



## Annual Report 2004

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### The year behind...

Another year has gone by fast. It seems only a few months ago that I was writing our annual report for 2003. In the last 12 months we've accomplished a lot, retrenching and solidifying the improvements we have made to our management and our facilities in previous years. In the coming year we plan to undertake yet another round of ambitious improvements, so stay tuned.

The interns employed in the Forest Apprenticeship Program (aka the Forest Crew) had a fantastic summer, marking 510 MBF at the Yale-Myers Forest and another 280 MBF at Yale-Toumey (see the feature on the Myer's crew, page 4). The crew prescribed our first strip shelterwood in a hemlock-oak stand on a slope with a northern aspect. They also developed a prescription for a patch selection cut for oak-hemlock. This past summer also saw the collection of CFI data for the Yale-Myers Forest. Watch out for our summary of the CFI analyses in next year's news. In other respects, the year for the crew was fairly typical: following the program we have developed over the last few years, to make this an intensive field skills experience for training foresters.

The past year was also a productive one for research. Though our programs in aquatic ecology and trophic food web studies of old fields were not as intensive as in past years, our programs in plant physiology and regeneration ecology grew considerably. Our extension programs also expanded by leaps

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## Summer life improvements at Myers



Credit: Mark Ashton

**Recent changes at Yale-Myers have led to increased sightings of exotic wildlife, such as this flock of Hard-hatted Staff seen outside its native range of New Haven.**

A new era has dawned at the Yale Myers Forest. The new classroom and kitchen building was completed in the spring of 2004, just in time for its first season of use. The new structure stands in the same footprint of its predecessor known as, among other names, "The Classroom", "The Dungeon", and "The Building Where Almost Nobody Contracted the Hanta Virus and So They Lived to Tell About It". This past summer saw all Forest activities moved to the new building, relieving the Morse House from duty.

If you're struggling to grasp how life at Yale-Myers has changed, imagine:

- wireless internet access that allowed the swarm of laptop-owning residents to, once and for all, avoid those awkward, after-hours conversations and interactions with each other;
- a modern kitchen, eliminating the need for John McKenna to walk all the way to the bath house to brush his teeth;
- and dimmable track lighting, creating a romantic mood among co-workers on even the hottest and most humid July evenings.

In fact, conditions at the Myers Camp are so much better than in previous years that the complaints of the summer crew were, for the first time, petty and ignorable. Summer cook

Eva Garen (MES '97, PhD '05) broke in the kitchen and the walk-in pantry, and in August, three weeks of modsters thoroughly tested the capacities of the facilities. The bedrooms and the new computer lab/office on the west end of the building are equipped with features once considered fancy at Yale Myers: electrical outlets, light switches, and working windows with intact screens.

Contrary to our expectations, the new building is far from sterile. The mice took no time at all to find a way in, and a few friendly bats have taken up residence in the classroom; their evening flights made more exciting by the presence of new ceiling fans. A less friendly swarm of hornets found the kitchen's exhaust hood a desirable place to nest, and they have the nerve to get agitated whenever we run the fan.

The improvements at the Yale Myers camp will not end at the classroom. The blacksmith shop, to the north of the Morse House, will be renovated in



Credit: David Hobson

**With the new classroom, Yale-Myers has its own version of the 'Green Monster'.**

and bounds. Apart from our summer seminar series and our BioBlitz (which are now a regular part of forest activities), we held a fall walk in the woods for the local townsfolk and conducted field days for various visiting groups, including the FES staff (see photo on front page). And the summer mods were as successful as ever. Hosting all of these activities proved easier and more comfortable with the major improvements in our facilities. In particular, the new classroom with its spacious kitchen and pantry, computer room with internet access, and new landscaping behind it have helped make all our operations run more smoothly. With the completion of other improvements, this trend is sure to continue.

On the lighter side, the traditional Foresters vs. Researchers wiffleball game on July 4th, saw the researchers, (including myself) soundly whipped by a very professional team of foresters. In addition to such a resounding defeat, my standing among camp dwellers was further eroded when I failed to get the right kind of hamburger for the barbecue. In fact I'm not sure that the "beef product" that I procured should be considered as meat of any sort, a fact that was emphatically reflected in the sounds of disgust from the would-be celebrants.

**The year ahead...**

This year we will continue to upgrade the School Forest Apprenticeship program with several more formal lectures and exercises. The Red Front Lot and Kozey Road demonstration areas, which highlight wildlife habitat management and advanced stand dynamics are already complete, and we will produce self-guided brochures for the trails later this year. We also plan to start on our fourth demonstration area: the area around the old Morse family farm. This demonstration area will focus on historical ecology and land-use change. While we plan to use it for programs with resource management professionals and the public, we expect it to be especially valuable for incoming Master's students during the summer mods.

The development and upgrading of our School Forest facilities will continue this year, with the goals being the restoration of the Morse House interior and the renovation of the rooms in the bunkhouse. In addition we will be evaluating Toumey Villa (whose rudimentary charm eludes most guests) for a complete overhaul. We also are making significant investments in new gates and road grading to improve and control our access to the forests.

