



COLLEGE OF NATURAL
RESOURCES AND ENVIRONMENT
FOREST RESOURCES AND
ENVIRONMENTAL CONSERVATION
VIRGINIA TECH



FREC

2021 ANNUAL

REPORT

*#1 FORESTRY PROGRAM IN THE U.S. FOR THE 5TH
CONSECUTIVE YEAR (2017, 2018, 2019, 2020, 2021)*



Industrial Centers

Forest Productivity Cooperative (FPC)
Forest Modeling Research Cooperative (FMRC)
Center for Environmental Applications in Remote Sensing (CEARS)

Studies Abroad

Costa Rica
UNFCCC Conference of Parties
Panama
Brazil (under development)



Extension and Outreach

Virginia Forest Landowner Education

Approximately 28 programs were held; 2,556 forest landowners, professionals, and others attended VFLEP programs, with more than 43,228 acres represented.

Virginia Forest Landowner Update

4 issues sent to 8,243 landowners; 12 e-newsletters sent to 5,861 subscribers.

Virginia Master Naturalist Program

Approximately 2,100 active volunteers contributed 177,000 hours of service to benefit Virginia's natural resources.

Urban Forestry

62 indirect contacts (emails, phone calls, letters); 10 events (workshops, webinars, etc.); 489 direct contacts (people reached at events); 2,157 users and 3,713 pageviews of VT Urban Forestry website; 27,779 users and 115,803 pageviews of Va. Big Tree Program website; 7,504 profile visits and 322,900 Tweet impressions of Eric Wiseman's Twitter @vtarborist.

Virginia SHARP Logger Program

1066 active participants; 800 completed training to receive credit.

Geospatial Education Program

200 program participants with 13,600+ hours of online video tutorials watched and 60,000+ ebook tutorial pages accessed to date.

Agroforestry/Forest Farming

Leader of multistate coalition of 2000 landowners, companies, technical service providers, and conservationists. Programs reach hundreds of producers each year through intensive multiday training and online initiatives.

National Advanced Silviculture Program

Annual multiweek advanced silviculture module for agency silviculturists from across the country. Participants are responsible for managing hundreds of thousands of acres of federal forestlands.

Research

External research grant awards of \$4.252 million (calendar year 2021- OSP Awards database) \$3.5 million in research expenditures (calendar year 2021-MicroStrategy)

Research Grants

Average of \$4.3 million/year for past 5 years

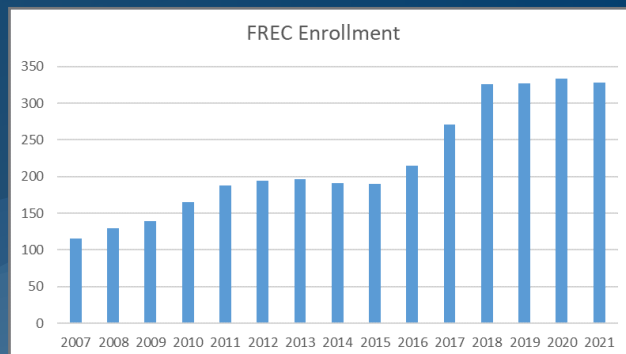
Granting agencies include the following and others:

American Chestnut Foundation
USDA-NIFA
USDA Forest Service
Virginia Department of Forestry
USDA Agricultural Research Service
NASA
NSF
US Dept of Energy
National Park Service
NCASI

Research Areas

Agroforestry/Forest Farming
Ecosystem Science Management, Climate/Carbon
Environmental Education and Communication
Forest Biology, Silviculture, Soils, Fire
Forest Biometrics and Geomatics
Forest and Resource Economics, Policy, Management
Forest Genetics and Biotechnology
Forest Operations and Business
Human Dimensions of Natural Resources
Natural Resources Recreation
Urban Forest Ecology and Management
Water Resources

Undergraduate and Graduate Programs

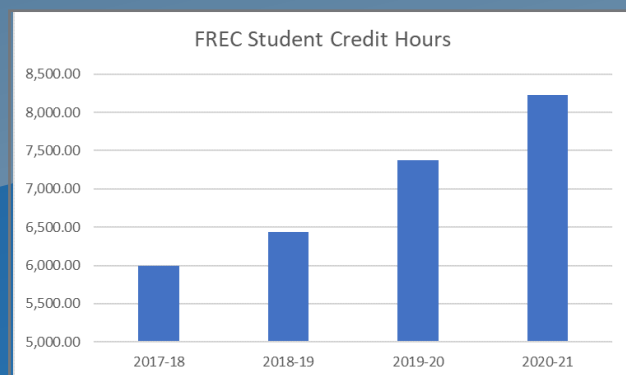


Graduate Enrollment:

Master's	22
Ph.D.	26
Overall	48

Undergraduate Enrollment: by major, fall 2021

EI	40
ERM	70
FORS	83
WRPM	42
NRC/ECS	93
NRR	
Overall	328



FREC Diversity

Undergraduate

Major	% persons of color	% female
ECS	12%	58%
EI	32%	35%
ERM	9%	34%
FORS	16%	22%
WRPM	16%	43%
Overall	15%	39%

Graduate

Level	% persons of color	% female
Master's	11%	46%
Ph.D.	11%	45%
Overall	11%	45%



Department Head Comments:

Needless to say, our students are coming through school and preparing to launch their careers in unprecedented times as we emerge from an era-defining pandemic, as they come to grips with issues of justice and fierce civil discourse, as they seek to establish lives and careers under inflation rates unseen for more than 40 years, and as they (like all of us) wonder how war might play out in Europe with far-reaching consequences, as if the usual stresses of getting through school aren't enough. Many are entering the workforce facing uncertainty over their future and how best to prepare. Of course, employers, too, may be wondering what to expect of recent graduates, and whether their organization will be able to maintain a workforce sufficient to meet the demand for their products and services. In FREC, we stand in the middle of much of this uncertainty surrounding the future workforce in our field. I want to assure you that through these times, as always, our faculty and staff are committed to a continuing tradition of providing the best critical thinking, problem solving, hands-on education possible for preparing our students for critically vital careers in forestry and environmental resources, including an increased emphasis on professional skills. Above all, though, we are all in this together, and sticking together and working together is the most important thing we can do.

Jay



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