

**The Associated Colleges of the South - Environmental Initiative
Environmental Citizenship for the 21st Century**

Second Year Report: Period August 1, 1998 through July 31, 1999

I. INTRODUCTION

In year two of the environmental initiative the Associated Colleges of the South (ACS) has made significant progress in its efforts to create an environment where environmental concerns are an integral part of campus life and learning. A series of activities and events have lent considerable support to the initiative. Leadership from the campus-based environmental fellows and student interns, campus forums to openly discuss the ACS environmental initiative, an environmental lecture series bringing key environmental leaders to the ACS campuses, faculty development through key workshops, and initial efforts to create environmental studies programs on the majority of the ACS campuses, have all significantly contributed to ACS efforts to increase environmental citizenship among the ACS campus communities.

At a minimum, we define "environmental citizenship" as having attitudes that are respectful of the earth; of being mindful of the need for a sustainable environment; and of being intelligent in one's understanding of interactions between humans and the biosphere.

This past year a concerted effort was made to link all aspects of the initiative, and ensure that the varied activities of the initiative are "grounded" in the principles of sustainability. Sustainability may be defined as the integration and balance of economic viability, ecological health and human well-being.¹ In extending environmental citizenship and the principles of sustainability, ACS has sought to extend the learning environment beyond the classroom and engage the ACS community in sustainable actions through service, campus operations, research, and curricula development. ACS envisions a learning environment that is exemplified through institutional actions and scholarship. Toward this, ACS has initiated a number of projects and activities designed to incorporate the principles of sustainability across the ACS member institutions and the individual campuses. This report provides a summary of the ACS environmental initiative "Environmental Citizenship" and efforts in year two, with a brief overview of year one activities.

II. MISSION

Through the ACS environmental initiative "Environmental Citizenship for the 21st Century", ACS has dedicated itself to make environmental concerns an integral part of campus life and learning. Specifically, the environmental initiative is designed to increase environmental citizenship among the ACS campus communities to include the students, faculty and staff by

¹ Refer to "Building a Sustainable Learning Community", Office of Sustainability Programs, University of New Hampshire.

fostering collaboration in course development, collaborative and interdisciplinary research, campus outreach and service, and campus operations. At a minimum, we define "environmental citizenship" as having attitudes that are respectful of the earth; of being mindful of the need for a sustainable environment; and of being intelligent in one's understanding of interactions between humans and the biosphere.

Goals for the Program

ACS is a mechanism through which member colleges and universities can create and build programs in a manner otherwise not possible on an individual basis. Their ideas and resources are shared, thereby raising the efficiency of operations and the effectiveness of programs. In keeping with the ACS mission to make a case for liberal arts education and to strengthen member institutions academic programs, Environmental Citizenship for the 21st Century is an interdisciplinary collaborative initiative, which not only seeks to extend across institutional boundaries, but to establish community partnerships, amplifying the role of the individual institutions and the consortium. Toward this effort, ACS has established some broad and encompassing goals:

- Seek to increase environmental citizenship among the campus community, thereby serving as effective environmental citizens and maximizing consortium efforts to alleviate environmental problems.
- Effectively create a model for institutional collaboration, demonstrating the transforming effect that this property can have on academic institutions and individuals.
- Encourage and foster collaborative programs that are multi-institutional and interdisciplinary and that recognize sustainability as an important element in environmental education, research, service, and operations.
- Foster and establish partnerships with entities outside of ACS to include non-profit groups, corporations, government agencies, and non-ACS academic institutions to support and enhance the efforts of the ACS environmental initiative.
- Enhance its leadership role in higher education toward advancing environmental literacy and sustainability, elements inherent to environmental citizenship.

The ACS Graduating Student and A Vision for Environmental Citizenship in the 21st Century

A special emphasis is placed on the ACS student and the ACS vision for the profile of the 21st century graduating student. The development of environmental citizenship is inherent in the broader "cultivation of global citizenship", and the vision to embody "openness, honesty, tolerance, and mutual respect, civic responsibility, and global awareness." Viewed in this context, fostering environmental sensibilities is a direct extension of the liberal arts tradition. The ACS institutional members, therefore, conceive of an academic institution where environmental concerns are an integral part of campus life and learning, and by direct extension a concern of the campus community.

Toward this vision, students must be challenged to acquire the knowledge and skills requisite of environmental citizenship. We envision that the graduate of an ACS institution will leave the institution with a keen insight and consciousness of the salient environmental issues, processes, problems and opportunities of today's society. To meet this vision, the graduating student will:

- possess the necessary skills to participate as an effective and responsible citizen in environmental and sustainable development activities and movements on a local scale or beyond;
 - be prepared to play a leadership role in wrestling with complex and challenging environmental questions and issues;
 - enter society knowledgeable of the multiple available sources of new information and conversant with how to access and utilize such information;
 - possess the requisite critical thinking skills and effectiveness in using those skills to grow throughout his or her lifetime in terms of sensitivity to and understanding of environmental questions and conditions necessary for sustainable development;
 - be challenged to adopt principles of sustainable livelihood in all aspects of life; and
 - possess an acute understanding of the interdependence between humans and their surrounding natural environment and the policies and actions necessary to create and sustain a balance between the two.
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III. PROGRAM SUMMARY

The original program proposal submitted to and approved by the V. Kann Rasmussen Foundation has provided critical direction for the first two years of the program. Additional program guidance has come through the establishment of an extensive communication network. Aiding this process was a concerted effort in year two to strengthen the role of the environmental fellow and enhance communication among fellows. This has considerably aided program development and coordination. To provide additional program direction and background information regarding the 15 ACS member institutions and better enable us to assess strengths and weaknesses, direct resources, and plan future activities, initial surveys were done at all schools in the areas of campus operations, career planning and student interests. The complete surveys and summary of results may be found online at <http://www.colleges.org>.

Year One Highlights

Year one was characterized by extensive planning and organization, identifying potential collaborators and expertise on which to draw for assistance and in preparation for proposed projects. A program framework, including broad-based goals, was developed and approved. In addition, several collaborative project-based activities were conducted. This included the planning and development of four workshops, the first of which was held in June 1998 at the University of Richmond. Two pilot courses were developed linking five ACS institutions in research and service-based learning opportunities. Campus environmental assessments were initiated at two ACS institutions and a pilot assessment project developed to conduct more extensive assessments at several institutions in 1998-1999. All aspects of the environmental initiative were done with direct input from the 15 ACS member institutions as all sought to continuously seek ways to enhance interdisciplinary-collaborative efforts.

Year Two Highlights

Hoping to build upon the foundation established in Year One, we have sought to develop and conduct more programmatic activities in Year Two. Year Two has also seen the fruition of several projects conceived in Year One. The strong foundation established in the first year of the initiative should continue to foster enhanced collaboration and program activities through year four. The program committee, environmental fellows, and student interns continue to build relationships on and across the campuses, and better define their role in relation to the initiative and the needs of their respective campuses. Second Nature worked with ACS to plan and conduct a spring clinic for the ACS environmental fellows. The clinic was designed to provide the environmental fellows with the skills required to be effective leaders of the program. Second and third rounds of collaborative proposals were invited in year two. The ACS chief academic officers subsequently approved ten proposals. The most recent call for proposals provided a greater emphasis on the humanities and the natural environment. This past February, Davidson College hosted a workshop on sustainable campus design, jointly funded through the ACS environmental initiative and the National Wildlife Federation's Campus Ecology Program. The workshop was attended by 12 academic institutions from throughout the country - seven of which were ACS institutions. The workshop provided an opportunity for cross-disciplinary teams from these schools to actively work together examining practices and policies related to campus operations. Because this was a national conference the spotlight was on ACS, allowing the consortium to increase its visibility as a leader in higher education and sustainable development as well as providing a forum from which ACS could extend its model of collaboration to other academic institutions. The response to this workshop has been overwhelming, a micro-indicator of our ability to successfully foster collaborations and provide the resources and forums desired by the ACS institutions. Another exciting opportunity this past year was the ability of the ACS institutions to utilize the recently opened "Southern Environmental Center" at Birmingham-Southern College. The Southern Environmental Center and Birmingham Southern College hosted a three-day ACS workshop "Greening the Campus - Broadening the Classroom" in the fall of 1998. The Southern Environmental Center is a \$850,000 facility dedicated to the education of the public of the critical environmental problems confronting us today. The Southern Environmental Center staff provides critical leadership to the ACS schools through on-site consultation and resource availability to enhance institutional and community efforts through the consortium.

