



UMASS AMHERST

2019 FEC Alumni Survey Results

Are you currently working in the broad field of forest conservation as a means to earn your livelihood (i.e., working with trees, forests, land, and management or conservation issues)?

Answer	0%	100%	Number of Response(s)	Response Ratio
Yes			15	83.3 %
No			3	16.6 %
No Response(s)			0	0.0 %
Totals			18	100%

How would you characterize your position in forest conservation? Please choose one.

Answer	0%	100%	Number of Response(s)	Response Ratio
Public forestry (e.g., public lands, service forestry)			9	50.0 %
Consulting forestry			1	5.5 %
Industrial or Procurement Forester			1	5.5 %
Graduate student			1	5.5 %
Land Protection			0	0.0 %
Land Management			1	5.5 %
Educator			1	5.5 %
Other			1	5.5 %
No Response(s)			3	16.6 %
Totals			18	100%

Current employers:

- USFS
- MA DCR
- Mountain Roots Inc
- NY DEP
- MA Fish and Wildlife
- City of Worcester
- Hancock Forest Management
- UC Davis
- LandVest Inc.
- Harvard Forest

What is the nature of your employment? Please choose one.

Answer	0%	100%	Number of Response(s)	Response Ratio
Full-time (> 30 hrs/week)			14	77.7 %
Part-time			1	5.5 %
No Response(s)			3	16.6 %
Totals			18	100%

Please indicate which of the following professional forestry credentials you currently hold:

Answer	0%	100%	Number of Response(s)	Response Ratio
SAF Certified Forester - CF			2	13.3 %
Forester License (please specify state(s) in comments below)			4	26.6 %
Currently not eligible for a license, but intend to apply in the future			6	40.0 %
Don't hold a license or certification and have no plans to pursue one			3	20.0 %
Totals			15	100%

Comments from this section: currently work in wildland firefighting but plan to work in silviculture; MA licensed forester, CT licensed forester, applying for a CF in 2020, certified Advanced Cruiser

If you are not currently working in forest conservation, why not? Check all that apply.

Answer	0%	100%	Number of Response(s)	Response Ratio
No job where I wanted to live			0	0.0 %
Inadequate salary to meet my needs			2	100.0 %
Personal reasons			0	0.0 %
Lack of interest; my priorities changed from when I was an undergraduate picking a major			0	0.0 %
Other (please describe in comments below)			2	100.0 %
Totals			2	100%

What technical knowledge or skills gained in the Forest Ecology and Conservation program have you used in your professional career? Please check all that apply and add those not listed.

Answer	0%	100%	Number of Responses	Response Ratio
Tree and plant identification			16	100.0%
Knowledge of forest ecology			16	100.0%
Land use and conservation history			16	100.0%
Measurement of trees and forests			15	93.7%
Map and Compass			16	100.0%
GIS			14	87.5%
GPS			14	87.5%
Invasive plants			15	93.7%
Forest insects and diseases			15	93.7%
Setting up and administering a timber harvest			12	75.0%
Wildlife habitat assessment and management			11	68.7%
Land protection tools			10	62.5%
Conservation easement/restriction monitoring			5	31.2%
Protection of ecologically sensitive sites and cultural resources			12	75.0%
Other (View all)			2	12.5%
Totals			16	100%

What professional knowledge or skills gained in the Forest Ecology and Conservation program have you used in your professional career? Please check all that apply and add those not listed.

Answer	0%	100%	Number of Responses	Response Ratio
Presentation skills			13	81.2%
Understanding landowner decisions			12	75.0%
Ability to integrate information from a variety of disciplines			16	100.0%
Planning and project management			16	100.0%
Leadership			13	81.2%
Safety, Supervision, Contract Administration			13	81.2%
Public outreach			12	75.0%
Interaction with elected and appointed officials and the media			6	37.5%
Conflict resolution			13	81.2%
Professional ethics			13	81.2%
Safety			12	75.0%
Critical thinking			14	87.5%
Other (View all)			1	6.2%
Totals			16	100%

Overall, how satisfied are you with your UMass - Amherst Forest Ecology and Conservation education?

