

## Sustainability Committee minutes 10/29/08

### Present:

Carr Everbach, recorder

Nick Buttino, also recorder

Rebecca Ringle, Lang Intern assigned to SusCom

Maurice Eldridge

Amanda Bayer

Linda McDougal

Mike Roswell

Kelsey Hatzell

Guests: Jeff Jabco, Grounds; Eric Behrens and Mark Davis, ITS

The committee heard first from Jeff Jabco regarding sustainability initiatives from Grounds. Jeff began by explaining the division between Grounds and Arboretum: the Scott Arboretum endowment pays for “inside” staff salaries and a few plants, but most everything else is covered by the College, through Grounds. As noted by Andrew Bunting (Arboretum) in our previous meeting, Jeff answers to Stu Hain but also to Claire Sawyers, Arboretum Director.

Maurice pointed out that new buildings now come with endowments to support their ongoing maintenance, including plantings around them (e.g. Science Center).

Jeff talked about green roofs projects on campus: Papazian shed, Alice Paul, David Kemp, and soon Scott Arboretum Education Center and LPAC (Jeff has applied for State money but in case that doesn't come in, plans to factor the costs into the Grounds capital budget over the next few years). Swarthmore is a leader in mid-Atlantic green roof expertise, and provides dozens of tours (regular monthly tours, tours during conferences, tours for Middle School students by special arrangement).

Jeff then addressed stormwater management. Groundwater recharge exists at the Science Center, PPR, under the stadium field, for Alice Paul and for David Kemp Hall. He discussed the use of porous asphalt on campus, which has been most successful on horizontal paths such as the Science Center entrance (sloping paths such as Parrish Beach have the pores filled in by dirt that washes down from the lawn). Jeff discussed the composting program (funding comes from Linda McDougal's dining hall budget), with Good Food Club coordinators paid through the Arboretum. Next discussed was Integrated Pest Management (since 1991) in which chemical usage is reduced in preference to natural predator introduction. There is a coordinator on gardening staff, who also oversees turf grass maintenance (low maintenance, no fungicides/insecticides, minimal use of herbicides); playing field fertilizers are increasingly organic (chicken manure). The Grounds crew makes their own mulch from wood chips of felled trees with leaf compost (from the Borough and Township) mixed in. Recently, waste drywall from Alice Paul was ground up and used as a soil

amendment. Grounds is looking into turf grass alternatives for twice-annual mowing.

Jeff then turned to an in-depth discussion of the recycling program, and circulated copies of the 2007 annual totals (attached here below). Carr promised to make a nice graph for the Sustainability Committee website plotting College recycling over the past 5 years. Interestingly, co-mingled and paper recycling have gone down every year for the past three years. Does this mean that recycling is less or that people are using less (due to electronic dropboxes, etc.)? There followed a lengthy discussion of contamination of recyclables by food: environmental services staff are told not to put recyclables contaminated with food waste into the recycling dumpsters, lest the entire load is rejected by the recycler. Swarthmore recycles plastics numbered 1, 2, and 5. Jeff noted that hundreds of recycling bins disappear every year from campus, and he is not sure where they go (Mike Roswell agreed to ask the Phoenix or Daily Gazette to do some investigative reporting on this). Jeff is hoping "single-stream" recycling will be coming soon to make it more convenient for people to recycle. We cannot track our trash totals inexpensively, and so comparison of recycling with trash is difficult.

Jeff is co-chair of the Crum Woods Stewardship Committee, which is using guidelines from the 2003 National Lands Trust plan (see link at <http://www.swarthmore.edu/x16866.xml>). The CWSC has had a big focus on deer control for about a year. Deer control measures will be starting December, which effort will facilitate replanting of indigenous flora (because replacement efforts now produce only deer food). Ongoing maintenance of the woods is directed by grounds staff in coordination with the Scott Arboretum: attempted control of invasives (since 1980s), trail maintenance, trash cleanups, replanting of native species, research (student-initiated and Bio dept). Jeff would like to institute an "adopt a section" of the woods, targeting invasives and replanting native plants, and indeed this has already started. Items for the future: Yale Avenue dam removal, establishing managed meadows of native plants, increasing forest interior, hiring a Crum Woods manager. Almost all these items will require money, time, and support of the College community (including the Sustainability Committee).

Jeff's last topic was the creation of a comprehensive College planning process for Grounds, as money is almost always the limiting factor on what we can do. Examples are stormwater erosion behind Lang Music, Whittier Place Road replacement (which could, for example, include an under-the-street cistern or groundwater recharge system, but only if we plan in advance for it), and replacement of some less-used parking lots with more vegetated coverings. Mike Roswell asked, "why not do this now?" and Jeff replied that this kind of planning is just starting now, but that it comes down to money.