Several special programs were also initiated in year two including (1) a pilot internship program providing student opportunities for environmental experience and learning; (2) the ACS lecture series designed to address critical issues in the various areas of the environment; (3) campus-based environmental assessments to provide a positive experience toward enhancing environmental awareness throughout the campus community; and (4) Centers of Excellence, a concept put forth to reform environmental studies learning through the establishment of interdisciplinary and collaborative educational centers. Each of these is explained in detail later in this report.

Program Indicators for the First Two Years

1. Environmental Education (course development/redevelopment and faculty development and training).

Original target:

- 13 courses over four-year period at \$390,000; and one faculty development training per year at \$80,000

Status - Course Development/Redevelopment:

- Three formal courses established and implemented through direct ACS funding (open to all ACS students)
 - a. Directed Field Study (Living in the Yucatan)
 - b. Sustainable Development in Costa Rica
 - c. Water Purification Technology in Rural Communities
- Four courses redeveloped in direct response to ACS environmental initiative (minimal financial support provided)
 - a. "Religion and Ecology", "Environmental Chemistry", and "Society, Culture and Ecology" collaborating in interdisciplinary groups to examine environmental issues on the campus of Southwestern University.
 - b. "Environmental Ethics", examined issues of sustainability and conducted an environmental audit. University of the South.
- Funding to Date: \$110,000 (note: the two field based courses are multi-year projects encompassing aspects of research and service-learning)

Status - Faculty Development and Training:

- Environmental Studies Curriculum (June 1998)
- Sustainability in Local Communities (September 1998)
- Sustainability and the Liberal Arts: An ACS Workshop for Course Development and Institutional Transformation (October 1998)
- Broadening the Classroom (October 1998)
- Environmental Fellows Clinic (April 1999)
- Funding to Date: \$100,000
- Total Faculty/Staff attending: 175

2. Research:

Original target:

- Seven projects averaging \$30,000 per project at \$210,000 over four years

Status - Research Projects:

- The Effects of Economic Growth in the Rural South (The Cumberland Center for Conservation and Sustainable Development at the University of the South)
- Systematic Analysis and Reduction of Costs Associated with Campus Paper Usage
- Living in the Yucatan (previously listed under course development incorporates undergraduate research as a critical element of the course)
- Funding to Date: \$80,000

3. Service

Original Target:

- One model service workshop per year for three years at \$60,000 and five joint environmental projects at \$30,000 each

Status - Workshops:

- Summer Student Intern Workshop (June 1999)
- Funding to Date: \$4,000

Status - Joint Projects:

- Sustainable Development in Local Communities (Costa Rica)
- Appropriate Water Purification Technology for Rural Communities: The Dominican Republic
- Funding to Date: \$8,000

4. Campus Operations

Original Target:

- Three demonstration workshops and technical support at \$40,000, and campus environmental assessments at all 15 ACS institutions over four years at \$21,000

Status - Workshops:

- Greening of the Campus (October 1998) \$22,000
- Sustainable Campus Development Clinic (February 1999) \$25,000
- Funding to Date: \$47,000

Status - Campus Environmental Assessments:

- Centenary College
- Southwestern University
- University of the South
- Hendrix College
- Rhodes College
- University of Richmond
- Funding to Date: \$1,000

IV. YEAR TWO ACTIVITIES

In 1998-1999 we held two "requests for proposals", September 15, 1998 and February 1, 1999. Of the proposals received, the ACS environmental program committee recommended 11 projects for approval by the ACS academic deans in the areas of course development, faculty development, and collaborative research. Each of these projects is in various stages of completion. In addition, three projects initiated in the 1997-1998 were completed this year.

Proposals Approved in 1998-1999:

- Sustainable Development in Local Communities
- Living in the Yucatan: Building Environmental Citizenship through a Field-Based Research Course in the Northern Maya Lowlands

- The Effects of Economic Growth in the Rural South (Cumberland Center for Conservation and Sustainable Development)
- Sustainable Campus Development Clinic
- Systematic Analysis and Reduction of Costs Associated with Campus Paper Usage
- Heritage Resources Management in the College and University Environment: Its Importance in Environmental Planning and Decision-making
- Collaborative Environmental and Student Interest Web Newspaper
- Gendered Environments: The Fourth Biennial Associated Colleges of the South Women's Studies Conference
- A Collaborative Resource for Teaching and Learning about Scarcity and Choice
- Greenway - Oriented - Communities: Ethical Design for the Wekiva Protection Area

Priority Area No. 1 - Academic Programming

A. Joint Collaborative Projects

1. Project Title: Sustainable Development in Local Communities.

Collaborating Institutions: Birmingham-Southern College, Rollins College, and the University of the South

Project Period: January – December 1999

Summary: This is the second year of a multi-year proposal supporting an ACS program on “Sustainable Development in Local Communities.” This summer program builds upon the already existing and successful ACS spring semester program in Costa Rica by further strengthening it and using it as a centerpiece around which to build a broader ACS program that addresses sustainable development in other local and regional contexts.

Project components include:

- *Research/Service Internship Opportunities:* The intent is to provide funding to the course directors to allow students to stay after the formal program ends to undertake individual research and service internships. These funds extend the opportunities available to students to learn about sustainable development in the field, and provide service to the Costa Rican communities that are hosts to this ACS program (see Service Learning for additional details).
- *Summer Research Program on Sustainable Development in Dominica:* The Dominica program is complementary to and supportive of the already established program in Costa Rica and serves as a recruitment tool for the Costa Rica program of both ACS faculty and students. The program was held in July for a period of two weeks. This collaborative summer research program reviewed current progress toward the sustainable development objectives specified by the Sustainable Development Council of Dominica. Each project identified as part of this trip - for future trips - is intended to have a clearly linked service component, allowing students to gain firsthand knowledge of relevant issues in an applied context.
- *Workshop on Sustainable Development in Local Communities:* The 1999 workshop scheduled for November 1999 is intended to strengthen and extend the efforts of the first. The 1999 workshop would include a number of the 1998 participants but, importantly, also new ones, especially from new schools. This second workshop will provide participants a

chance to build on the momentum developed by the first, especially in strengthening collaborative efforts and disseminating instructional materials.

2. Project Title: Living in the Yucatan: Building Environmental Citizenship through a Field-Based Research Course in the Northern Maya Lowlands.

Collaborating Institution(s): Millsaps College

Project Period: October 1998 – September 1999

Summary: This project, an environmentally focused ACS field course, was developed in the Yucatan. The course is a follow-up to the year one pilot project and was run in 1999 as a full-fledged field course in the Yucatan. This course utilized critical thinking, problem-solving pedagogy while exposing students to three major areas of field based investigations:

- Impact of development on coastal ecosystems and coral reefs
- Archaeo-ecology of the Classic Maya Civilization and
- Ecological audit and baseline classification of very rare remnants of old growth forest in the central Yucatan.