1 = Very Unsatisfied, 2 = Unsatisfied, 3 = Uncertain, 4 = Satisfied, 5 = Very Satisfied

	1	2	3	4	5	Number of Response(s)	Rating Score*
						16	4.9

*The Rating Score is the weighted average calculated by dividing the sum of all weighted ratings by the number of total responses.

Please describe the most valuable part of your experience in the Forest Ecology and Conservation Program:

- Understanding the different elements of forest ecology e.g. wildlife, hydrology, timber production, and how they interact and affect management decisions.
- Small program, great professors. Good critical thinking and learning opportunities.
- Learning from and working with passionate instructors who were highly capable and respected members of their fields. Knowing that they really wanted me to succeed helped me to gain confidence in my own knowledge.
- The field portions of the upper level forestry classes were the most valuable part of my experience in the program. Our professors orchestrated field trips and learning experiences that allowed us to see forestry first-hand in the field, whether it was at an active timber harvest or in a local mill. These trips allowed us to meet a number of professionals in the field that also gave us professional contacts to utilize when we graduated.
- The most valuable parts of the program experience were the field-based lab exercises in most of the forest ecology and conservation courses. Those labs prepared me for many of the responsibilities and tasks I faced in the professional field.
- Qualified experienced professors teaching silvicultural methods, tree and pathogen ID
- As a young professional in the field, I think the most valuable take away was the technical knowledge- identification, forest measurements, timber harvesting,

wetland delineation, etc., combined with the strong focus on ethics of conservation, and understanding that our work reverberates through centuries and generations. I feel that through the program, I was very well prepared for my first position out of school and I continue to see it as a well-structured base on which I am still building my knowledge.

- The most valuable part of the program was the field work involved with the core classes, especially with the timber harvesting class where we created a cutting plan.
- Working closely with other students of varying natural resource disciplines.
- The UMass program did an EXCELLENT job of training me for conservation and land management in the 21st century. Taking into account all stakeholders and their varied viewpoints. This has been the single greatest contribution to my career as the gap between working forest, community forest, and community shrinks. The program at UMass taught me how to manage the human dimension of forestry, how to listen, and how to engage. These are the most important tools for foresters moving into the new era of forestry.
- Silviculture, forest measurements, and dendrology were the most valuable courses that I apply daily in my work. Dendro has made me able to learn id tips for trees in the mid-Atlantic that I learn through work. For instance, I know to look for leaf shape, serration, opposite or alternate branching, etc. to remember new species. Coming into this job, I already knew the concepts of various silvicultural prescriptions, but through work I learned what basal areas work best for each particular species and how to mark trees to best employ that specific prescription. I came into this job knowing how to use a clinometer and how they use trigonometry to calculate heights and more. Field classes were extremely valuable from the Forest Ecology Program
- Working with and seeking advice from Professors and advisors.
- The ability to think on a landscape and ecosystem level. When working in sale prep, I find it common for many colleagues to focus on the unit or sale area scale when assessing forest health, species composition, potential impacts of mechanized harvest and available habitat types. Analyzing all of these factors on a small spatial scale is often the easiest and most convenient thing to do. Being able to generally assess overall ecosystem conditions on a landscape level and realizing what role a specific sale area may play in this larger picture is a vital component of how I analyze the work I do every day. I am extremely thankful for the prospective my education provided me and am confident it has made me a better forester. I have also realized this method of thinking is not necessarily a universal one that all of my colleagues gained during their education.
- The most valuable part of my experience in the Forest Ecology and Conservation program was the dedicated faculty and staff that made learning a fun, interesting, and engaging process. As for courses taken, Forest Ecology,

Tree and Plant ID, and Forest Measurements have been the most valuable to me and my early career thus far.

