

1994 PROGRAM SITES



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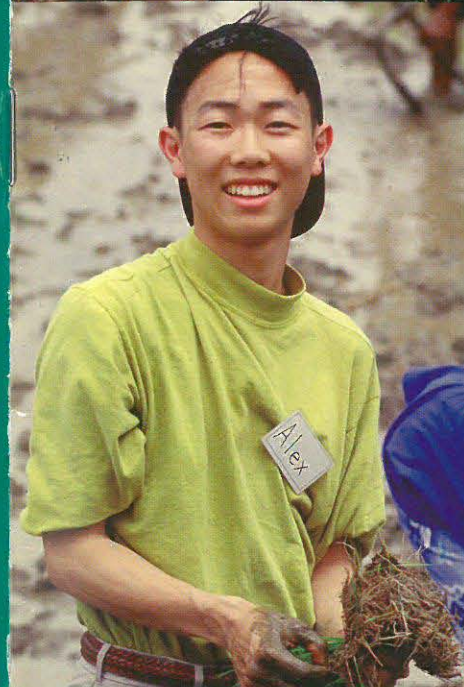
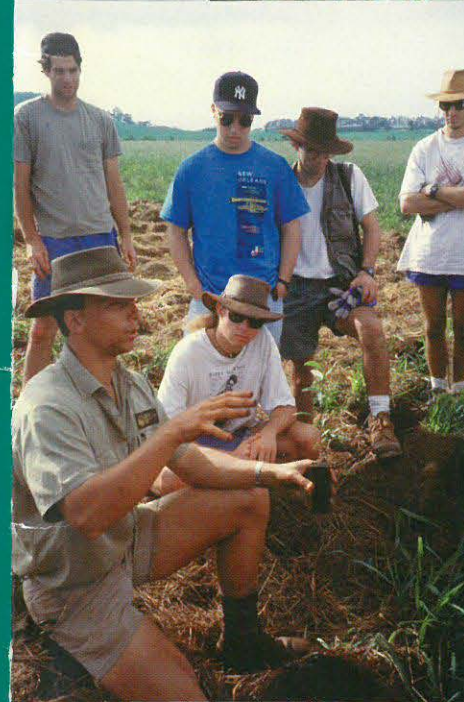
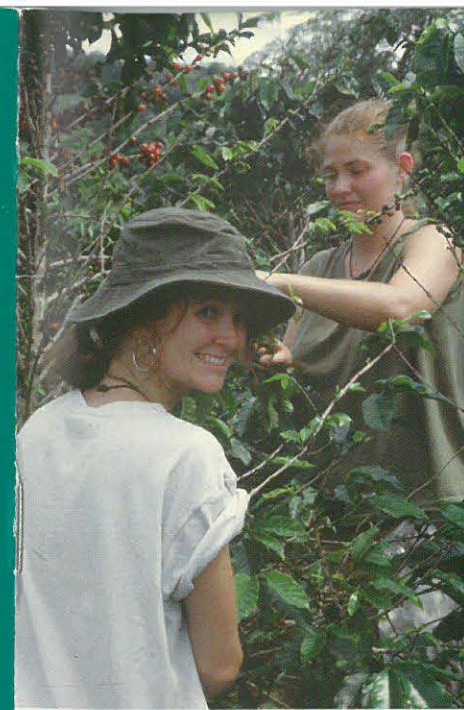
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PRINTED ON RECYCLED PAPER



The mission of The School for Field Studies is to provide highly motivated young people from the U.S. and abroad with an excellent practical education in environmental studies, in order that they may become more environmentally literate/aware, as well as make immediate and future contributions towards the sustainable management of the world's natural resources.

THE SCHOOL FOR FIELD STUDIES

1994 ANNUAL REPORT

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The School for Field Studies admits students of any sex, religion, race, color, national and ethnic origin to all the rights, privileges, programs, and activities generally accorded or made available to students of the School and does not discriminate on the basis of sex, religion, race, color, national or ethnic origin in the administration of its educational policies, admissions policies, scholarship and loan programs, and other School-administered programs. SFS is an equal opportunity institution.