This four-week course was divided into three components (as listed above) approximately ten days each in length. Twenty students representing four ACS institutions participated in the 1999 field season, with faculty representing three separate institutions. The first component of the course focused on Archaeo-ecology and eco-tourism, the second on the understanding and preservation of old growth forest and its relationship to the present day Mayan culture, and the third on the impact of development on coastal ecosystems and coral reefs. Students were directly exposed to the primary issues surrounding each research project through readings, lectures and field trips. In addition, each student was required to participate in primary data collection and preliminary analysis of material recovered by the respective research sub-project.

3. Project Title: The Effects of Economic Growth in the Rural South (Cumberland Center for Conservation and Sustainable Development).

Collaborating Institutions: University of the South

Project Period: Summer 1999

Summary: This program was a collaborative investigation of the effects of economic growth in the rural South, focusing on Franklin County, the state of Tennessee, and the southern Cumberland Plateau. The rural southeastern United States has been recognized as a rich and diverse center of biodiversity, but is now threatened by rapid economic growth. One of the main thrusts of this project was to provide a synthetic examination of how growth affects biodiversity. Accordingly, the study represents a multidisciplinary, systematic study of the growth process, drawing on the expertise of faculty drawn from different departments and ACS institutions.

Six interns funded by the ACS environmental initiative worked on a variety of research projects. The students working in teams to estimate the annual conversion of hardwood forests in Grundy County, developed a geographic information system map that shows annual growth of new structures in Franklin County, analyzed survey data of forest landowners and citizens in Grundy, Marion, and Franklin Counties, examined the feasibility for Tennessee of policies used in throughout the US to maintain forest cover, and analyzed the economic effectiveness of the Forest Greenbelt program (use value taxation) in six Tennessee counties. Time was also devoted to working on economic analyses of urban growth boundaries and transfers of development rights with the Regional Planning Agency in Chattanooga.

4. Project Title: Sustainable Campus Development Clinic.

Collaborating Institutions: Davidson College and the National Wildlife Federation

Project Period: November 1998 – February 1999

Note: This program was jointly funded in the programmatic areas of (1) Academic Programming and (2) Campus Operations

Summary: Students at Davidson College initiated this project to address sustainability in the area of campus development. The Sustainable Campus Development Clinic held at Davidson College February 12-14, 1999 concentrated on three specific aspects of sustainable, environmentally conscious campus design: architecture, landscaping, and transportation. Clinic participants, in teams composed of students, faculty, physical plant staff, and administrators from each of approximately ten institutions, worked with experts on:

- the ecologically appropriate design, construction, and maintenance of energy efficient and sustainable dormitories, unions, and academic and administrative buildings
- the design and implementation of appropriate landscape plans that enhance the community's environmental consciousness and help to meet the college's ecological and financial goals (native landscaping, composting, xeriscaping)
- and the planning and institution of a transportation strategy for the campus (public transportation, student vehicles, biking and hiking trails, green space).

5. Project Title: Heritage Resources Management in the College and University

Environment: Its Importance in Environmental Planning and Decision-making.

Collaborating Institutions: The University of the South

Project Period: November 9-14, 1999

Summary: Archaeological education is essential for planners and the general public alike, yet archaeological awareness is often viewed as difficult to achieve without extensive training. This workshop will provide a usable level of archaeological knowledge to a large segment of the ACS academic and public sector by actively involving ACS University members (faculty, students, and staff) in archaeological classroom training and field trips on and near the Domain of the University of the South. It is intended to serve administrators, faculty, and students as an experience in planning and preserving, demonstrating how each group plays a key role and how students can be energized to become deeply involved in research addressing important environmental issues. An essential product of the workshop will be a draft heritage resources management policy suitable for adoption by all of the ACS schools and for modification and elaboration tailored to the resources of each individual institution.

6. Project Title: Systematic Analysis and Reduction of Costs Associated with Campus Paper Usage.

Collaborating Institutions: Millsaps College and Birmingham-Southern College

Project Period: January 1999 – December 2000

Summary: The primary goal of this project is to reduce the costs associated with a college's usage of office paper through the systematic application of information technology. A secondary goal of this project is to collect data on business processes involving paper on college campuses. More than an audit, the intent is to gain an understanding of how paper is used as a communication medium. Specific business processes or "paper trails" on the campuses at Millsaps and Birmingham-Southern are currently being identified.

7. Collaborative Environmental and Student Interest Web Newspaper

Collaborating Institution(s): University of the South

Project Period: September 1999 - May 2000

Summary: The initiative will address the need to increase environmental awareness and build a sense of community among ACS institutions. The creation of a web-based environmentally conscious collaborative newspaper will help to fight increasing apathy towards the environment. This will be accomplished focusing on environmental issues, events, and activities at the participating institutions and around the world. The University of the South environmental organization ECO Domain is teaming up with the official school newspaper, "The Sewanee Purple", to design a completely new collaborative environmentally conscious newspaper. The newspaper staff will be composed of a publishing hub at the University of the South and student reporters, consultants, and technical assistants based at other ACS institutions that choose to participate in the environmental newspaper initiative.

8. Gendered Environments: The Fourth Biennial Associated Colleges of the South Women's Studies Conference

Collaborating Institutions: Birmingham-Southern College, ACS Women's Studies Steering Committee

Project Period: October 15-17, 1999

Summary: The Fourth Biennial Associated Colleges of the South Women's Studies Conference will provide the academic community, independent scholars, college students and area high school teachers the opportunity to engage in dialogue, debate, collaboration and scholarship in addressing environmentalism within a humanist viewpoint. The conference is also a vehicle by which we can address these emerging environmental issues within a gendered context. The conference will be cross-disciplinary and address philosophical, aesthetic and political approaches to environmental issues as well as scientific approaches. It is our belief that this will, additionally, encourage more research and collaboration between students and faculty and strengthen the quality and depth of environmental and Women's Studies curricula on the ACS campuses. Projected outcomes of the conference include:

- A strengthening of the Women's Studies and Environmental curricula at ACS institutions
- An on-line journal of papers and research presented at this year's and subsequent conferences
- The addressing of Environmental and gender issues outside of the traditional scientific context
- The creation of courses in Women's Studies and literature of the Environment at Birmingham-Southern College, to be integrated into the curriculum during the 1999-2000 academic year.

9. Collaborative Resource for Teaching and Learning about Scarcity of Choice

Collaborating Institutions: Centre College, University of the South

Project Period: Summer 1999 - Summer 2000

Summary: The overall purpose of this project is to address the need for widely accessible educational support in the field of environmental economics. In the process of soliciting and sharing contributions among ACS economics faculty members, collaborative relationships will be established and strengthened. The focus is a web site devoted to the assistance of all environmental economics teachers and students, including teachers who have previously considered teaching environmental economics but do not yet have the adequate course development materials and know-how. When finished this site will feature downloadable visual aids and course syllabi, instructions for hands-on service activities, active learning exercises, examples and pictures of environmental success stories and failures, teaching tips and tricks, links to the best of the web, textbook information, and other assorted tools for teachers and students. The inclusion of enabling materials and information on the web site will provide benefits beyond direct learning.

10. Greenway - Oriented - Communities

Collaborating Institutions: Rollins College

Project Period: March - June 1999

Summary: This project provides a module for ACS schools to incorporate environmental ethics and ecological design into their curriculum. The core of the project was design of a "greenways-oriented-community," (Wekiva 2020, Conceptual Design Principles for the Wekiva River Protection Area) that is part of a larger effort to implement sustainable design standards in the Wekiva Protection Area, one of Florida's most sensitive ecological regions. This prototype project will also be utilized to make "Ethical Design" a collaborative research and service agenda for ACS institutions.

