

META-ANALYSIS  
OF  
PAST EVS-300 SEMINAR PROJECTS  
ON  
CAMPUS AND COMMUNITY SUSTAINABILITY

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EVS – 300  
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In the Bass Hall Environmental Resource Center there are two large binders containing approximately one thousand pages of research and recommendations for improving sustainability at Smith College and in the surrounding community. When I first studied these reports, I noticed that certain issues were addressed again and again throughout the five years represented by the collected papers. I became interested in seeing if these recurring themes were tracking the progress of sustainability efforts or merely beating a dead horse. The fact is, it is a little of both. There is progress and there is retrenchment, some of the reports offer recommendations that have become part of the sustainability program here at Smith and others are waiting for their time to come. I am interested in determining what factors support the implementation of student research recommendations.

Initially I had considered doing a three-by-three comparison analysis: comparing and contrasting a sub group of three similarly themed papers that appear to have contributed to the implementation of certain sustainability efforts with another sub group of three analogous papers that do not appear to have entered the pipeline. As I gathered more information, it became apparent that this model is too contrived to explain the complex inter and intra relationships that exist among the study group. Also, as I became more familiar with the student's papers, it was clear that it was not a difference of degree in passion or vision that finds certain ideas being implemented while others are not: the factors are much more complex. Therefore, to best represent and comment on the past EVS seminar papers, I thought it valuable to expand my field of view and consider a much larger sample to analyze.

Through interviews with faculty and staff who are engaged in sustainability efforts at Smith College, I have learned that certain patterns emerge which help to determine if a student suggestion will be picked up for implementation. For the sake of this study, I have categorized the reports into six broad areas of interest: sustainability education; sustainable

transportation; campus housing and trash; food; paper use and printing policies on campus; landscaping and grounds. In addition, there are several studies outside of the bounds of my analysis, these reports examine systems in the surrounding community or are unique in other ways and do not fit within this limited analysis. Interestingly, no papers address water use on the college campus or in the local ecosystem. Is this a sign of how mightily we take water for granted? Does the continuous flow of water from every tap make it seem as though there are no problems, no need for conservation, with plenty of hot water always available? For these questions I have no answers. However, I will consider the completed EVS-300 seminar papers, giving a brief description and commentary on selected papers and conditions within the six categories, applying my observations and suggestions for furthering the visions set out by the students.

### **WEAKNESSES/POTENTIAL**

While the purity of ideas and virtue of intention contained in these papers is inspiring, few papers provide a cost/benefit analysis, point out possible problems that may be encountered by following the student suggestions, or detail the logistical and mundane specifics relative to real world implementation. I found that many of the papers fail to indicate what specific further research might be necessary to bring the student suggestions from theory into utility. Based on interviews or email correspondence that I conducted with various staff and faculty of the college,<sup>1</sup> it seems the critical pieces that are limiting the implementation of student research on sustainable practices are communication between all the interested parties and a staff position to assume responsibility for managing projects

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<sup>1</sup> Carole Fuller, Amy Rhodes, Bob Dombkowski, James Lowenthal, L. David Smith, Michael Marcotrigiano and Joanne Benkley

towards completion. Fortunately, these critical needs are in the process of being satisfied. In March 2008, in accordance with the recommendations of the Committee on Sustainability (COS), the Smith College Human Resources department posted a job listing for Environmental Sustainability Coordinator.<sup>2</sup> The COS hopes to hire an individual to fill this position during the summer of 2008.

The job responsibilities for the position of Environmental Sustainability Coordinator are comprehensive:

The Environmental Sustainability Coordinator is responsible for coordinating Smith's integration of sustainable principles and practices into campus operations and practices.

The Coordinator proposes plans and goals and coordinates, tracks and reports progress on implementation; advocates for sustainable practices; collaborates with students, staff, faculty and relevant committees; and communicates regularly with members of the campus community.

