

FOREST ECOSYSTEM MANAGEMENT

What will I do "on the job"?

*To give you an idea of what different **entry-level** jobs might entail, here is a sample of actual **job titles and responsibilities** written by our forestry alumni in response to our department's alumni employment surveys, **one to two years after graduation.***

biological science technician (Smithsonian Environmental Research Center) – lead a research lab to achieve long-term research goals

Chesapeake Bay forester (PA DCNR) – community forestry planning using aerial imagery assessments

conservation planner (Georgia Land Trust) – coordinate, recruit, negotiate, and execute conservation easements

consulting arborist (SavATree) – acquire and maintain clients; make recommendations for the care of clients' landscape trees and shrubs; manage the technicians who perform the work

consulting forester (Hale Forestry Company) – marking timber; setting up timber sales; supervising harvesting; appraisals; tree planting; meeting landowners

consulting forester (self-employed) – timber sales; appraisals; stewardship plans

county forester (VA Dept. of Forestry) – assist landowners with forest management on private land, enforce state fire and silvicultural laws, suppress wildland fires in work unit

dendrician (Bartlett Tree Experts) – pruning, cabling, and bracing of trees; plant health management; nutrition management; tree removals

environmental trainee/surface mine conservation inspector (PA DEP) – inspect quarries and surface mines

environmental scientist (Vertex Environmental) – assist in performing wetlands delineations for land development projects and preparing reports that describe the rationale and data to support those delineations

erosion and sedimentation control inspector (Navitus Engineering, Inc.) - inspect gas well pad, water impoundment, and water intake sites for adherence to the DEP approved site plans; offer suggestions to the engineers and the clients as to how to resolve issues on site.

erosion and sedimentation control technician (Montgomery Co. Conservation District) – review erosion and sediment control plans for developments, provide permits

forester (Seneca Resources) – lay out boundaries and mark timber for timber harvest; supervise logging crews; GPS harvest boundaries; operate company GIS

forester (International Paper) – locate wood for harvest; lay out and prepare areas for timber sales; supervise loggers

forest technician (U.S. Fish and Wildlife Service) – forest inventory; forest pest management; field surveys for gypsy moth; habitat and wildlife enhancement; forest analysis and forest cover type delineation

forest technician (Forecon, Inc.) – timber sale administration, management plan inventory and data collection, stand exams, harvesting operation inspections

forest technician (PA Game Commission) – establish permanent forest inventory and analysis plots, map work, GPS/GIS; data collection with Juniper, Impulse laser, diameter tape, compass, increment borer

forester (U.S. Forest Service) – conduct forest inventory and analysis program (that is, identify species, measure diameters and heights, and grade trees on sample plots); locate plots using GPS units, topographic maps, and aerial photos

forester (PA DCNR) – timber stand analysis, timber management, timber sale administration, road layout, GPS mapping, herbicide and fencing projects, fire suppression, recreation, and lease camp administration

forester (PA DCNR) – recreation forester, no timber management duties; fire suppression; GIS coordinator

forester (PA Game Commission) – manage game lands to promote timber management and wildlife habitat

forester (PA Game Commission) – timber sales, forest mapping and planning, GPS and GIS

geoscientist (Weston Solutions, Inc.) – site characterization; well sampling; report writing; operate treatment systems; project construction; database management

GIS analyst (Rayonier, Inc.) – oversee the maintenance of the GIS (geographic information system) that manages more than 420,000 acres of forestland

GIS forester (Collins Pine Company, Kane Hardwood) – manage the GIS (geographic information system) for 127,000 acres of forestland

hydrologist (U.S. Geological Survey) – surface water management

IPM monitor (Bartlett Tree Experts) – diagnose and treat pest, disease, and cultural problems of trees and shrubs on client properties

park ranger (National Park Service) – law enforcement, resource management, public education, search and rescue, wildland fire fighter

plant health care specialist (Bartlett Tree Experts) – commercial tree care including pruning, pest and pathogen scouting, fertilizing, spraying, removals, and inventories

procurement forester (Walker Lumber Co.) – buy timber and logs to supply a sawmill; manage logging jobs and crews

salesman (American Lumber Co.) – trade hardwood lumber

sales representative (Bartlett Tree Experts) – sell tree services including integrated pest management and fertilization; organize and run crews

service forester (PA DCNR) – responsible for promoting sustainable forestry on private forestland in a four-county region by providing technical assistance to forest landowners, municipalities, and NGOs

utility forester (ACRT) – contact landowners about tree trimming; supervise tree-trimming crews; evaluate trees for trim or removal to assure proper electric line clearance

watershed forester (Western Maryland Resource Conservation and Development Council, Inc.) – forest stewardship for private landowners; municipal forested watershed management; invasive species monitoring and control

wildland firefighter (U.S. Forest Service) – wildland fire suppression, hazard mitigation, prescribed fire planning and execution, and fuels mitigation

View alumni profiles online at <https://ecosystems.psu.edu/majors/forest-ecosystem-management/careers>.

Questions? Please contact:

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