B. ACS Environmental Fellows

The 1998-1999 academic year represented the first year that the fellows were in place on each of the 15 ACS campuses. To help assess the year's activities and plan for the future, the current fellows (academic year 1998-1999) and appointed fellows for the 1999-2000 academic year, met in Austin, Texas at the Lady Bird Johnson Wildflower Center, April 16-18, 1999. The workshop provided the opportunity for ACS staff to work with the ACS Environmental Fellows to develop the knowledge, skills and strategies to become more efficient advocates and practitioners of sustainability on their campuses. As a final workshop product, the fellows proposed a number of campus actions to enhance the principles of sustainability and promote change on each campus.

Workshop Outcomes: Goals/Activities

I. Proposed Campus Actions to Create the Vision: "College as a Sustainable Microcosm"

- Initiate Ecoscape Design
- Conduct Campus Environmental Assessments/ Assessment Follow-Up
- Propose that New Buildings be "GREEN"
- Develop Strong Environmental Studies Programs
- Produce Visible Service Learning Projects
- Develop Composting Proposal with other Campuses

- Provide "Sustainability Training" for Staff
- Develop Collaborative Initiatives with Faculty from other Institutions in Research/Teaching/Efficiency Projects
- Encourage Student Environmental Projects
- Seek Environmentally Responsible Purchasing
- Create Opportunities for Students to Connect with the Natural World
- Introduce a Proposal for Long-term Campus Initiatives

II. Principles and Practices by which to Effectively Meet and Implement Goals/Activities:

- Removing the fences among Administration, Faculty, and Students
- Encouraging the President and Administration to Take a Lead Role
- Creating a Central Place for the Program (physical location) including:
 - A Funded Position
 - A Gathering Place
 - A Resource and Information Center
- Developing an Annual Environmental Report to Show Commitment
- Rewarding Students and Faculty that Promote Sustainability
- Encouraging Faculty that Lead by Example via:
 - Integrating Environmental Principles into their Curriculum
 - All Aspects of Campus Life
 - Personal Action
- Seeking Broader Change of Department Curriculum
- Meeting with Colleagues on Campus to Catalyze Movement Towards Campus-Wide Sustainability
- Educating the Community

C. Student Interns (and Student Initiatives)

ACS students have been an integral component of many of the previously described efforts. As part of the October Greening workshop held at Birmingham-Southern College, the student interns were invited to meet with the Director and share their ideas and experiences with each other. The addition of Kim Thurlow to the staff has greatly enhanced efforts to work with the students. Additionally, the students are excited to know that there is a resource person in addition to their faculty advisor and others on campus from whom they can seek out help and resources. The winter workshop at Davidson College was student initiated and has fostered direct working relationships among students, faculty and staff. Other resources are currently being developed to assist student efforts and promote collaboration across campuses, including: development of an environmental newsletter and coordination among the ACS school papers to focus on environmental issues, a student resources page on the web, and development of a forum by which students on all ACS campuses can effectively communicate their ideas, concerns, activities and other environmental interests to one another.

Examples of student intern initiated efforts:

- Initiated and assisted in conducting Environmental Assessments
- Organized Lecture Series and various speakers on campus
- Coordinated campus Recycling Programs

- Organized Earthday activities
- Organized and directed online/web based activities and resources
- Organized campus environmental student groups and related activities

D. Career Planning

The Career Planning and Service Directors met once as a group in New Orleans in December 1998, and remained in contact through the year. Relevant issues discussed included continuation of the ACS job/internship posting mechanism through the web site "Resume Expert" (<http://wjl.resumeexpert.com/acs/acs.htm>), and the establishment of a student internship pilot program. The student internship program was subsequently implemented in the summer of 1999 (see Service Learning).

Priority Area No. 2 - Service Learning

A. Joint Collaborative Projects

Service Proposals and Projects Approved in 1998-1999:

- Appropriate Water Purification Technology for Rural Communities: The Dominican Republic
- Summer Environmental Internship Program
- Sustainable Development in Local Communities (Costa Rica)

1. Appropriate Water Purification Technology for Rural Communities: The Dominican Republic

Collaborating Institution(s): Rollins College

Project Period: March - December 1999

Summary: Rollins College created a service learning course to implement an appropriate water purification project in the Dominican Republic during the summer of 1999. This course was open to students and faculty from ACS member institutions. The water project offers opportunities for students to study the environment, culture, and history of the Dominican Republic through a service-oriented structured. This includes helping with building projects, as well as health and education training. In addition, students will perform collaborative scientific research on the quality of local water sources, as well as analyzing the effectiveness of the water filtration system being distributed.

2. ACS Environmental Internship (Pilot) Program

Collaborating Institution(s): Centre College, Southwestern University, and Rhodes College (with planning and input from all 15 ACS schools - see "Career Planning" under Academic Programming)

Project Period: June - August 1999

Summary: To broaden students' opportunities for environmental experience and learning, and to guarantee sustainable impact, ACS initiated a pilot program offering a set of broadly-based ACS internships that include for-profit organizations as well as non-profit groups concerned with environmental and sustainable living. The concept is to coordinate students, career services professionals, and on-site sponsors through the training, experience, and resulting feedback to the ACS institutions in order to guarantee continuous impact of the internships. The pilot program offered four internships in the summer, 1999.

1. Heifer Ranch (Little Rock, AK): Environmental assistant (two interns). Heifer Project International (HPI) operates the Heifer Ranch. HPI helps farmers to learn sustainable, environmentally sound agricultural techniques. At the Heifer Ranch, the ACS interns managed two-week educational camp for junior high students, led activities related to the international camp, and developed a new composting program for the ranch. They also assisted with implementing new research on environmental concerns as they relate to sustainability and HPI activities and concerns worldwide.
2. Louisville Zoo (KY): Zookeeper for endangered species. The Louisville Zoo is a national and international leader in conservation programs. The student intern worked with all aspects of zoo keeping and conservation efforts, with a particular emphasis on the ferret reproduction project.
3. Global Service Corps (Costa Rica). The Global Service Corps provides international cross-cultural learning and community service opportunities for students. The intern's focus in Costa Rica was diverse including rainforest conservation, educational programs, public health, sustainable development and other community-based projects.

As part of the student training, the four interns participated in a daylong orientation and training event held in Atlanta, Georgia, June 4. Training was provided by staff from Centre College, Southwestern University, Rhodes College and ACS. Training included four components: 1) an introduction to experiential learning; 2) issues and readings related to sustainability and environmental concerns; 3) cultural observation, including organizational diversity; and, 4) a preliminary learning plan that specifies the intern's objectives, expectations, proposed readings, and project. This plan will be revised in consultation with the student's onsite supervisor.

Each intern is evaluated by their onsite supervisor in the areas of skill development, contribution to the work of the organization, team efforts, initiative, and willingness to share information about his/her project with a larger community. Upon completion of the internship each intern will participate in a debriefing meeting at Centre College. Upon return to their respective campuses in the fall, interns will be expected to give an analytical presentation on his/her campus, describing, analyzing, and promoting environmental learning as they relate to the internship.

3. Project Title: Sustainable Development in Local Communities.

Collaborating Institutions: Birmingham-Southern College, Rollins College, and the University of the South

Project Period: Summer 1999

This is a direct extension of the Costa Rica project (see Academic Programming). The intent is to allow students to stay after the formal program ends to undertake individual research and service Internships. This extends the opportunities available to students to learn about sustainable development in the field, and provide service to the Costa Rican communities that are hosts to this ACS program. Specific activities in 1999 included:

- Creative Learning Center, Sta. Elena, Costa Rica. Student worked to implement a recycling program, plant natural landscaping, design and plant gardens for the children, and learn about the local environmental education curriculum planning.
- Santa Rosa National Park, Costa Rica. Student worked with a marine biologist in the Park to identify coral species in the lab and field.

- Finca La Bella, Sta. Elena, Costa Rica. Student worked with local family at Finca La Bella (a project of Monteverde Conservation League) in sustainable farming.

