint software and working knowledge of email and internet communication.
  3. Proficiency in basic statistical analysis is required and familiarity with statistical software (ex. SAS, SPSS, R)
  4. Proficiency in GIS software (ArcMap and/or ArcGIS Online), specifically map making and basic spatiotemporal analysis functions.
  5. Must possess proficient skills in written grammatical composition. Must possess good organizational, interpersonal and communication skills. Public speaking skills are desirable.
  6. Must possess a valid Florida Driver's License with an acceptable driving record.
  7. Must maintain applicable licenses, including certification in the application of "restricted use" pesticides, as per Chapter 388, Florida Statutes, and Chapter 5E-13, Florida Administrative Code, FL Department of Agriculture and Consumer Services. If not in possession when hired, certification is required within six months of employment.
  8. Must have the ability to travel.
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### **WORK ENVIRONMENT/PHYSICAL REQUIREMENTS:**

The physical demands and work environment characteristics described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform essential functions.

**Physical Requirements:** Light physical activity is required on a regular basis including reaching with arms and hands, using hands and fingers to type, standing, sitting and walking and may occasionally be required to lift up to twenty pounds and climb stairs. Adequate vision to see computer screens and written documents is required on a regular basis.

**Work Environment:** The work environment normally is an office, but could occasionally include warehouses, and vehicles. Working around chemicals, which are stored, handled, applied/used and disposed of according to exact labeling instructions, is required occasionally. Occasional local travel may be required.

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**I HAVE READ AND UNDERSTAND THIS JOB DESCRIPTION.**

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Signature

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Date

\_\_\_\_\_  
Printed Name