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Ed Stashko, David Bathgate



THE CENTER FOR MARINE MAMMAL STUDIES
La Paz, Baja, Mexico
FALL & SPRING SEMESTER PROGRAMS
Marine Mammal Conservation
SUMMER COURSES
Sea Lion Conservation



THE CENTER FOR MARINE RESOURCE STUDIES
South Caicos, Turks and Caicos Islands, BWI
FALL & SPRING SEMESTER PROGRAMS
Marine Resource Management
SUMMER COURSES
Marine Parks Management



THE CENTER FOR RAINFOREST STUDIES
Yungaburra, Queensland, Australia
FALL & SPRING SEMESTER PROGRAMS
Tropical Rainforest Management
SUMMER COURSES
Tropical Reforestation



THE CENTER FOR SUSTAINABLE DEVELOPMENT STUDIES
Atenas, Costa Rica
FALL & SPRING SEMESTER PROGRAMS
Sustainable Development Studies
SUMMER COURSES
Alternative Strategies for Preserving Tropical Ecosystems



THE CENTER FOR WILDLIFE MANAGEMENT STUDIES
Athi River, Kenya
FALL & SPRING SEMESTER PROGRAMS
Wildlife Ecology and Management
SUMMER COURSES
Community Wildlife Management



SUMMER SATELLITE COURSES
SESSION I
June 14-July 13
SESSION II
July 20-August 18

Killer Whale Conservation <i>Puget Sound, Washington</i>	Ethnobotany <i>Mexico</i>
Conservation Education <i>Belize</i>	Protecting Birds of Prey <i>Montana</i>
Planning Parks for Preservation <i>Argentina</i>	Village Development in Fragile Mtn. Ecosystems <i>Nepal</i>

It is our hope that each student involved in an SFS course will:

1. Make a meaningful personal contribution toward improving the condition and/ or sustainable management of the natural resources of the local community in which he/she is studying.
2. Acquire an approach to problem-solving and decision-making that involves identification and comparison of alternative courses of action and consideration of the social, ethical, political, and biological implications of each.
3. Develop an integrated understanding of conservation issues that emanates from a case-based study of:
 - > ecology;
 - > applied science and research techniques;
 - > resource management;
 - > the role and implications of the cultural context (including the political and economic implications); and
 - > the inter-relationships of the above.
4. Experience opportunities for personal growth and achievement, including:
 - > the opportunity to function productively as a part of a group;
 - > the challenge to achieve at his/her maximum personal potential;
 - > the opportunity to pursue and realize extraordinary achievement; and
 - > the opportunity to accept responsibility for his/her personal learning and growth.



James L. Elder, Jr.
President



Terry L. Andreas
Chair

We at SFS believe that the essence of our educational challenge is to teach young people how to see the connections between things, to perceive patterns, to ask big questions, to develop a truly *integrative* intelligence.

We recognize that the traditional organization model of the university does not serve this new vision of education. It is rigid and resistant to change, unresponsive to student needs, and has come often to serve the faculty (or on occasion, government and/or business) more than those for whom it was originally

intended: the students.

In its place must be an innovative, flexible, student/client-oriented, and program driven corporation: one which puts students first and focuses all its attention on providing them with the very best education possible; one which is in tune with the times, and what those times are demanding of young people.

This past year at SFS, while not remarkable in its growth, is remarkable for its development.

While revenues rose 6% and total fund balances increased by 10%, the gains in organizational and programmatic integration were far more notable, as we hope the following report will attest. We have continued to shift our curriculum from being based on the presumption that environmental solutions lie in the direction of better management of the planet to the presumption that solutions instead lie with better management of us, the people of this planet. We, not the environment, are the problem.