Priority Area No. 3 - Campus Operations

A. Workshops

- Greening of the Campus - Broadening of the Classroom
- The Sustainable Campus Development Clinic

1. Project Title: Greening of the Campus-Broadening of the Classroom

Collaborating Institutions: Birmingham-Southern College

Project Period: October 15-17, 1998

Greening of the Campus, hosted by Birmingham-Southern College (October 15-17, 1998) introduced the broader ACS community to issues central to campus operations and environmental education seeking ways in which the ACS community can work collectively on these issues. The conference focused on sustainability in the day-to-day operations of the college campus.

2. Project Title: Sustainable Campus Development Clinic

Collaborating Institutions: Davidson College and the National Wildlife Federation

Project Period: November 1998 – February 1999

Note: Refer to Academic Programming - Joint Collaborative Projects for summary information.

A direct outcome of the Birmingham-Southern College workshop was the subsequent workshop hosted by Davidson College and co-sponsored by ACS and the National Wildlife Federation's Campus Ecology (No. 1 above). The Sustainable Campus Development Clinic provided a more in depth understanding of the issues initially addressed at Birmingham, seeking solutions to ecological design, as well as suggesting strategies for the implementation of these solutions. This clinic ultimately helped to create a more cohesive master plan to the building, transport, and landscaping on the participating campuses. One important aspect of the clinic was its "team" approach. The majority of participating institutions sent a team comprised of two students, faculty, physical plant staff members, and an administrator. Throughout the weekend teams collectively used their own diversity of experience coupled with the speakers information to create a project plan and strategy for each topic area. The goal was to have the representatives from each institution return to their campuses and be able to put their ideas to practice at all levels of college life and operations. Overall, 95 participants including faculty, students, staff, and administrators from 15 southern institutions attended.

Davidson College Workshop Outcomes:

- The Millsaps College team members have since developed a three-part proposal for their campus involving energy management, landscaping, and transportation. The proposal includes promoting energy efficiency by tying first the Olin Hall of Sciences, and eventually all buildings on campus to a computerized energy monitoring and control system; and a comprehensive landscaping plan for the north end of campus utilizing environmentally sound design principles. This will include developing a wetlands study area around naturally occurring springs; developing a scenic fitness trail with native plantings around newly

constructed playing fields and physical activity center; and adopting erosion control measures.

- Davidson College has met to initiate plans for a new college/community organic garden and a university wide bike share program to reduce the dependence of car-use on campus. In addition, Davidson has placed a tremendous importance on energy conservation, and is in the process of upgrading energy and lighting fixtures to become more efficient.
- Furman University has produced a document that has resulted in the decision to bring David Gottfried, a nationally known environmental engineer, to consult on the design for the newest campus building Hipp Hall.
- Rhodes College has formed a committee known as the "Rhodes Planning Cooperative." Their main goal is to 'green' a proposed dormitory. By becoming involved in the early design process and providing tangible cost savings suggestions for daily operations they hope to eventually include a gray water recycling system, native plantings, and possibly solar collectors.
- The University of the South created the Sewanee's Campus Sustainability Development Team. Of considerable importance the team has completed their statement of environmental stewardship for their university strategic plan. They are also in the process of establishing a recycling program and have proposed to convert parking areas to green space.
- Since the workshop, Trinity University has submitted a proposal to ACS to create an on-campus outdoor environmental education learning center. The center will aid existing academic programs and provide opportunities for community learning.
- Similarly, the University of Richmond is considering ways to incorporate eco-landscaping into its service learning programs.

B. Environmental Assessments

Each of the ACS institutions is encouraged, as outlined in the original ACS proposal, to conduct environmental assessments of their campus programs and operations. The goal of the assessment is to enhance environmental awareness of the campus community and in turn, facilitate responsible choices and policy decisions, which encompass the principles of sustainability. It also offers an opportunity to acknowledge the many positive practices already in place at the ACS institutions. For such studies to be effective they must be an inclusive and cooperative effort of all sectors of the campus community. In addition, institutions are encouraged to use an external consultant to ensure that all phases of the assessment will have positive and maximum benefit. It is further suggested that a peer review committee be established to review all aspects of the assessment.

This past year five institutions initiated assessments. The focus of each assessment was directly related to the priorities and needs of each campus. Approaches and scope have been diverse, yet effective.

- The *University of Richmond* conducted a waste and recycling assessment. The assessment involved student volunteers and members of service learning projects sponsored by the "Persuasive Strategies" and "Environmental Communication" courses. Students also engaged in a waste salvage initiative where student discards are recycled into usable material. This was done through the sponsorship of a "yard sale" event with the proceeds going to the Southern Baptist Church and other area nonprofit groups.

- At *Rhodes College*, a student led initiative focused on solid waste, campus paper usage, and purchasing practices. Rhodes College also initiated efforts following the assessment to create a more effective recycling program. Essential to the success of this program was coordination between students and facilities management.
- *Southwestern University* conducted an environmental assessment by having students in three classes ("Religion & Ecology", "Environmental Chemistry", and "Society, Culture and Ecology") form interdisciplinary and collaborative groups in areas of recycling, energy conservation, purchasing, water conservation, waste generation and disposal, campus-community relations and sustainability issues, wildlife and non-human animals, student lifestyles and sustainability, landscaping and grounds, environmental education/awareness, and campus infrastructure.
- At the *University of the South*, an assessment was initiated through the school's environmental ethics course in cooperation with the physical plant.
- The *Hendrix College* campus assessment was also student driven but directly coordinated with the faculty and physical plant staff. The assessment is currently being presented campus-wide and reviewed by SAGE, an interdisciplinary campus group.

C. Energy Challenge Grant Program

Recognizing that campus operations typically are removed from the educational process on most campuses, yet are vital components of what makes the institution work, ACS through its environmental initiative instituted an Energy Challenge Grant Program. Through the installation of more energy efficient devices and practices, the realized benefits are financial, providing direct cost savings to the institution, as well as a protected environment. Through this grant program, individual ACS institutions are eligible for funds to initiate pilot projects designed to demonstrate the potential saving in energy use. This may include simple retrofits such as lighting, electric motor replacement, or installation of low flow showerheads. Four energy projects are currently being planned for 1999-2000, and will focus on the retrofitting of lighting in various academic buildings and dormitories and water usage reduction and retrofitting of showerheads and toilets. Included in each project will be an educational component to enhance environmental awareness on the campuses and throughout ACS.

Priority Area No. 4 - Information & Dissemination

A. Conferences

Recognizing that ACS is unable to meet faculty development needs entirely through internal workshops and events, ACS sponsors faculty attendance at select regional and national events. Benefits are twofold, (1) faculty development and subsequent sharing of concepts and ideas throughout ACS, and (2) exposure of the ACS environmental initiative to a broader audience and expanding its contact base. This past year ACS sponsored the attendance of six faculty at three separate events. All attending faculty and staff are required to write a report summarizing events activities and how the event may directly benefit their home institution as well as ACS.

1. Carolina Recycling Conference, March 10-12, 1999, Myrtle Beach, S.C. ACS Attending Institution: Birmingham-Southern College, Southern Environmental Center. The conference provided a very useful sampling of what's new in recycling programs and products, and an opportunity to showcase the ACS- SEC partnership. It is anticipated that

contacts established at this conference will also allow the SEC to facilitate partnerships between ACS schools interested in sustainable buildings and regionally based "green" firms.

2. Environmental Studies: Considering Structural and Programmatic Options for Environmental Studies Programs, Project Kaleidoscope (PKAL), Brown University, Providence, R.I., June 18-20, 1999. ACS Attending Institution: Southwestern University, Department of Chemistry. The workshop was designed primarily for faculty in the stages of early program development. It should be noted that a majority of ACS schools are either exploring the development of such programs or have recently initiated environmental studies programs. As a result of this workshop, Southwestern University is considering: coordinating with their admissions office the development of a brochure for incoming students; developing a list of goals for the environmental major and writing a vision statement for the program; redefining the senior capstone experience and possibly integrating a junior year experience; rethinking and fine tuning the introductory course; incorporating service learning into the environmental program; developing ways to foster a sense of community within the program; and discussing the program's role in the master planning process at Southwestern University.