Please describe the least valuable part of your experience in the Forest Ecology and Conservation program:

- Not enough GIS/GPS training. Maybe this has changed, but the one class required in 2007-2011 was not adequate.
- None of my core classes fall into this category. I wish the integrative experience and writing classes had been more useful.
- I don't think anything in the program is invaluable - it all ties together to provide students a thoughtful, in-depth, and holistic education. We graduated with all of the tools necessary to be successful in any field.
- My communications class (genEd?) was not very informative, and I learned more about the subject outside of that class.
- The least valuable part of the program was the forest insects and diseases class because it was poorly taught. A working knowledge of forest insects and diseases in college would have been immensely useful to the start of my professional career.
- Lack of direct connection to employers and job opportunities. Would have been great to get a complete overview of career paths rather than learn by searching for jobs.
- I would like to make it clear that I do not think this portion of the program was not valuable or even not of high value... But, if I had to pick a portion of the FEC program that was lacking, it would be "harvesting". Given that many foresters travel outside of Massachusetts for work and end up working many different kinds of logging systems, the harvesting program could spend more time explaining laws/safety around logging systems such as skyline/tether/high lead/jammer etc. I realize the limitations of available site visits for this program. Again, I am nit picking at this point. Timber Harvesting was one of my absolute favorite classes.
- I haven't had to find a deed, however, I use Platt books and I call the local tax assessor to find out the neighboring property. Also, for the position I hold, we don't do conservation easement monitoring. In addition, I completed the Forest Ecology Course before taking dendro, so I wasn't able to remember and truly picture the species ecology.
- The minutia. All that studying to get a good grade, when in hindsight it may had been better to try to learn the information rather than regurgitate it. I think it depends on what the student believe they are going to do with their degree. In addition, I think having certain core forestry classes be available more than just once every other or once every four semesters. The intermittent availability for these classes made scheduling for graduation very difficult. I also understand

my advisor for the first three years was experiencing symptoms of Alzheimer's and may not have been fully aware of what I needed to graduate, which will not be the case for all students.

- In general, I don't have any major critiques of my education. Some specific field-based skills may not have gone as in depth as I may have wanted them to at the time however, I now realize that these are the least important to learn in the classroom setting. Every employer wants things done in the field a bit differently and these skills are the easiest to learn after you start work in the professional world.
- For me, the least valuable part of my experience in the Forest Ecology and Conservation program was the required BCT course- I believe it was called The Built Environment. As a required course, it has yet to be relevant in my career and I am not sure I see it being so in the future.

How can we improve the undergraduate Forest Ecology and Conservation program, and make it relevant to conditions today (e.g., knowledge, skills, experience)?

- I think it would be beneficial to have someone from the Federal Service (Forest Service, Park Service, Fish & Wildlife) talk about how to apply for jobs with the federal government and what working there is like, because it is a pretty complicated task just to apply.
- Continue getting students into the field through field trips. Those were great real-life opportunities to meet professionals and see forestry in action. An apprenticeship/internship or study offered with a professional forester or manager would be very helpful.
- More in depth training in botany should be required or heavily suggested. Same goes for landscape ecology.
- Maybe including a class or a longer unit on northeastern forests and climate change, since that is an unfortunate reality. Requiring some form of internship or practical experience could also greatly benefit students.
- More field experience and visits to logging jobs. This may have been intentional, but all forestry taught at UMass was purely conservation forestry. I quickly learned after leaving college that there were differences in what we were taught and how things work in the real world.
- I would like to have learned more about the varying forestry techniques and challenges around the world. We learned about our land use history and our connection to European forestry, and I would like that to be expanded to include more about the complex forestry issues around the world, which include policy, economic situation, ecology, and farming techniques. More focus on business/economics would be helpful as well.
- Some improvement would be more field work, particularly pertaining to implementing management plans in the field (marking trees to be cut). Another

improvement would be a basic Bird ID class to get a working knowledge of common New England bird species, which would be much easier to learn in a classroom/field setting instead of on your own.