- Coordinate development and implementation of college sustainability plan, goals and standards, including specific areas such as the President's Climate Commitment, building and renovation standards, purchasing and the like.
- Encourage environmental stewardship among members of the college community.
- Conduct informational and orientation sessions for students, staff and faculty.
- Communicate regularly with the campus community about sustainability trends, college goals and current projects, using the website, email, an annual report, and other means.
- Work with college departments and programs to develop a culture of sustainability and department-specific plans.
- Collect, analyze and report on data relevant to sustainability on campus including such areas as progress on sustainability goals and commitments, green building, and transportation.
- Meet regularly and coordinate data tracking/reporting efforts with other environmental staff in areas such as recycling/waste reduction and energy consumption.
- Research and recommend environmentally sustainable technologies and practices.

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<sup>2</sup> Committee on Sustainability, *Strategic Planning: Making Sustainability Part of the College's Mission*, Memo. (Smith College:, 2006) "Job Details - Environmental Sustainability Coordinator," in Smith College [database online]. Northampton, MA [cited 2008]. Available from <https://jobs.smith.edu/applicants/jsp/shared/frameset/Frameset.jsp?time=1209855771895>.

- Serve on appropriate college committees and staffs the Committee on Sustainability.
- Engage with colleagues at other higher education institutions and organizations to stay up-to-date on technologies, ideas, trends and practices.
- Involve and mentors students in research projects and program implementation; and other responsibilities as assigned.<sup>3</sup>

As is apparent from the lengthy description above, the Sustainability Coordinator is not only expected to involve and mentor students in research projects, but this aspect of the position can provide an ambitious source of talent to carry out the legwork necessary to bring more sustainable practices to the campus.

## **OVERVIEW OF EVS-300 COMPLETED PROJECTS**

Since 2003, fifty-eight EVS-300 seminar papers have been catalogued in the Environmental Resource Center. Each year there are between nine and thirteen projects filed. Inclusion in the public file is voluntary and most, but not all, students have agreed to keep their work on file either in hard copy or in electronic form. Those papers that are available electronically can be accessed through the Smith Environmental Science and Policy website. Each year there is at least one topic that is examined by a team of students, with each researcher producing her unique interpretation of the findings. By comparing the objectives of the COS with the topics investigated by EVS students we see that these interests mesh neatly. This commonality of priorities indicates a great potential for progress when the necessary framework is instituted.

A discussion and elaboration of the body of work will serve to show the breadth of interests that engage the students in the EVS–300 classes. There are eighteen papers that are concerned with the expansion of sustainability education; six projects look into sustainable

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<sup>3</sup> *ibid.*

transportation and greenhouse emissions at Smith College; three papers explore improvements to the Smith College dining program; six students question the disposal of trash and recyclables from campus; four papers each originate from concerns about non-sustainable lawn and garden care, the profligate use of paper at the college, or residential energy conservation and electricity use; eight projects study open space issues on campus and in the community. Furthermore, there are several team projects that are temporally situated, interrogating historically relevant issues on campus. Specifically, in 2004 there are three research papers that examine the construction of a sustainable science building and in 2005 two students investigate the environmental impact of the recently instituted Grab n' Go dining program.

#### SUB-GROUP - - - EDUCATIONAL INITIATIVES ON SUSTAINABILITY

Fifteen of the eighteen environmental education projects look at changes that can be made at Smith College. Recommendations for Smith suggest possible improvements impacting student learning during their entire period of enrollment at the college. Ideas include Katja Eriji's 2007 plan to develop a pre-orientation program to increase sustainability awareness for incoming students. In 2004, Beth Callaghan proposed a first-year seminar, *Toward Sustainability*. Emily Kolod and Sarah DiLaura - 2003 present an intercollegiate comparison of Smith's sustainability and environmental curriculum. A group of surveys written in 2007 aim to quantify and expand the current and graduating student body's environmental literacy (E. Benger, H. Chu, L Rizzo, E. Taylor).