3. Earth Charter, June 19-21, 1999, Alexandria, VA. ACS Attending Institution: Hendrix College.

Two students and two faculty from Hendrix College attended a national workshop on the Earth Charter, and now serve as official "facilitators" of Earth Charter studies in Conway, Arkansas. The Earth Charter is a document, supported by the Earth Council (based in Costa Rica) and Green Cross International (based in Geneva), that is being developed by teams of consultants from around the world, and that is to be presented to the United Nations in 2002. It is intended to be an educational tool, enunciating ethical principles for environmental well-being that can be guidelines for individuals, communities, churches, businesses, and colleges. The team from Hendrix is now exploring ways in which it might be used at Hendrix and among ACS institutions, even as it might also be used by public schools in Conway and by the Rotary Club in Conway. The conference in Alexandria introduced them to the Earth Charter and helped them become facilitators. They hope to use their knowledge in workshops sponsored by the ACS Center of Excellence, the Center for Spirituality and Sustainability, so that others within the ACS might also work with this document as an educational tool.

B. Environmental Citizenship for the 21st Century - Lecture/Seminar Series

ACS is collaborating with an interdisciplinary group of faculty to coordinate an ACS-wide series of lectures addressing critical issues in the various areas of the environment, particularly as they relate to ecosystem and human health. In the first year of the lecture series, individual schools were allowed to bring in a speaker or speakers closely related to campus environmental concerns. Plans for the upcoming year (1999-2000) call for a more coordinated effort by the environmental planning committee focusing on a specific broad-based theme relevant to all of ACS. From this theme, several speakers will be asked to visit the ACS campuses.

Speakers in this year's series and schools visited included:

1. Robbie Cox, "A Civil Action and Environmental Controversy: Reclaiming American Democracy." University of Richmond (February 9, 1999). Robbie Cox is the former

president of the Sierra Club, and the current Vice President of Education and Media Affairs for the Sierra Club.

2. Jerome Ringo, "Environmental Justice". Millsaps College (January 15, 1999), Rhodes College (February 2, 1999), the University of the South (March 9, 1999), and Centre College (April 21, 1999). Jerome Ringo is a member of the Board of Directors of the National Wildlife Federation, and is President of Progressive Resources, an international environmental consulting company.
3. Lou Gold, "Lessons from the Ancient Forest: Earth Wisdom and Political Activism." University of the South (April 20, 1999), Furman University (April 22, 1999), and Rollins College.

In addition to the above speakers, ACS was pleased to welcome several other prominent speakers to our campuses in conjunction with a series of workshops sponsored by the ACS environmental initiative. Speakers included:

1. David Orr, Oberlin College. "Campus Operations and Ecological Design"
2. George Bandy, Sustainability Officer, UT- Houston Health Science Center
3. Paul Irwin, Humane Society of the United States (CEO) and Center for Respect, Life and Environment (President)
4. Tony Cortese, President, Second Nature
5. U.S. Senator Dale Bumpers. "U.S. Politics and Environmental Issues"
6. John Cobb (co-author with Herman Daly of For the Common Good). "Liberal Education for the Good of the World"
7. David Korten (Author of When Corporations Rule the World). "Global Economies and Sustainable Livelihoods"
8. Sharon Parks, Whidbey Institute (co-author of "Common Fire").
9. Julian Keniry, National Wildlife Federation. "Successful Campus Greening Projects"
10. Dr. John Gibbons (former science advisor to President Clinton). "Environment in the 21st Century: Will Our Grandchildren Condemn or Praise Us?"
11. Dr. George Folkerts, Auburn University. "Vanishing Biodiversity in the Southeast"
12. Dr. Brent Blackwelder, Friends of the Earth. "Greening the Campus: Here and Abroad"
13. David Gottfried, Founder of US Green Building Council; President of Gottfried Technology

C. Other Communication

1. Environmental Knowledgebase

In cooperation with the ACS Library Program, the environmental initiative sponsored the purchase of "Environmental Bibliography On-Line" (EBOL). This online database provides the 15 ACS institutions with simultaneous usage and access to over 6,000 indexed periodicals. It is hoped that access to such an extensive database will enhance current efforts to promote environmental studies and sustainability across each of the campuses.

2. Eco-Domain - University of the South

An excellent example of the leadership being provided through the environmental fellows and student interns is the University of the South's environmental initiative "Eco Domain". Eco Domain is the environmental home - and represented through their web page - for all members of

the Sewanee community, providing the latest information on environmental news and events in the Sewanee area. The ECO Domain initiative is supported by ACS through the ACS environmental fellow and student intern. Eco Domain seeks to foster an environment in which all members of the Sewanee community -- students, faculty, staff, and residents -- play a cooperative role towards the conservation and preservation of the natural world and its resources.

3. Environmental Curriculum Survey and Database Development

In order to facilitate collaboration across institutions, and to make available to the faculty of the ACS schools course and teaching materials and resources, we have begun to assemble a database related to the "environmental curriculum". As part of the process, we have constructed a web page listing environmentally related courses at each of the ACS schools. Subsequently, each school has been asked to develop their own page more specifically outlining their environmental curriculum. As a model for other schools to follow, Davidson College (Davidson, N.C.) has developed such a page:

<http://www.davison.edu/academic/economics/website/dcenvtl.htm>

The underlying goal of this process is to facilitate collaboration among the ACS schools. ACS will make this information available across the consortium so that faculty teaching or interested in teaching "environmental courses" will be able to develop a network of colleagues.

4. ACS Environmental Newsletter - "The Environmental Citizen"

To enhance overall communication of the ACS environmental initiative, an environmental newsletter was developed and produced (in cooperation with Furman University) in the spring of 1999. It is expected that the newsletter will be produced each semester of the academic year. The newsletter is one of several mechanisms utilized for informing the ACS community and other constituencies about ACS activities and events related to the environmental initiative.

V. SPECIAL COLLABORATIVE PROJECTS - CENTERS OF EXCELLENCE

Concept Development

A concept originally put forth in year one for future consideration was the establishment of "Regional Centers of Excellence" within ACS. Centers of Excellence represent the second major phase of the environmental initiative and will be a significant step toward further institutionalization of the initiative. The creation of centers recognizes the expertise and resources of the individual member institutions of ACS, and thus allows the institutions to develop collaborative programs providing expertise and resources throughout the consortium.

Centers of Excellence are for reforming environmental studies learning through the establishment of collaborative educational centers providing opportunities for teaching, research and training and encompassing service learning and campus operations.

Preliminary goals of the "Center" concept are to:

- Use regional centers as the foci to build and maintain coalitions of faculty who will implement and sustain reform in undergraduate education throughout ACS.
- Prepare faculty at these regional centers to eventually become ACS interdisciplinary consultants or advisors of faculty and students with a particular emphasis on new faculty development.
- Provide ACS faculty to gain experience in interdisciplinary environmental studies through teaching and learning through team-taught classes, workshops, and seminars that model this kind of approach, and through interdisciplinary research, either ongoing or proposed at the regional centers.
- Enhance both faculty and student opportunities to gain a broad-based understanding of the environment through direct experience with methods and processes of inquiry in the field and in undergraduate interdisciplinary courses.
- Facilitate collaboration and communication among faculty about their reforms in teaching about the environment.

The concept is currently being developed on several ACS campuses including:

- Hendrix College - Center for Spirituality and Sustainability
- Birmingham-Southern College - Southern Environmental Center
- The University of the South - Cumberland Center for Conservation and Sustainable Development.

