

### **DOUGLAS COUNTY (WI)**

1316 N. 14th Street, Suite 301 Superior, WI 54880 http://douglascountywi.org

# **Inventory Forester/GIS Specialist**

An Equal Opportunity Employer

Online applications can be submitted until 11:59 pm on the closing date.

**SALARY:** \$24.68 - \$28.21 Hourly

\$51,334.40 - \$58,676.80 Annually

**OPENING DATE:** 04/21/17

**CLOSING DATE:** 05/14/17 11:59 PM

### **DESCRIPTION:**

Douglas County Forestry Department, a recognized leader in forest management information system technologies, is currently seeking a full-time Inventory Forester/GIS Specialist to help manage the largest County Forest land base in the State of Wisconsin. If you have a strong forest inventory background and technical experience with databases and geographic information systems (GIS), this is a great opportunity to lead an advanced forest inventory program while working with cutting edge technologies to support a very active forest management program covering 280,000 acres of public forest land in Wisconsin's great northwoods.

The primary purpose of this position is to provide expertise and leadership in all matters of forest inventory. Responsibilities include annual inventory plan development, inventory design and analysis, field data collection and compilation, updating inventory records, maintaining spatial tabular databases, and hiring and supervising seasonal forest inventory staff. Other duties include leading the development, maintenance, use, and integration of GIS, GPS, data recorder, and related technologies to support forest management program needs and providing training and technical assistance to staff and field personnel in the application of forestry information systems. This is a diverse position, with opportunities for growth in many areas related to forest management, forest inventory and analysis, and forestry information system technologies.

### **ESSENTIAL DUTIES:**

- 1. Lead and manage the forest inventory program; including annual inventory plan development, designing data collection policies and procedures, field data collection, data analysis, and database integration.
- 2. Recruit, hire, and supervise seasonal forest inventory staff; provide training, direction, assign work, and review performance.
- 3. Conduct regular forest compartment and stand level inventory updates utilizing the Wisconsin Forest Inventory and Reporting System (WisFIRS).

- 4. Monitor, track, and report on staff assigned annual inventory program goals and accomplishments; assign and coordinate inventory program work with partnering agencies and monitor progress. Evaluate results and program accomplishments and make recommendations for program improvements.
- 5. Develop, maintain, and integrate timber resource growth and yield models, standard planned treatment assignments, and assist with determination of annual harvest levels and track timber sale accomplishments.
- 6. Interface with field foresters on inventory program needs and analysis, and provide technical assistance for timber sale cruising and land ownership boundary determination.
- 7. Serve as a technical resource on forest health monitoring, suppression, and prevention activities. Assist with planning, scheduling, and directing forest insect and disease detection, evaluation, suppression, and prevention activities.
- 8. Lead the development, maintenance, use, and integration of the information technology program (GIS, GPS, data recorders, and related technologies) to support program needs.
- 9. Develop, maintain, and expand GIS spatial data including, data standardization, data quality control, data updating, storage and archiving, and end user support.
- 10. Produce maps and other mapping products to internal and external customers.
- 11. Analyze new or emerging technologies and provide guidance for integration into existing systems and assist with technology program annual budget planning and development.
- 12. Serve as a technical resource and provide support to other team members on information system technologies.
- 13. Assist with SFI and FSC forest certification program compliance and participate in program audits.
- 14. Assist other team members with timber sale establishment, including sale layout, cruise design, and timber marking; assist in forest recreation and wildlife habitat planning and development projects.
- 15. Enforce County ordinances, policies, and regulations. Make reports to the Forest, Parks, and Recreation Committee.
- 16. Provide customer service to the public regarding Department programs and functions, forest management activities, land-use policies, and recreational offerings.
- 17. Prepare materials and present at conferences, meetings, school/local functions. Partner and coordinate with State, Federal, and other agencies to achieve maximum program objectives.
- 18. Assist in the standard maintenance of Department facilities, vehicles, and equipment.
- 19. Assist with wildfire suppression and prescribe burning programs.