On the GIS side, we will be upgrading the stand maps for the



**Professor Alex Finkral (MF '97, PhD '05) ponders what he should have for lunch.**

Turkey Hill and Morse divisions. Next winter, we hope to prepare our first holiday card mailings to send along with an updated School Forests brochure to all our friends.

Last, and perhaps most important, one long-time member of our School Forest team will be leaving us. Alex Finkral (above), Forest Manager for eight years, is leaving to accept a tenure-track post in forest management at Northern Arizona State University. We will miss him and we wish him the best. With his departure we will hire a full-time professional forester in the Forest Manager position. This is a big move for us but it's time that we do this.



**The Yale-Myers Phoenix — the old stone fireplace links the dark and forbidding classroom of the past (left) with the bright and inviting classroom of the future (right).**

March and April 2005. Once the work is complete, nearly all of the equipment now kept in the basement of the Morse House will be moved to the blacksmith shop. This will provide the camp with a dedicated, functional tool and maintenance shed. A new wood shed will be built to the west of the Morse House. This will offer a stable and convenient place to store the cords of firewood needed throughout the camp, replacing the deathtrap that stood behind the house until this past summer. Last, the Morse House itself will undergo some major upgrading, with a new kitchen and a new heating system being installed. Ultimately, the Morse House will be used to house visiting instructors and staff for the summer internship program.

# Research at the School Forests



**Linda Puth contributes to the Forests with her Kiddie Pools for Zooplankton program.**

Recent upgrades to the research infrastructure at Yale-Myers Forest continue to improve its potential as a unique and productive location to study forest ecosystem dynamics. The implementation of a formal set of research protocols in 2002 has helped to better distribute resources, facilitate researcher interaction and implement projects that integrate well with the broader management objectives of the forest. The new classroom, computer lab and wireless internet system have elevated the forest from its days as a fieldwork station to a center where data analysis and information exchange can be readily conducted. In response to these improvements, the scope of research projects being conducted at the forest has expanded beyond the traditional mainstays of silviculture, aquatic ecology and wildlife population dynamics.

Ecology and Evolutionary Biology doctoral student Annika Walters has recently begun a four-year study investigating hydrological processes in some of the major brooks at Yale-Myers Forest. Her project, *The effect of altered hydrology on stream community structure and function*, will use stream manipulations to link hydrological regimes with ecological interactions and ecosystem processes in an effort to predict the effects of climate change and continued human modifications on freshwater systems.

Megan Andrews, a doctoral student in the Geology Department, has

identified the Boston Hollow area at Yale-Myers Forest as a prime location for her research, *Gymnosperms vs. angiosperms: using mineral surface observations to determine the relative weathering of minerals*. Megan will be sampling the many exposed bedrock ridges in the area to compare the rates of mineral weathering caused by the two groups of trees. She hopes her work will contribute to the development of better models for assessing the impact of angiosperm evolution on atmospheric CO<sub>2</sub>.

In response to the increased threat of invasive species on native communities, Ecology and Evolutionary Biology postdoc Linda Puth is continuing her research at Yale-Myers Forest. Linda's project, *Putting the parts together: a holistic view of invasion*, is an attempt to determine which characteristics of organisms and landscapes increase the likelihood of dispersal, and to make predictions about which organisms are likely to invade new habitats.

None of this is to say that the more traditional research endeavors at the school forests are dropping off. John McKenna (MFS '00), a doctoral student at UMass, has finished conducting an experiment on the interactive effects of

light, water, and nitrogen on the growth and physiology of birch (*Betula*) seedlings. Doctoral student Alexander Evans (MF '97) is continuing his investigations into the biology, spread and management of hemlock woolly adelgid (*Adelges tsugae*). Dr. Ann Camp and doctoral student Philip Marshall (MESc '02) are carrying on with their photo-documentation of long-term stand development processes at both Yale-Myers and Yale-Toumey Forests. Doctoral student Mark Urban (MESc '01) is also continuing his work on amphibian behavior and population dynamics, and some of his recent findings can be found in the journal *Ecology* (2004) **85** (11): 2971-2978.

Congratulations are also due to Cat Burns, a long-time researcher at Yale-Myers Forest, on the completion of her dissertation research and granting of her PhD from Yale's Department of Ecology and Evolutionary Biology. Cat's extensive work on white-footed mice (*Peromyscus leucopus*) should contribute greatly to our understanding of wildlife population dynamics after disturbance and across heterogeneous habitats. Her work will appear in upcoming issues of the journals *Ecology* and *Behavioral Ecology*.



**Busy beavers, led by doctoral student Annika Walters (center right), work on changing the flow of one of the many small streams at Yale-Myers Forest.**

## Nothing could be finer than timber cruising Myer's...

The weather could not have been better this past summer for our beloved crew. With consistently mild temperatures and only a few days of rain, Keith Bisson, Robert Lamb, Justin Pollard, Steven Roberge and Ben Urquhart, spent their days carousing through the Myers Division in the Siccama van. Yet under the sage tutelage of crew boss, Dave Hobson, these rowdy men managed to do some phenomenal work.