Efforts are also being initiated to establish a Center for Latin American Studies for Sustainable Development in Local Communities, and a Center for Geographic Information Systems. Further coordination is required for these and the above, however, and mechanisms including funding and staffing must be resolved.

Current Efforts

Birmingham Southern College - Southern Environmental Center. The focus is on environmental education. The Southern Environmental Center, with its unique and innovative "ecoscape" and interactive learning center has demonstrated the ability to serve the southeast as an environmental education facility relating to pollution prevention, conservation, and sustainable development for the college and the broader community and the region. As a Center of Excellence, the environmental center and ecoscape are used to develop and enhance collaboration through project development and implementation between and among ACS faculty, students, and staff, as well as with outside groups and individuals. The center serves as an on-site learning center for faculty, staff and students. Additionally, SEC staff serve as a visiting consultants to the ACS schools. In 1998-1999 SEC staff visited two campuses, represented ACS at a regional conference, and hosted an ACS workshop on the Birmingham-Southern Colleges campus.

University of the South - The Cumberland Center for Conservation and Sustainable Development. Using southeastern Tennessee - an area rich in biodiversity but facing increased pressure from urban growth and resource extraction - as a backdrop, the center seeks to foster student/faculty problem solving in the areas of regional conservation and sustainable

development. The center is currently comprised of an interdisciplinary group of faculty from the Departments of Biology, Economics, Philosophy and Political Science. Specifically, the center acts to:

- Provide interdisciplinary, collaborative mentoring to advanced undergraduates through shared faculty/student research.
- Foster student/faculty problem-solving in the areas of regional conservation and sustainable development, focusing at least initially on Franklin County (TN) and the southern Cumberland Plateau.
- Facilitate students and faculty interfacing with not-for-profit organizations and government agencies concerned with these issues.
- Provide students a stepping stone into graduate programs in these areas.
- Provide a recognized entity for communication, coordination and collaboration with other faculty and outside agencies.
- Serve the region as a think-tank on issues relating to conservation and sustainable development for the University, broader community and region.

This summer, the Cumberland Center for Conservation and Sustainable Development offered student undergraduate research internships to students of ACS institutions. All internships focused on southeastern Tennessee, and involved working primarily with state and non-governmental agencies, with supervision of Sewanee faculty, on issues of interest to both the particular agency and the center. The six interns worked specifically on:

- the identification of the primary environmental issues facing the region
- the role of public lands in the this landscape (including state and national forests)
- growth management on the urban/rural fringe
- forest and biodiversity preservation on private lands
- the writing articles/brochures to communicate with the general public

Hendrix College - Center for Spirituality and Sustainability: A Three-Site Learning Center for the Study of Sustainability, Spirituality, and Ecological Worldviews (in cooperation with Heifer Project International and the Center for Respect of Life and Environment). The Center for Spirituality and Sustainability offers experiential, interdisciplinary programs designed to promote consciousness of the interconnectedness of all creation and a sustainable future based on spiritual awareness. CSS will offer an exploration of diverse ideas and theories, as well as practical hands-on ways to make a difference in our own lives, our communities, and the world.

Currently CSS is being co-administered by Hendrix College and Heifer Project International. The co-directors are being assisted by a steering committee composed of leaders from different constituencies in the mid-south and southeast region of the United States including ACS. The CSS advisory board (now the steering committee) was brought together June 13-16, 1999 at the Heifer Project Ranch (Perryville, AR) to initially discuss the formation of CSS. At this meeting CSS adopted a mission statement, and formed a steering committee to help establish CSS as a nonprofit organization with 501(C)3 status. Nominations for Board of Directors are being considered and funding options are being pursued by the three major cooperating entities. The role of ACS is to provide direct administrative and technical support to CSS in facilitating the role of

the ACS schools, including but not limited to curricula design, and course and workshop development. ACS will also serve as a member of the CSS Board of Directors.

The CSS vision of future educational opportunities will include credit courses taught by visiting and/or adjunct faculty who will link CSS to their home institutions, and experiential workshops, offered by local, national and international experts designed to integrate the principles of global sustainability with contemplative spiritual values. Organizationally, CSS will retain an independent status but link directly with ACS, HPI, Hendrix College, and CRLE. HPI will provide its facilities as an on-site home for CSS and also provide administrative support through their on-site staff. It is understood that the mission of each partner strongly complements the overall mission of CSS, and that the pooling of educational and administrative resources benefits all. A permanent board of directors will be established and work will begin to design curricula and seek funding for anticipated workshops.

VI. ORGANIZATIONAL STRUCTURE

Several changes were made in the overall organizational structure and are summarized below. In addition a new staff member, Kim Thurlow, was hired, and the 1999-2000 academic environmental fellows were appointed in the spring of 1999.

Review of Organizational Structure

To ensure effective program leadership, education and communication, policy guidance, and resources among the 15 ACS institutions, ACS is guided by a comprehensive program network. This includes a faculty program committee, representing all the member institutions, and a program director. The director and program committee work in conjunction with the ACS president and academic deans. The program committee is instrumental in providing program guidance and policy development, and the development of a long-term environmental strategy for ACS. Because of this long-term perspective, each member of the program committee serves a non-rotating four-year assignment. It is the ACS environmental program director that is the catalyst and direct link bringing together the various ACS groups, faculty, staff, students and others, and ultimately must provide the leadership necessary for the development of a comprehensive, coherent, and cooperative program of benefit to each institution.

Critical to this process is the buy-in from the chief academic officers and overall administrative support. The chief academic officers have played a critical role in reinforcing the importance of this initiative and the opportunities for faculty, staff, and students to make an impact on the environment and the cause for sustainability. Throughout the development process and into year two of the program, the chief academic officers devoted considerable time and energy in the organizational development, subsequent implementation of the many projects and activities, and setting the overall initiative direction in cooperation with the program committee and director. It is this continued administrative program support that has provided the ACS environmental

initiative the impetus to focus the institutions on sustainability and encourage broad campus community support.

The ACS environmental initiative is unique in that it seeks to serve the needs of multiple institutions geographically spread over 12 states, and is not campus based or focused on a single institution. There are many examples of single institution programs and activities, but there are few examples of formally established consortia efforts in the area of the environment. To stimulate environmental and sustainable development activity on the campus and move the campus toward the goals of the overall endeavor, a mechanism was required to provide the director with critical campus-based program support. To meet this need, ACS appointed campus faculty fellows - a rotating position from year to year - to serve as the key spokesperson for the environmental initiative on each of the 15 campuses. The fellows coordinate the gathering and dissemination of information to other ACS institutions, collaborate with the project director to meet specific program needs, bring together the key environmental players on the campus to explore cooperative environmental initiatives, and assist with specific aspects of the project such as visiting lecturers and workshops held on the campus. Time committed to these endeavors is minimal as the faculty carry a full teaching load in addition to their other academic responsibilities. Centre College has successfully experimented with release-time, freeing this person from a single course and allowing the fellow to devote a greater amount of time to the initiative. Currently the fellows are compensated with a minimal stipend. In the future, it is hoped that additional funds may be sought to provide all fellows release-time so that they may devote greater time to campus and consortium environmental efforts and enhance institutionalization of the program.

Leadership and advocacy efforts also extend to the students. ACS appointed student interns directly assist the faculty fellows in bringing the environmental project to the attention of individuals and groups on the campus. The interns play a lead role in organizing student participation in the project, building on whatever is currently taking place on the campus, and stimulating further efforts among the students and others on the campuses to develop projects supportive of the mission of the initiative. They also provide an inter-institutional student network linking their individual efforts to those throughout the consortium.