Students are also interested in extending sustainability education outside of the Greycourt Gates. In 2004, Julie Jonelis studied the possibility of bringing sustainability education into Massachusetts's high schools. Ashley Russell's 2005 report plumbed David

Orr's argument for integrating agricultural and nature based education into the academic environment with her suggestion for a learning exchange between Smith College and Smith Vocational and Agricultural High School. In 2004, University of Massachusetts - Amherst student Sabrina Morano delved into the complexities of instituting a sustainability program at her large state school. Just as W. A. Rosenbaum's article "Making Policy: The Process" describes the difficulties of bringing new policy into the governmental arena, Morano found that the potential gains of impacting four thousand first-year students annually was offset by the bureaucratic, systemic, and structural difficulties of developing and implementing a new model into the university.

Another sub-topic of interest to the students is the establishment of an Environmental Science and Policy major (ESP) at Smith College. While the aforementioned group of fifteen projects may not specify the creation of an ESP major, the arguments presented are cohesive in their request for a more expansive integration of environmental issues across the curriculum. This interdisciplinary connection is an integral part on an ESP major. Professor Amy Rhodes, acting director of the ESP program assured me that student projects have aided in the development of the proposal for the major. Professor Rhodes cited Laura Keir's research project as especially useful to the faculty and staff working to produce the curriculum recommendations for the ESP major. While not an EVS-300 student, Keir's research as a STRIDE (Student Research in Departments Program) participant addresses questions concerning the development of an ESP major at Smith College. Keir conducted her research in conjunction with Professor L. David Smith, the Father of EVS-300.<sup>4</sup> The high degree of faculty interaction and guidance available to STRIDE scholars allowed Keir's research to be specifically targeted and directed in producing the research most relevant and

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<sup>4</sup> Laura Keir and L. David Smith, *Is Smith Ready for an Environmental Major*, Poster, (Smith College:, 2006)

useful to the particular stage of development of the ESP major. To gain maximum benefit from student work in furthering sustainability efforts it is important to avoid duplication or irrelevance in research. I will later return to a discussion of the proposed ESP major examining the committee's suggestions and comparing them with my own offerings for future projects in EVS-300.

### SUB-GROUP - - - SUSTAINABLE TRANSPORTATION

The earliest of the six research projects looking into sustainable transportation and greenhouse gas emissions at Smith were completed by Jessica Ansanitis and Jasmine Eleftherakis in 2003. This issue remains in the current conversation. My classmates, Lauren Bachtel and Krista Matatt are revisiting this issue today. Certain recommendations in Ansanitis' and Eleftherakis' reports have indeed been implemented, such as the two college-sponsored Zipcars and increased fees for campus parking permits. But as Bachtel and Matatt explain, there continues to be an opportunity for improvement in crafting a sustainable transportation system on campus.

The following year, Miriam Mick's *Getting the Ball Rolling* called for a transition of certain campus vehicles from diesel to biodiesel fuel. Bob Dombkowski, Supervisor of the Grounds Department at Physical Plant explained that Smith had been using biodiesel for a couple of years, but approximately three years ago, the College's contracted fuel provider could not provide the product due to a lack of availability. This is precisely the type of issue that students must address when preparing their recommendations for improvements. It is tempting to see only the silver lining around the fuel truck, but these structural considerations and potential problems are concrete issues that need to be understood by the students before they graduate. Looking ahead, Smith College has become a partial owner of Northeast

Biodiesel in Greenfield, MA. Northeast Biodiesel is a consumer owned energy cooperative that has recently purchased 26.5 acres of land in Greenfield's industrial park on which they plan to build a five million gallon per year sustainable biodiesel production facility.<sup>5</sup> In the mean time, while the College is willing, they are also unable. Physical Plant has returned to using petroleum based diesel fuel.

