Peer-reviewed publications from class projects

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Topics

- Origin of idea
- Class information
- Class projects (2001-2008)
- Pros and Cons
- Would I recommend it to someone else?

2001 class project in action!
Origin of idea

- Publications benefit me
- Publications benefit graduate students
- Win - Win

Me: The tenure clock is ticking......
Students: The job interview clock is ticking...
Class information

- FOR 5374 Advanced Forest Ecology
- Typical enrollment: 4-7
- More M.S. than Ph.D.
  - Forestry
  - Geography
  - Wildlife
  - Biology
  - Soils

The 2008 Class
Class project #1: Cabin dating

- Dated what was supposed to be R. J. Reynold’s grandparent’s cabin
- Tree-Ring Research 57:197-203
- Lesson: Authorship order (but helped student!) and differences in writing ability between MS and PhD students
Project #2: Pine climatic response

- Compared dendroclimatic response of Virginia pine and pitch pine at two slope positions
- Castanea 67:91-104
- Lesson: Equipment training is necessary and don’t assume all grad students have taken dendrology
Project #3: Edge trees

- Evaluated differences in climatic response of eastern redcedar growing along the edge of balds vs. interior forest
- *Dendrochronologia* 23:39-45
- Lessons: First connection to Natural Heritage, reviewer’s prejudice against “class projects”, and soils work unpublishable.
Project #4: Tree in-growth in balds

- Used belt transects and dendrochronology to quantify the rate of tree encroachment in Appalachian balds
- Castanea 69:297-308
- Lessons: Bad winter weather caused delays in data gathering – thus no student involvement in writing; another Natural Heritage
Project #5: Woodlands/forest edge

- Used dendrochronology to sample stability of ecotone between woodlands and forest
- Natural Areas Journal 26:274-279
- Lessons: Another Natural Heritage; my lack of GIS skills compensated for with student’s skills
Project #6: Saw mill location

- Geographic analysis of grist mill and saw mill distribution as a relation to environmental factors.
- Southeastern Geographer 47:138-154
- Lesson: GIS faculty member co-authored; no student involvement in writing or analysis
Project #7: Stand dynamics

- Dendroecology and date of origin of 6 stands – each sample plot was 0.3 ha in size and all trees > 1 cm cut or cored!!
- Northeastern Naturalist 13:477-494
- Lessons: Use undergraduate class for free labor!
Project 8: Flood plain vs. terrace

- Do beech on a river terrace have a different climatic response than beech in a flood plain?
- Journal of the Torrey Botanical Society 134:505-511
- Lesson: Another case of cutting all the soil work and publishing only the tree ring work – students don’t understand 😞
Project 9: False ring formation

- Looked at environmental causes of “false ring” formation in jack pine.
- Forest Ecology and Management 236:348-355
- Lesson: No student involvement in field work, writing, or data analysis = top journal.
Project 10: Former balds

- Do former grassy balds have similar forest composition to the surrounding forest after they fill with trees?
- Natural Areas Journal 29:133-139
- Lessons: Another Natural Area site; first removal of a student from a group; another GIS-student assist
Project 11: Tree response to lake

- Examined changes in growth rates and climatic response in white oak before and after lake construction.
- American Midland Naturalist 163:134-145
- Lesson: April 16th shooting at Virginia Tech left this project incomplete at end of semester – I finished lab work, analysis and writing

2007 class
Project 12: Academic family trees

- Reconstructed academic family trees for forestry faculty at Virginia Tech
- Journal of Natural Resources and Life Sciences Education 38:99-105
- Co-authored with College of Natural Resources Librarian

My academic “father”
Project 13: Growth releases

- Methodological question about growth release criteria
- Forest Ecology and Management 257:2235-2240
- Lessons: Reused cores from previous project, co-authored with faculty from Oregon State – students did not understand paper.
Project Blackhole: The total failure
Pros?

- Exposure to many ecological communities.
- Opportunity to write a wide variety of research manuscripts that were not tied to funding.
- Some students (years later) thanked me.
Cons?

- Collaborating with students not particularly rewarding
- Tired of authorship “gifts”
- Criticized for not having a clearly delineated research program and clearly delineated teaching program
Would I recommend it?

- No.
Many thanks to the students of FOR 5374