ITS - Eric Behrens, chief CITO, Mark Davis (desktop deployments)

Our ITS guests noted that Swarthmore is now a leader in virtualization (reducing many big servers to a few, which time-share), a process that has allowed 25% less

electricity than previously and also less electricity for cooling the servers. There is an automatic shutoff time for major area public desktop computers (those facilities with set hours), and monitor sleep times have been reduced from 30 min to 10 min. As regards lab and classroom AV, the "roomview" application monitors overhead projectors and built-in computers remotely, and can shut them down if idle (reducing the number of blue screens projected all night in empty classrooms). ITS has encouraged the replacement of separate printers with multipurpose units (printer/photocopier/fax/scanner), but departments buy bootleg printers, resulting in environmental costs including not just the electrical power they consume, but also the environmental costs of their creation, transportation, and eventual disposal. A discussion of tradeoffs occurred about this, as Departments often have reasons to want several small printers in different locations. Old computers are sold by ITS to refurbishers, and so we don't know how eventual disposal occurs or what environmental costs there are. We discussed tradeoffs like laptops (use less energy than desktops but don't last as long) and the advantages of dual-boot (Windows/Mac/Linux) consolidation, especially of ITS staff computers. We discussed telecommuting by ITS staff, many of whom live far away from campus (idea: faculty mortgage deal for staff, too?).

Eric and Mark reported that there are plans to include small built-in computers in some classrooms: these would be small Mac mini dual boot computers.

Discussion then turned to print management software and print-release stations (hardware boxes that would print previously queued documents only if the user was physically there to pick up the printouts). ITS views these issues from a cost perspective, not so much a sustainability one, and these systems are expensive (hardware and software). In fact, print-release systems were break-even in cost, and even reductions in printing from copiers would not necessarily save much money (other than for consumables like paper and toner) because copier contracts cover replacement and maintenance for a fixed annual fee. Mark and Eric discussed the terminal-server model of computer classrooms (rather than individual desktops or laptops), and consumption at hardware-purchasing level (1200 computers, replaced on 3-year cycle). Finally, Eric said he would like to establish an incentive program (like guns for tots), for community members to turn in low-use machines in exchange for some benefit. These machines sometimes are a waste of money and environmental resources, as they are kept on, replaced every three years, and are rarely used.

**\*\*\* Please look at your calendar for a next meeting Monday, November 10, 2008 from 4-5 pm in the Lang Center. \*\*\***

Respectfully submitted,

Carr Everbach (with help from Nick Buttino)

### Important Addendum:

Earthlust hosted a teach-in session on 100% wind power from 9:00-10:30 pm later in the evening of 10/29/08. Tom Cochrane and Carr Everbach attended. Earthlust members reported that will cost about \$88,000 annually (on top of about \$1.2M, or a 7% increase) to buy sufficient wind credits from American Wind to cover projected annual electricity use by the College. The reasons why Earthlust thinks the purchase of wind credits is the best use of the money are these:

1. Adopting 100% wind would be a good-faith action on the part of the Administration, whom some students and alumni see as slow to show leadership in sustainability. It is a step only the Administration can take.
2. It would let everyone know that the College is serious about lowering its carbon footprint (i.e., it would have Public Relations value, both on and off campus).
3. It would have immediate effect, unlike plans for replacing items on campus to reduce carbon footprint, which have long start-up times.
4. A wind credit contract for 100% of College electricity would solve a major issue entirely, while the same money applied to problems like geothermal heating/cooling of buildings or replacement of the College use of #6 fuel oil would barely make a dent in those initiatives.
5. It supports a national movement toward development of renewable sources that needs support, especially after the country's economic problems have reduced demand for renewables. The Pickens plan is an example of a national effort that is supported whenever customers buy wind and thus indirectly fund the building of new turbines.
6. It would indirectly create green jobs (which carbon reductions on campus would not necessarily do).
7. It would motivate students to look for more local solutions to increasing sustainability as part of a "green push" in all aspects of living and learning. It would provide motivation for Earthlust members and others.
8. Wind Power can be a "hook" to discuss sustainability and educate incoming students during Freshman orientation (and otherwise).
9. If other student sustainability efforts are less successful, at least the electricity used on campus would be green. It is a guaranteed and auditable benefit to the environment.
10. Wind credits are the surest, quickest, and most visible method for increasing environmental sustainability on campus. Other initiatives would follow, as outlined in the 2007 ES Capstone's Sustainability Action Plan.