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MS Position in Forest & Invasive Plant Ecology (Fall 2026).

The Department of Forest Resources and Environmental Conservation at Virginia Tech is seeking to recruit a highly motivated Master of Science (MS) student to join the Department beginning Fall 2026.

Project background

Introduced plant species are estimated to cost \$344 million per year globally in damage and management. In the continental United States, approximately 20% of invasive and highly invasive terrestrial plants are climbers. These species are aggressively invading our forested ecosystems, exacerbating climate-related stressors, displacing native species, and driving major shifts in plant community composition. Despite their growing ecological impact, the mechanisms underlying the success of non-native woody climbers in North American forests remain poorly understood. In this MS project, the student will investigate whether native and invasive woody climbers differ in their capacity to establish, survive, and perform under a range of environmental conditions. The project will further assess how these differences may translate into shifts in species distributions under future climate scenarios.

Research responsibilities

The successful candidate will:

- Conduct seed germination and clonal establishment experiments using thermal gradient beds
- Organize and participate in seed and stem collection campaigns across multiple field sites
- Design and implement environmental stress treatments in greenhouse experiments
- Perform plant physiological measurements on woody climber seedlings
- Analyze, visualize, and interpret experimental data
- Contribute to peer-reviewed scientific publications
- Present research findings at scientific conferences

The student will also have the opportunity to gain training in habitat suitability and species distribution modeling. The successful candidate will be encouraged to seek affiliation with the Invasive Species Collaborative at Virginia Tech (<https://invasivespeciesvt.org/>)

Qualifications

Applicants should hold a Bachelor's degree in forestry, biology, ecology, environmental science/engineering, or a closely related field.

Strong candidates will demonstrate:

- Experience conducting field and/or laboratory experiments
- Willingness to perform repetitive greenhouse and lab tasks
- Familiarity with plant physiological measurement techniques (preferred but not required)
- Experience with statistical analysis and programming in R
- Strong written and quantitative skills
- Ability to work collaboratively and independently
- Motivation to develop critical thinking and research independence

Location & starting date

The student will be based in Blacksburg, Virginia, with possible travel to forest sites in Virginia, North Carolina, West Virginia, and Tennessee for seed and sample collection.

Start date: July–September 2026.

Compensation & mentorship

The student will be supervised by Asst. Prof. Hannes De Deurwaerder, with co-supervision by Prof. Jacob Barney.

The position includes:

- A competitive annual stipend
- Full tuition waiver
- Health insurance
- Funding secured for two years

The student is expected to complete the program in approximately two years, earning an MS degree in Forest Resources and Environmental Conservation from Virginia Tech.

Application process

Interested applicants should contact Hannes De Deurwaerder (hannesd@vt.edu) with the subject line: "MS Position – Temperate Climbers"

Please include:

1. A statement of interest describing research background, experience, and motivation
2. A CV or résumé
3. Contact information for 1–3 references (recommended)

Application review will begin **April 15th, 2026**. Shortlisted candidates will be invited to a virtual interview to assess research interests and mentor–student fit.

Successful candidate must apply to the Virginia Tech's graduate program, which Instructions are available here: <https://graduateschool.vt.edu/>