After learning to appreciate the finer points of the chainsaw from the Game of Logging — and with a few lectures from such wise elders as Mark Ashton, Tim Gregoire, Dave Ellum and Alex Finkral — the team stepped bravely into the forest for two weeks of continuous forest inventory (CFI). With this experience and a fair number of ticks under their belts, the crew began the timber-oriented component of the summer by cautiously marking a crop-tree thinning below Dr. Ashton's recently landscaped home. After several weeks however, the crew became comfortable with their newfound abilities and began to design and mark more complicated patch shelterwood cuts and seed-tree cuts. By the end of their time at Yale-Myers, the crew had marked roughly 50 acres of regeneration cuts and 60 acres of thinnings, for a total volume of more than 510 MBF.

When allowed by their busy schedules, the forest crew indulged in a variety of excellent activities; including swimming in Bigelow Pond, marathon training, anti-beaver dam tactics and the occasional trip to We-Lik-It ice cream. While the 4th of July party was a pale shadow of its former self, the annual Margarita party erased any doubts (as well as some memories) about the enthusiasm or sobriety of the crew. The ultimate highlight of the summer however, was the sound thrashing delivered unto the research staff in the annual wiffleball game, final score: 7 to 2.

In August, Robert Lamb headed south to get married while the remainder of the team turned north to finish their summer at the Yale-Toumey Forest. Two weeks within the Ashuelot division yielded an additional 40 acres of thinning and 280 MBF of white and red pine.



Credit: David Hobson

**The School Forests' own boys of summer take time out from their busy schedule to pose in front of their tour bus.**

## Announcements & Coming Events

### Red Front Lot Demonstration Debuts

Each year the School Forest works to expand its Extension and Outreach programs and this year was no exception. Thanks to the hard work of David Ellum and the 2003 Forest Crew, the new Red Front Lot trail had its inaugural season. The trail shows how people can manage their landholdings to create habitat for a number of wildlife species. To date we've had trail-goers from as far away as Russia and Germany. Additionally, the trail was featured as part of the Walking Weekends program run by the Quinebaug-Shetucket Heritage Corridor, Inc. An accompanying self-guided brochure will be available later this year.

### A New Class Act

In contrast to its predecessor, our new classroom building has become a hub for outreach activities. The facility has enabled us to begin hosting outside groups for meetings and conferences. Early last spring a number of foreign foresters spent the day at Yale-Myers as guests of IKEA. Sofie Beckham (MF '01, Forest Crew 2001) now works for IKEA and thought of Yale-Myers when looking for a place to gather an international group of foresters. After the IKEA folks spent the day meeting in the classroom, they planted fruit trees in the meadow at the lower end of camp to offset the carbon dioxide released by their travel to the forest.

The next group to hold a meeting at the Yale-Myers camp included Yale FES graduate Tim Northrop (MEM '03) and regional staff members from the Trust For Public Land. However, the largest group of all ( $\pm 5\%$ ) was the biometricians. The 2004 Conference of the Northeast Mensurationist Organization proved so popular that we quickly ran out of space in our new building and had to relocate to the facilities at the Eastford Baptist Church. While the presentations took place at the nearby church, we spared no effort in providing the biometricians a chance to sample life at Yale-Myers, with plenty of food and drink around a roaring fire under the catalpa tree back at the camp.

### Third Annual BioBlitz, June 18, 2005

This summer's 24-hour biological quest at the 787-acre Myers division uncovered more than 100 species. The BioBlitz was a bit more like a "BioAmble" as we spent an enjoyable day hiking together, discussing ecology and recording species. The stars of the day were two local boys who, despite their young age, proved to be seasoned naturalists. In true Yale-Myers style, no event would be complete without food, so at the end of the day we all retreated back to camp for a cook-out. Join us this year on June 18 when we "blitz" the Turkey Hill division.

### Yale-Myers Summer Seminar Series, June-August, 2005

The summer seminar series continues to draw a crowd — now without drawing blood. With the availability of the new classroom, we were able to forego the bug-filled tent and concerns about the weather. The easy access to electricity and a projector also made the presentations run more smoothly. Still, we haven't sacrificed any Yale-Myers charm by moving inside. The bat who has taken up residence in the fireplace makes regular rounds of the room to remind us we're still in the woods. This season's line-up promises to be just as entertaining and educational. We will be starting a bit earlier this year, so join us on June 23, July 7, July 21, and August 4, 2005 at 7 pm for beverages and snacks; the talks start at 7:30.

As always, if you have any suggestions for events or just need a question answered please feel free to contact our Extension and Outreach Coordinator, Samantha Rothman. She can be reached via e-mail at [samantha.rothman@yale.edu](mailto:samantha.rothman@yale.edu) or by phone at (203) 432-7856.