### SUB-GROUP - - - HOUSING AND TRASH

Housing and trash, ten papers have been written seeking solutions to these recurring sources of waste. The 2003 EVS class addresses both of these topic areas; Kate Elmer suggests a paid student position to produce biannual educational charts from data at Physical Plant concerning resource consumption. Elmer calls for increased advertising about recycling in the student houses, providing a monetary incentive to reward recycling in the residences, and creating another paid student position to collect recycling within the house. Elmer also calculated savings and proposed a switch from incandescent bulbs to compact fluorescent in student housing. The idea of the paid positions would most likely increase the success of the recycling programs in the houses; however, this money must still be acquired from someplace in a very tight budget. Carole Fuller, Smith's Director of Strategic Marketing addresses the financial considerations when she asks, "What do students want to give up to pay for this?" Perhaps a cost/benefit analysis of offset costs for trash disposal fees could help to locate the money for funding these ideas.

Structural issues need to be more fully considered by the authors of the EVS papers. No papers, which I examined, mentioned the intricacies of contract obligations; Ms. Fuller

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<sup>5</sup> Lynn Benander, *Sustainable Biodiesel Plant Purchases Land in the Greenfield Industrial Park*, (Greenfield, MA: Co-op Power, 2007)

informed me that Smith's contract to purchase office paper is bundled together with paper purchasing for the State of Connecticut. From what I understand, if Smith wants to buy recycled paper, it would be necessary for the State of Connecticut to concur. In 2008, Sara Hoffman's study of trash and recycling points out that the narrow hallways of many Smith residence houses prohibit the keeping of an appropriately sized recycling bin on each floor, thereby resulting in a lower compliance rate among all students, even those with a strong environmental commitment. Each year at least one of the collected reports contains a paper about trash or recycling. In an interview with Joanne Benkley, Program Coordinator of Environmental Science & Policy, I learned that the 2005 research projects by Irma Torres-Leon and Wiam Turki-Judeh questioning usage of disposable products in the Smith Grab n' Go dining program did result in a change in policy.<sup>6</sup> Benkley told me that these papers provided the data to justify the abandonment of bottled water in the dining halls. By good fortune, the COS became aware of this situation just one week before construction on the Chapin dining hall renovation project was to begin. In the nick of time, the COS was able to work with the architects in designing a filtered water dispensing station that would be able to accommodate the traffic of the dinner hour.

The following year, as Torres-Leon and Turki-Judeh recommended, nalgene water bottles were dispensed to the students during central check-in; approximately 4,000 bottles a day have been removed from the waste stream due to this research. This aspect of student suggestions was implemented quite easily; however, the same student's counsel to eliminate disposable carry out containers from the dining halls was not as successful. Again, the COS heeded the advice in the reports and worked with Dining Services to remove the plastic containers. There was an outcry from both the students and the Dining Services staff. Dining

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<sup>6</sup> Personal interview with author, Benkley. May 2, 2008.

Services were concerned that there would be an increase in the loss of china plates and cups; there were also unpleasant reactions from the students directed toward the staff,<sup>7</sup> thereby corrupting a site of potential support. Although this attempt at decreasing waste was less successful, there remains the possibility for significant waste reduction. Benkley pointed out that further research could determine if Dining Services did actually experience an increased loss of china. As for the bad behavior on the part of the students toward the dining staff, this is clearly an opportunity for education in cooperation, personal responsibility, manners, and environmental sustainability. After one semester, the carry out containers were back in the dining rooms; however, Dining Services now encourages students to bring their own reusable containers.

As previously stated, cooperation and alliance between all members of the Smith community is essential to the success of these new practices. Education and explanation of the goals and impacts (both positive and negative) must be communicated and mediated between the effected parties. One difficulty noted by Kate Elmer is the sense of entitlement that the high cost of housing at Smith generates. This attitude can corrode the incentive to sacrifice and transform accustomed non-sustainable practices such as extra long hot showers, extravagant electrical usage, and disposable dinnerware. Here again, education is key, but this request for change must be demonstrated to apply to the general as well as the particular. Why should I give up my two showers a day if the heating system in my house is so inefficient that we need to have the windows open in February? It's complicated and will take time.