Environmental Program Committee - Year Two

As part of the ongoing strategic development process for the environmental initiative, an assessment of the role of the program committee was made in year two, and several recommendations were subsequently made to and approved by the academic deans. It is fully anticipated that these changes will allow a significant and more efficient input by the members of the program committee. These changes recognize both the current commitments on the part of ACS faculty and staff who comprise the program committee, the increasing role of some members of the program committee as parallel projects in support of the overall initiative develop, and reflect the overall needs of the environmental initiative to ensure program success.

Approved Changes:

- *Establish separate faculty/staff proposal review committee (previously the responsibility of the program committee):* The Director will appoint a multi-member interdisciplinary review committee for the sole purpose of reviewing submitted proposals. The committee will rotate

each academic year. Such a change will free program committee members from this time-consuming commitment and simultaneously broaden the participation of other faculty and staff members.

- *Restructure the Program Committee:* Actively solicit potential new committee members - who are willing to commit the required time and effort - to replace those who feel they are unable to continue to serve in this capacity. Specifically, we will seek to appoint a minimum of two to three new members (as turnover allows) from staff such as physical plant, career planning or other appropriate fields. This will effectively provide a broader campus community perspective.
- *Program Committee members will not simultaneously serve as environmental fellows.*
- *Create several working groups to be chaired by members of the program committee:* Program Committee members will coordinate activities of small working groups, created to focus on specific needs/issues of the environmental initiative.

The proposed changes represent a balanced approach to ensuring that the program committee meets their obligations, but also recognizes their time constraints. Specifically:

- Creation of a separate and distinct proposal review committee will allow approximately 8 hours (of the 25 required) to be redirected to important policy matters, providing a more focused approach.
- These changes will enlist the aid of a greater number of faculty and staff and effectively broaden the initiative.

Environmental Fellows - Year Two

Several steps were also taken to enhance and further clarify the role of the environmental fellows. Perhaps the most significant was the bringing together of the 1998-1999 and 1999-2000 fellows for a clinic in Austin, Texas, hosted by ACS member Southwestern University. As part of the clinic the role of the fellow was reviewed as well as that of the environmental student interns.

The role of the fellows was reaffirmed, and specifically states that each fellow:

- Serves as the key spokesperson for the ACS project on the campus.
- Is a catalyst to stimulate environmental and sustainable development activity on the campus, moving the campus toward the goals of the overall endeavor.
- Coordinates the gathering of information and the dissemination of that information to other ACS institutions.
- Collaborates with the project director to achieve the projected outcomes of the project.
- Brings together the key environmental players on the campus to explore cooperative environmental initiatives.
- Helps with specific aspects of the project such as visiting lecturers, workshops held on the campus, and utilization of outside consultants.
- Provides annual report to ACS on programs and activities offered on his or her campus.

The fellows also agreed on the need to ensure that they:

- sufficiently coordinate non-academic projects,
- have contact/time with other campus entities,

- increase their involvement and solicit assistance from throughout the campus community,
- actively seek the input and help of the administration, particularly in the formal dissemination of information, and
- carefully coordinate activities with operations staff, recognizing the time constraints imposed upon operations staff.

Student Interns - Year Two

The role of the Student Intern was also reviewed and rewritten to provide the interns with greater overall support and structure. The student intern:

- will assist the faculty environmental fellow in bringing the environmental project to the attention of individuals and groups on the campus;
- will play a lead role in organizing student participation in the project, building on whatever is currently taking place on the campus;
- will stimulate efforts among the students and others on the campuses to develop projects supportive of the mission of the grant;
- will work with the career-planning director in exploring possibilities for career preparation, training and internships related to careers in environmental fields;
- will work with interns on the other ACS campuses to share environmental information and lessons learned from environmental programs; and
- will provide an annual report on student environmental activities, to include evaluation of programs and recommendations for future action.

VII. PRIORITIES & CHALLENGES FOR 1999-2000

The strong foundation established in the first two years of the initiative will continue to foster enhanced collaboration and the integration of the principles of sustainability throughout the consortium. The core program infrastructure, including the program committee, environmental fellows, and student interns, continues to build relationships on and across the campuses. The establishment of relationships with key collaborators such as Second Nature, the National Wildlife Federation and the Center for Respect Life and the Environment has considerably enhanced efforts to link current programs and activities with the principles of sustainability. Such relationships further allow the consortium to increase its visibility as a leader in higher education and sustainable development, and additionally provide a forum through which ACS may extend its model of collaboration to other academic institutions.

In year three we expect to place a greater emphasis on communication and resource building to enhance future collaborations. This includes focusing the program committee on specific topics in working groups and well as an emphasis on the strategic planning process. Resources will be dedicated to enhancing the role of the environmental fellow, and efforts are being made toward the development of critical databases such as course listings, instructors, and their research interests and activities. The current lecture series will be expanded to include intra-consortial campus symposiums and consultations on special interest projects allowing ACS faculty to travel

to other ACS campuses to conduct seminars and provide enhanced information and resources. We will also seek to work directly with the ACS Public Relations Officers to promote the initiative both within and outside of ACS.

To enhance the proposal process, the request for proposals has been restructured to eliminate specific deadlines. Proposals will be accepted continuously and reviewed as they are received. The director working with the program committee will target specific priority areas and seek out proposals, meeting the perceived needs of the initiative. Project principal investigators will work directly with the director, the program committee and ultimately with the proposal review committee to ensure that the projects are indeed interdisciplinary and collaborative and meet the overall requirements of the initiative.

In consultation with the program committee and the environmental fellows, it was agreed to formally define the meaning and intent of "collaboration". In year three, we will further recognize projects as "collaborative", when they are pilots or models that will benefit other ACS institutions. For example, this may include a course module or energy efficient measure, with lessons that can be disseminated to all of ACS. Limits here would not allow for repeat of similar projects but include only those pilots/demonstrations, which are considered to be of interest to all of ACS.

Projects will be encouraged that seek a funding level of \$15,000 to \$20,000, although a maximum of \$30,000 will still be accepted for those exceptional projects warranting such amounts. For example, the third round of funding included low-cost projects averaging less than \$4,000 but all with the broad collaborative potential and benefits throughout ACS.

As previously stated, a major focus in year three will be the further development of "Centers of Excellence" (see Special Collaborative Projects). New centers are expected to be established in Latin American Studies and Sustainability and in Geographic Information Systems (GIS). Eight of the 15 institutions are actively engaged in cooperative efforts in Latin America, and all 15 of the ACS schools have indicated a high level of interest to cooperatively pursue GIS and attended a GIS technical training and planning meeting in August at Trinity University.

While we are pleased with the progress and diversity of the developed projects and activities, we also recognize that many challenges remain. Overall, we have generated greater excitement about the initiative and developed a better focus on our priority areas. We continue to seek creative ways to encourage and foster collaboration among the member institutions. The completion of the ACS environmental strategic plan will provide strong program guidance and reinforce the commitment on the part of ACS and its member institutions. Efforts continue to build a strong campus constituency that will promote program activities and heighten awareness about the importance and need for improved environmental literacy in higher education. Related to this latter point, it is critical to note that the success of the environmental initiative should not just be measured in the number or extent of programs completed and initiated in these first two years. We must also look at dialogues that have been initiated and discussions that are actively ongoing to seek out ways to improve environmental education across the ACS institutions. While we have not funded all requests, we have successfully engaged faculty, staff and students in related activities to seek alternative ways to implement their respective programs and

activities. It was through the environmental initiative that we were able to stimulate the initial discussion, facilitate an ongoing dialogue, and ultimately help these individuals to seek alternative mechanisms to implement their ideas, although not directly funded by the initiative. It is our hope and vision that ultimately through the actions taken and planned, we will further encourage and develop projects and resources to directly emanate from within the respective institutions, as well as prepare the necessary leadership to ensure long-term program success and ultimately deepen the commitment on the part of the ACS member institutions.