The ideal candidate will have effective communication skills, excellent customer service skills, positive enthusiastic attitude, passion for forestry, and strong relationship building skills with colleagues, partners, contractors, and the general public. We are looking for a highly motivated

team player with a drive for success and a desire to make a lasting contribution to the Douglas County Forest.

## **MINIMUM QUALIFICATIONS:**

Bachelor of Science Degree in Forestry from an accredited University or College of Forestry or related natural resource management field and two years of related experience and/or training in forestry or forest inventory and analysis with GIS/GPS preferred; or any combination of education and experience that provides equivalent knowledge, skills and abilities required to successfully perform essential duties and responsibilities. Preference will be given to applicants who meet the educational requirement and have additional professional forest inventory and advanced GIS/GPS experience. A graduate degree may be substituted for the experience.

# SUPPLEMENTAL INFORMATION: Knowledge Required:

- Working knowledge of forestry and forest inventory and analysis principles, practices, and concepts; including data collection, maintenance, and updating.
- Knowledge of a variety of field data collection and forest inventory tools, procedures, methods, protocols, and technologies including relevant hardware and software used in the collection and assessment of data.
- Knowledge of forest biometrics, mensuration, modeling, and statistical analysis of forest resource data.
- Knowledge of aerial photography interpretation.
- Knowledge of third party forest certification systems and related certification program standards.
- Knowledge of silviculture, dendrology, mensuration, tree physiology, forest entomology, and forest pathology with emphasis on northern forest types.
- Familiarity with timber valuation and appraisals.
- Working knowledge of land surveying principles and techniques.
- Knowledge of the development and management of GIS systems and the concepts, functionality, and appropriate applications of related technologies (GPS, data recorders, etc.).
- Knowledge of the concepts and execution of GIS data analysis and how to effectively apply these methodologies.
- Knowledge and direct experience with ArcGIS technologies including experience with ESRI geo-databases other data management tools.
- Knowledge of cartographic concepts and the ability to create maps for customers.
- Working knowledge of Microsoft Office software including Microsoft Excel and Access.
- Familiarity with general computer information systems and network infrastructure.
- Basic knowledge of how to effectively lead and supervise people including; training, assigning work, assessing performance, team building, and coaching.

Knowledge of customer service concepts and strategies with strong problem solving skills.

### **Skills and Abilities Required:**

- Ability to apply forest inventory and analysis knowledge to inventory data collection and maintenance activities and techniques.
- Ability to collect, edit, update, maintain, and perform quality control on forest inventory data.
- Ability to develop, implement, enhance, and maintain information system technologies (GIS, GPS, data recorders, etc.) to support forest management program needs.
- Ability to lead, supervise, and oversee the work of others.
- Ability to set work load priorities, assign work, and effectively delegate tasks to others.
- Ability to train others in forest inventory practices and procedures and standard Department policies.
- Ability to coordinate and direct team-based work assignments.
- Ability to coordinate multiple responsibilities and prioritize tasks.
- Ability to organize and maintain detailed records, and prepare reports and correspondence.
- Ability to provide support and train others on information system technologies (GIS, GPS, data recorders, etc.).
- Ability to develop and update manuals, technical documentation, tally sheets, and guides as necessary.
- Ability to interpret aerial photography/imagery, analyze GIS data and produce maps.
- Ability to adapt to change, problem-solve, and analytically think.
- Ability to communicate effectively with others orally and in writing and facilitate group decision making.
- Ability to interact with diverse public groups, State, Federal and local governmental agencies and a diverse work force in an effective, collaborative manner.
- Ability to express a positive attitude and exercise good judgment, integrity and tact when dealing with the public, co-workers, or partnering agencies.
- Ability to maintain favorable public relations.
- Ability to establish and maintain effective working relationships with co-workers, supervisors, outside agencies and the general public.
- Ability to safely operate motorized vehicles and other related forestry power equipment (4x4 trucks, ATV's, snowmobiles, and other equipment).
- Ability to work independently while exercising sound judgment in varied settings, both in the field and office environments.
- Ability to accept and perform other duties as assigned.