#### SUB-GROUP - - - FOOD

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<sup>7</sup> Personal interview with author, Benkley. May 2, 2008

Food is tricky too; students want to know where it is coming from and where the scraps are going. In 2003 Mira Kilpatrick asked, *Is Smith a 'Local Hero'?* Kilpatrick's classmate Kris Wraight, as well as the aforementioned studies by Torres-Leon and Turki-Judeh wants some answers about sustainable food procurement and the composting of food waste. Again this concern is echoed in 2008. Emily Edmonds-Langham reports that 300 tons of organic material is sent to the Northampton landfill each year by Smith College. As disposal fees at the landfill are levied by weight, not volume, it is easier to calculate the potential savings that a food-composting program could afford. Many factors would need to be considered in an attempt to expand Smith's current composting program. Support is palpable from Dining Services; the first entry on the *Frequently Asked Questions* webpage address sustainability and local produce.<sup>8</sup> Attitudes and suggestions from the Dining Services staff are crucial to success, administrative support would have to be gained through a careful cost/benefit analysis, logistical concerns such as containers, storage, and the reliability of a hauling service must be investigated and a realistic assessment of potential or unexpected problems must be presented with a new initiative.

Hampshire College has centralized dining and an on-site organic farm, easily facilitating a food-composting program. The situation at Smith does not easily compare, with at least sixteen dining and food preparation facilities spread across the campus, collection will be much more costly; exactly how much this will cost would be a valuable component of the effort to increase the current program. Although the differences between the program at Smith and Hampshire may seem to make a deeper investigation of Hampshire's composting effort seem inconsequential, there will be valuable lessons and tips to share to help ease an expansion of Smith's current composting program.

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<sup>8</sup> "FAQ & Dining News," in Smith College [database online]. Northampton, MA [cited 2008]. Available from <http://www.smith.edu/diningservices/faq.php>.

C.N McDaniel and J.R. McNeil both discuss the benefits of organic and sustainable farming. Although chemical based modern agriculture has usurped the term “conventional agriculture,” McDaniel’s observations about the “ecological simplicity maintained by complex technologies”<sup>9</sup> shows that industrial agriculture is far from the traditional design of agricultural systems that have been practiced for 10,000 years. Smith students also know that our food system is unsustainable and wish for something better. However, at this time, feeding 2500 students three balanced and locally grown meals a day through a New England winter would be a stretch.

Smith students are not unique in their apparent disconnection to our food system. With only one percent of the United States population engaged in agriculture, it is unlikely that the great majority of people truly understand the challenges of growing, preserving, and transporting live food. Certainly Ashley Russell’s idea to institute a learning exchange between Smith and Smith would dramatically increase student’s awareness about food and other natural systems. I can think of no better idea than to have a required annual commitment to an onsite biodynamic farm and managed forest. I realize this radical restructuring of multiple societal constructions will likely never occur, but like David Orr, I lament the missed opportunity of a pilot program.

Nevertheless, Smith College has begun to address this request for greater responsibility in its procurement of food. Smith’s \$2.5 million annual food budget<sup>10</sup> could certainly have a positive impact on local farmers, but things aren’t that easy. In her paper, Kilpatrick recognizes the complexities of providing locally grown food to the campus. She notes the need for “many people to be involved” with “considerable coordination and

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<sup>9</sup> Carl N. McDaniel, *Wisdom for a Livable Planet*, (San Antonio, TX: Trinity University Press, 2005) 66.

<sup>10</sup> Public presentation by Elizabeth Lyons of EVS-300 Seminar Paper. 04/29/2008

cooperation of everyone involved, as well as detailed organization and serious dedication.”<sup>11</sup>

Kilpatrick also mentions that she was well advised to pass her research on to a younger student to continue the process of bringing local food to the school. Despite Kilpatrick’s realistic assessment of some of the difficulties involved with procuring local food, Smith Dining Services has introduced locally produced food into their menus.