Verna Case, the Biology Department Chair at Davidson College (perhaps SFS's largest "feeder" school) wrote: "SFS experiences have been a marvelous addition to our Biology curriculum. Students return to campus with the self assuredness that comes from having their sense of the world and their place in it challenged. Their experiences totally integrate learning and living so that the boundaries of the academic world and the real world dissolve. They have developed skills in problem solving, critical thinking and research. In sum, the SFS experience develops leaders, both in and out of the classroom." We can find no better reward for our efforts than this verification that the SFS program can do what it was intended to do.

Due to the hard work of many staff and the contributions of many supporters, SFS is truly becoming what was envisioned 13 years ago. Our deepest thanks to all of you.

James L. Elder, Jr.

James L. Elder, Jr.
President

Terry L. Andreas

Terry L. Andreas
Chair

INTRODUCTION

► WORKING AT AN ALTERNATIVE AGRICULTURAL STATION IN NEPAL, SFS STUDENTS INVESTIGATED NEW PLANTING SCHEMES AND SOIL ENHANCEMENT STRATEGIES.

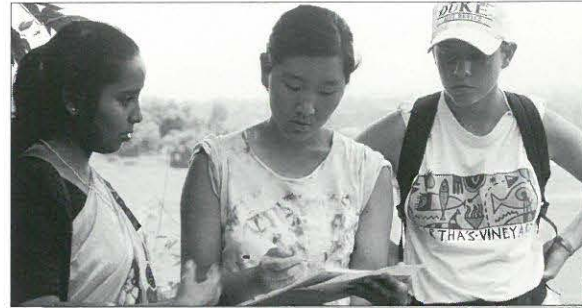


PHOTO: DAVID BATHGATE

A nonprofit corporation founded in 1980, SFS is governed by a Board of Trustees and Members of the SFS Corporation. Funding is provided by tuition, fees, and tax deductible contributions from individuals, foundations, and corporations.

SFS enrolls about 700 college undergraduates in either semester long or one month summer programs (which are also open to high school seniors) at our five overseas **Centers**. Semester programs are designed for 32 students and taught by four full-time faculty in each program; summer courses are designed for 16 students and taught by two faculty in each course. Summer courses are offered at six temporary **Satellite** sites as well as our five **Centers**.

THE SCHOOL FOR FIELD STUDIES (SFS) IS THE COUNTRY'S FIRST AND LARGEST EDUCATIONAL INSTITUTION DEVOTED EXCLUSIVELY TO ENVIRONMENTAL FIELD STUDIES.

Each SFS program combines academic study with a field project directed by our faculty. Our academic work encompasses all the traditional academic elements (lectures, readings, practicum, papers, and exams) but presented in an interdisciplinary "case study" format. The field research project applies the theory learned through the case studies to solving real environmental problems.

SFS programs are academically accredited by Boston University for all students who enroll in SFS, as well as by 15 Affiliated colleges and universities for their own students. In addition, a special Consortium of five colleges and universities supports and sponsors the SFS Center for Sustainable Development Studies in Costa Rica.

◀ VISITS TO TWO KENYAN PARKS — TSAVO WEST AND AMBOSELI — PROVIDE DRAMATIC ILLUSTRATIONS FOR OUR CASE STUDY OF THE DILEMMA OF ELEPHANT MANAGEMENT.

"Through my classes and these safaris, I was afforded a very whole vision of the issues facing conservationists and was able to develop my ability to think critically and beyond readily available media perspectives."

RACHEL BRIDGEWATER
Warner, NH
Simon's Rock of Bard College



PHOTO: MICHELLE GADD

INTEGRATION

► SFS STUDENT RECORDING DATA ON UNGULATE FEEDING BEHAVIOR IN KENYA.

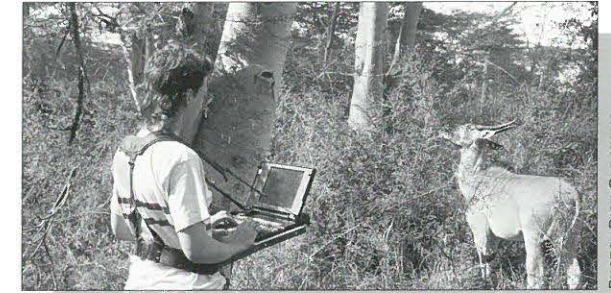


PHOTO: DICK GARSTANG

Becoming fully integrated with one's mission as a principal operating strategy requires an effort to pull together all parts of the School into a unified whole, to develop both an organization and a program which are *consistent* with the mission throughout and at all levels.