- Integrate more technology and partner with forest managers (private and public) for internships jobs and experience.
- More emphasis on GIS/Excel/Access and data management. So much of modern forestry is data management and any young forester would do well to study data and its storage/interpretation/use/etc.
- I think you should have students navigate in the woods with a compass and map and have to find their way back to a defined point. My map/navigation skills without a GPS were heavily lacking upon entering this job. Also, I think there should be a semester-long timber cruising practicum where we get check-cruised because my first cruise for LandVest I missed a fair amount of trees and we have do a limiting distance for each borderline tree. After the inventory, we should learn more about understanding volumes and what they mean for future management. If you offered a wood identification class, that would be extremely useful. It's hard for me to picture how defects affect wood quality for each species and I don't know how to grade lumber. If there was a way for us to mark timber and focus on which trees to remove or release for each prescription, that would be much appreciated. Finally, I think students should have to write a prescription or management plan.
- We still use a lot of pen and paper type of technology. Not all Forestry industries are using "top of the line" technology.
- Although I think it would be fairly difficult, I would have liked to learn more about market demand. What are the major markets for forest products today? How do we think those markets may change in the future? How does the fluctuation of market prices impact the forester on a day to day basis? What is the best way to manage our forests in order to be best equipped to respond to these market demands? Those are all questions I face in my job today and would love to take a class on that but realize there would be a lot of challenges in putting it together.
- The hands-on projects in the Forest Ecology and Conservation program were by far the most useful tools for me in learning the material and seeing it in use in the real-world. If there is any way to integrate more real-world scenarios through projects, I think it would be very beneficial to future students so they feel more comfortable and confident in transitioning to jobs and careers after graduating.

Additional thoughts and comments:

- I was recently admitted to the University of Idaho graduate program for Fire Ecology and Management. I owe a large part of my professional and academic

knowledge to the foundation built by the Forest Ecology and Conservation program.

- Please continue to offer forestry specific courses. This program gave me the knowledge and skills to enter the field and work my way to where I am now. An alumni event to interact with current students would be great.
- The Forest Ecology and Conservation program is full of dedicated professors and engaged students that are committed to learning about and conserving New England's forests. The program does a fantastic job preparing their students for life after graduation and provides the necessary foundation for success in all kinds of positions and careers.
- Students learn better when professors are enthusiastic about the subject, and the UMass professors were certainly able to inspire our passion for managing forests :)
- Consulting Forestry became not for me after two years of little pay, harsh work conditions, and toxic work environments. Public sectors are riddled with seniority and ladder climbing through low wage monotonous positions. In general, the work culture of Forestry doesn't allow for quick career growth and reasonable pay. More of this is a complaint of the industry rather than the program at UMass. But if these things were made more aware to me I would have thought differently. If I had been more engaged in the public and private sector in college I would have learned much more about what my trajectory looked like.
- The program at UMass did a great job of preparing me for a successful, demanding, rewarding career in forestry. Dave Kittredge, Paul Catanzaro, Paul Barten run a fantastic program geared toward modern forestry.
- I am so beyond grateful for my Forest Ecology/NRC professors. Without them, I would not have the skills I possess or be as successful as I am in the field of forestry. They truly conveyed their passion for the field and for passing that on to all of us. And in hindsight, considering that there really were only 2-3 forestry professors in the program at the time and with the logistics happening in our major at the time I was in school, it's pretty amazing how dedicated both professors were to each class they taught.
- I thank my past Professors for still continuing to be available to me, even after graduating 5 years ago.
- I thoroughly enjoyed my time at UMass within the Forest Ecology and Conservation program. I learned much more than I expected to and enjoyed every minute of it. I appreciate all of the time that the faculty and staff put into this program and hope that this program continues to thrive!