Kilpatrick recommends purchasing locally grown food through the PVGA (Pioneer Valley Grower’s Association). She acknowledges that local growers cannot provide the diversity required during the winter months, but suggests supplementing the menu with local choices. Within limits, Smith has done this. Dining Services does attempt to provide local salad greens to the student dining halls but has found the area grower they are working with is simply unable to meet the college’s demand. Instead of completely abandoning the prospect of locally grown salad, the catering division continued the relationship. My research goal is not to track and quantify each specific instance of movement towards greater sustainability; therefore I am unable to comment in detail on the exact parameters of each increment that is achieved toward greater sustainability. However, during my interview with Carole Fuller I gained a perspective on the inflexible limits of budgets and logistical actualities clouding the dewy image of locally produced food gracing Smith’s dining halls. Ms. Fuller explained that Smith has had difficulty acquiring an adequate supply of produce and coordinating purchases and deliveries with local farmers. Coordination among the many farmers necessitated the creation of a coordinating position. A renewed look into working with PVGA might provide an option for avoiding this added layer of management. It would be interesting to further investigate the purchasing contracts that Smith holds with our food vendors and see what accommodations are allowable for the purchase of seasonal local produce and to do a budget

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<sup>11</sup> *Is Smith College a "Local Hero"?* - *Investigating Smith's Food System* , Seminar Paper. (Smith College, 2003) 10.

analysis of local food with produce transported from distant locations. With the recent escalation of food prices, I do not believe that hidden costs of carbon footprints, agricultural pollution and worker exploitation will make an impact on the decision of which head of lettuce is cheaper. Sustainability also requires the financial sustainability of the college.

#### SUB-GROUP - - - PAPER

Barbara Schulze first addressed the need to change policies and paper usage patterns at Smith in 2003. Schulze's research was conducted when purchasing at Smith College was handled through Central Services and printing was free at Smith computer centers. Both of these factors have changed in the last five years. With decentralized purchasing, decisions about product selection are transferred to multiple individuals, thereby complicating the ability of researchers to track paper use. Mandi Norton-Westbrook, a student representative on the COS and an EVS-300 student, produced an excellent report in 2007 with the less than encouraging title *The (Im)Possibility of Green Purchasing on Smith Campus*.

A comparison of these two papers reveals that in the intervening years the college has taken a step toward greater sustainability. Schulze recommends that the college implement a charge of \$.05 per page for student printing. Smith's fulfillment of this suggestion has most certainly resulted in a reduction of the most extreme acts of wasteful printing. While no doubt significant and effective, this conservation action ends up being a student contribution to sustainability, while institutional contributions, such as the availability of duplex capable printers remain lacking. This application of Schulze's advice is a good example of the "low-hanging fruit" that Norton-Westbrook alludes to in her later work. Obviously a goal that presently remains out of reach is the availability of duplex printing in Smith computer centers. This suggestion is contained in Schulze's paper, the COS 2006 recommendations to President

Christ, and Norton-Westbrook's later report. To date, I personally have been unable to locate a printer in a college lab that can be set for duplex printing.

Norton-Westbrook's membership position on the COS and the ensuing relationship with faculty members committed to sustainability enabled her to design a study that exhibits an awareness of institutional limitations and provides an explicit, although disheartening, cost comparison. Norton-Westbrook also offers a nine-point plan of action for "creating a culture and infrastructure conducive to giving green purchasing a chance on the Smith campus."<sup>12</sup> As with Laura Keir's study of the ESP major, Norton-Westbrook's high degree of association with faculty and committee members resulted in a report of unusual value in promoting campus sustainability efforts.