### **Environmental working conditions:**

Approximately 60% of this position is performed within an office setting with the remaining 40% being performed in a field-base environment. The typical field-based setting requires exposure to extreme and inclement weather conditions and often uneven, difficult terrain. Seasonal winter conditions often include ice, snow, and extreme cold. Seasonal summer conditions often include extreme heat, humidity, and exposure to biting and disease carrying insects.

### **PHYSICAL DEMANDS:**

While performing the duties of this job, the employee is regularly required to sit for long periods of time using office equipment and computers. This sedentary work includes spending long hours working with data and other information which requires attention to detail and high levels of accuracy. At times, field work will include performing physical exertion for extended periods

walking through natural terrain, including but not limited to, walking, lifting, bending, pushing, pulling, sitting, standing; and reaching, grasping, talking, hearing, and seeing. The employee must regularly lift and/or move up to 25 pounds, frequently lift and/or move up to 50 pounds, and occasionally lift up to 100 pounds and apply up to 500 pounds of force to push, pull or otherwise move objects. The employee must also have the physical ability, in all types of weather conditions, to operate four-wheel drive vehicles, all-terrain vehicles, and snowmobiles.

### **TESTING REQUIREMENTS:**

Must possess a valid driver's license. Structured interview and background investigation required. Must pass a pre-employment physical examination.

APPLICATIONS MAY BE FILED ONLINE AT: http://douglascountywi.org

Job #InvenForester042017 INVENTORY FORESTER/GIS SPECIALIST HM

OUR OFFICE IS LOCATED AT: 1316 N. 14th Street, Suite 301 Superior, WI 54880 715-395-1429

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Inventory Forester/GIS Specialist Supplemental Questionnaire		
*	<ol> <li>Do you possess a Bachelor's Degree in Forestry or related resource management field from an accredited University or College of Forestry?</li> <li>Yes</li> <li>No</li> </ol>	
*	2. Please indicate your major field of study.	
*	<ul><li>3. Do you have two years of experience and/or training in forestry or forest inventory and analysis with GIS/GPS?</li><li>☐ Yes</li><li>☐ No</li></ul>	
*	4. In a brief paragraph, indicate the nature of your experience (e.g. student enrolled in an academic training course or camp; internship; temporary seasonal employment; volunteer opportunity; or professional job).	
*	<ul> <li>5. How many years of professional forestry or forest inventory and analysis experience do you have?</li> <li>None</li> <li>1 to 2 years</li> <li>3 to 5 years</li> <li>5 to 10 years</li> <li>More than 10 years</li> </ul>	
*	6.	

Do you have any experience supervising others or have you completed any leadership development type programs or training's? Please briefly explain.

	☐ Yes ☐ No
*	8. ANSWERING QUESTIONS 9 – 10: The following two questions will help you describe your
	experience and/or education/training in forestry or forest inventory and analysis.  Responses to each question are limited. The use of lists in your responses is highly
	encouraged. Please use asterisks for list bullets. In your response, please include all of
	the following information: • Your specific role in each of the areas listed. • Geographical region where the work was performed (e.g., Great Lakes Region, Plains States, Rocky

Mountain States, Northeastern States, etc.). • The type of project that the work was

7. Do you possess a valid driver's license?

performed for and what the outcome was.

- \* 9. Please briefly describe your field experience or education/training with standard forestry inventory and analysis (if no field experience exists, write "None"), including: 1. Forest inventory planning and design. 2. Forest inventory field data collection. 3. Forest inventory data quality assurance and quality control. 4. Forest inventory data analysis (describe processes and methods used to analyze data). 5. Producing technical reports from forest inventory data. 6. Directing the work of others collecting forest inventory data.
- \* 10. Please briefly describe your experience or education/training with forestry information systems such as geographic information systems (GIS), global positioning systems (GPS), and other related technologies, please rate your user skill level of each as beginner, intermediate, or advanced (if no experience exists, write "None"), including: 1. Database development and management. 2. GIS analysis and mapping. 3. GPS technology. 4. Data recorders/field computers. 5. ESRI ArcMap 10.x GIS software. 6. Microsoft Excel and Microsoft Access software. 7. Providing technical assistance and training others on forestry information system technologies.

\* Required Question