#### SUB-GROUP - - - LANDSCAPING & GROUNDS

Students in EVS-300 have demonstrated a steady interest in the practices used to care for Smith's thirty-three acres of campus grounds. Each year, with the exception of 2004, a student has proposed plans to move away from chemical fertilization and pest control on Smith lawns and gardens. As is apparent each spring when small yellow pesticide warning signs sprout across the entire campus, there remains room for improvement.

Bob Dombkowski, Supervisor of the Grounds Department recognizes and supports the goal of greater sustainability in regards to grounds management: but aesthetic, durability and practicality demands coupled with a reduced staff severely limit the options that are available for more sustainable gardening practices. When asked to frame a question for student

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<sup>12</sup> Mandi Westbrook-Norton, *The (Im)Possibility of Green Purchasing on the Smith Campus,* Seminar paper. (Smith College:, 2007) 14.

research Mr. Dombkowski replied “How can we become more sustainable?”<sup>13</sup> As student papers argue again and again, organic lawns are possible, but as Professor Marcotrigiano of Smith Botanic Gardens attests “the cost is astronomical.”<sup>14</sup> Mr. Dombkowski concurs, telling me he suspects that because “organic is hot,” the price of the natural fertilizer product the Grounds Department has been testing has increased in price by \$10/bag since last year, while products made from petrochemicals have increased only \$.90 - \$1.10 per equivalent unit.<sup>15</sup>

From my conversation with Mr. Dombkowski, I have come to see that a transition to organic lawn and garden care at Smith may be one of the most complex areas to address for the campus sustainability community. Student papers in the EVS collection do not exhibit an awareness of the unique complexities of a natural ecosystem being managed to conform to unnatural standards. A transition to organic lawn and garden care could become a truly interdisciplinary research project. I imagine a contribution of knowledge from the biological sciences, chemistry, landscape studies, environmental science and policy, Physical Plant and the Botanic Garden could all be put to use in tackling this sustainability puzzle. Foremost, such a plan would require a strong financial commitment as labor and material costs would greatly increase, especially during implementation. Diverse care and feeding programs would be developed to accommodate a varied selection of turf plants, such as clovers and possibly hybrid grasses, tailored to the many different lawn environments on campus. A new lawn paradigm must also make provisions for mowing schedules, heavily trafficked areas such as Chapin Lawn, plant sickness in vulnerable areas such as the low-lying athletic fields, irrigation systems, and appearance. Trial periods for new products and techniques would of necessity continue for several growing seasons to assure a successful outcome. While I have

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<sup>13</sup> Personal interview with author, Dombkowski. May 2, 2008.

<sup>14</sup> Michael Marcotrigiano, email correspondence, April 29, 2008

<sup>15</sup> Personal interview with author, Dombkowski. May 2, 2008.

no doubt at all that the gardens and lawns can be managed organically, I agree that the cost is astronomical, especially when compared to the deferred cost system presently employed.

## **PROGRESS AND PROMISES**

“The Smith Design for Learning is a core element of the strategic plan that will guide Smith College over the coming decade ... The Center for the Environment, Ecological Design and Sustainability is to serve as a physical and intellectual nexus for sustainability endeavors at – and beyond – the college”<sup>16</sup>

In November 2007 President Christ signed the American College & University Presidents Climate Commitment. Signatories pledge to reduce their college’s carbon emissions and increase campus efforts toward sustainability. Concrete goals and timelines are set by the Commitment and Smith has begun the process of addressing their carbon footprint. “Smith’s commitment to sustainability is grounded in its educational mission,” said Christ. “The college recognizes its responsibility to produce environmentally responsible citizens and leaders and to demonstrate the values of environmental sustainability in our daily operations.”<sup>17</sup>

Clearly the college is making significant moves toward greater environmental responsibility. In our conversation, Carole Fuller acknowledged that approximately three years ago there appeared to be a paradigm shift throughout the college. The approval of the construction plans for Ford Hall, the college’s LEED (Leadership in Energy and Environmental Design) certified science building, seemed to be a determining factor. Institutional changes accomplished since the turn of the century include the establishment of a

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<sup>16</sup> *The Smith Design for Learning: A Plan to Reimagine a Liberal Arts Education*, (Northampton, MA: Smith College, 2008) 1, 11

<sup>17</sup> *Smith Joins National Climate Pact*, Press Release, (Northampton, MA: Smith College, 2007)

President-appointed the Committee on Sustainability, Smith's engagement of Todd Holland, Five College energy manager and the formation of the Green Team, a self-mandated task force that implements changes on campus toward greater sustainability. In 2005 the Board of Trustees approved installation of a new highly efficient cogeneration electric and thermal power system. The future Center for the Environment, whether as a website or physical location, will become a hub for activities, making it easier to facilitate resource collection for students.

In response to student interest and support from the science department, the Committee on Mission Priorities, Committee on Academic Priorities and Smith administration has approved the development of an Environmental Science & Policy (ES&P) major. However at this time, the promise of two new faculty positions, as requested by the ES&P Committee, is uncertain. An ES&P major was first proposed at Smith twenty years ago, but as Stratton, Keir, and Couet each observed in their research, pedagogical and staffing concerns have retarded the program's development. The ES&P Committee is aware that such a broad-based interdisciplinary program will require careful advising for students in the major to gain facility and strength in both quantitative and qualitative skills. The ES&P Committee feels strongly about the need for new faculty to provide the appropriate level of support to students.

If the college does indeed commit to additional human resources to the ES&P major, the conjunction of these positions with the new Sustainability Coordinator have the potential to bring a tremendous degree of vitality to the sustainability efforts of the school. A December 2007 outline for the proposed ES&P major shows that EVS-300 will be replaced by two new courses, ENV-311 and ENV-312, these courses are the latter sections of a series of three courses (also either ENV-201/202) studying environmental integration. This concentration is designed to hone student's ability to collect, analyze, communicate, and present information

about sustainable solutions to diverse audiences. An ES&P major can potentially provide students with the faculty contact, expertise, and guidance needed to effectively focus on real-world environmental projects. From my research, I conclude that this integration component is a key variable in determining the successful application of student research. With the availability of sufficient personnel to mentor student's research in sustainability issues there can develop a continuing program of interdisciplinary research capable of deeply exploring the complex issues faced both "at – and beyond – the college."

## Bibliography

- "FAQ & Dining News." in Smith College [database online]. Northampton, MA [cited 2008]. Available from <http://www.smith.edu/diningservices/faq.php>.
- "Job Details - Environmental Sustainability Coordinator." in Smith College [database online]. Northampton, MA [cited 2008]. Available from <https://jobs.smith.edu/applicants/jsp/shared/frameset/Frameset.jsp?time=1209855771895>.
- The Smith Design for Learning: A Plan to Reimagine a Liberal Arts Education*. Northampton, MA: Smith College: 2008.
- Smith Joins National Climate Pact*. Northampton, MA: Smith College: 2007.
- Is Smith College a "Local Hero"? - Investigating Smith's Food System*. Seminar Paper. Northampton, MA: Smith College:2003.
- Benander, Lynn. *Sustainable Biodiesel Plant Purchases Land in the Greenfield Industrial Park*. Greenfield, MA: Co-op Power, 2007.
- Committee on Sustainability. *Strategic Planning: Making Sustainability Part of the College's Mission*. Memo. Northampton, MA: Smith College:2006.
- Keir, Laura, and L. David Smith. *Is Smith Ready for an Environmental Major?*, Poster. Northampton, MA: Smith College:2006.
- Marcotrigiano, Michael. email correspondence, April 29, 2008.
- McDaniel, Carl N. *Wisdom for a Livable Planet*. San Antonio, TX: Trinity University Press, 2005.
- Westbrook-Norton, Mandi. *The (Im)Possibility of Green Purchasing on the Smith Campus*". Seminar paper. Northampton, MA: Smith College:2007.