The mission of SFS is based on two fundamental assumptions: 1) the sustainable management of the world's natural resources is essential to improving humankind's well being, and 2) the most effective way to learn is by getting fully involved with real problems. These are the two basic assumptions which we seek to integrate into both the program and operations.

THE SCHOOL FOR FIELD STUDIES PRESENTS AN OPPORTUNITY TO BUILD AN INSTITUTION WHICH AIMS FOR COMPLETE INTEGRITY, ONE WHICH IS NOT ONLY TRUE TO ITS MISSION IN ITS PROGRAMS, BUT ALSO ONE WHICH PRACTICES WHAT IT PREACHES IN ALL ASPECTS OF ITS OPERATIONS (INCLUDING ORGANIZATIONAL STRUCTURE, MANAGEMENT, FINANCIAL INVESTMENTS, PHYSICAL PLANT DESIGN AND OPERATION, ETC.)

The strategic advantages of operating in a manner which is fully integrated with the mission are remarkable: an integrated organization has a coherence and strength which enables it to be responsive to change, to be more easily understood by staff and by external constituencies, and to develop a unity of purpose which enables everyone involved

to be more focused and productive. The power of a fully integrated program is equally remarkable: it provides a clarity and depth of meaning and purpose which is essential for optimal learning and for engaging students.

What does a fully integrated program and organization look like? While trying to answer this question ourselves over the past fourteen years, we have sought to create a consistent and comprehensive set of environmental and educational values for the SFS program. We have sought to evolve beyond most

(CONT'D ON NEXT PAGE)

◀ A COMMUNITY SERVICE PROJECT IN COSTA RICA FINDS AN SFS STUDENT PLANTING SEEDLINGS WITH LOCAL CHILDREN TO HELP STEM EROSION.



"Learning in the field was so different from classroom learning that I didn't realize how much of the environment I had soaked in. As we became immersed in our case studies, I found myself so interested in the different topics that the hard work I ended up doing came almost naturally."

AMY O'NEAL
West Hartford, CT
Smith College



PHOTO: BRUCE NEILL

◀ THE TURKS AND CAICOS ISLANDS WERE ONCE THE WORLD'S LARGEST EXPORTER OF QUEEN CONCH. WORKING WITH THE DEPARTMENT OF FISHERIES, SFS STUDENTS AND FACULTY DESIGNED AND PRODUCED A POSTER FOR USE IN IDENTIFYING UNDERSIZED CONCH AND LOBSTER TO REDUCE ILLEGAL AND UNSUSTAINABLE HARVESTING OF THESE SPECIES.

➤ To evolve from a traditional disciplinary-based curriculum to a problem-driven, case study curriculum in order to integrate the SFS program with the SFS mission. This has required an evolution from the natural sciences to environmental studies, and an effort to integrate the topic of development with preservation and the discipline of economics with ecology. By combining practice with theory in a problem driven curriculum, we have integrated fieldwork, classwork, and homework into a meaningful whole.

conventional educational institutions to integrate our two basic assumptions in the following ways:

➤ As a result of this problem-driven curriculum, to evolve from self-contained programs to programs which are integrated with local communities through our program partners and clients as well as through community service projects.

➤ To educate "the whole person," integrating the intellectual and social development of our students.

➤ To integrate our students with our faculty to an uncommon degree by sharing common objectives as part of

a small learning community and by living in such close proximity as dictated by field conditions.

➤ To integrate or align faculty hiring requirements and SFS's educational objectives, by hiring interdisciplinary "practitioners" rather than faculty with only traditional academic training.

➤ To integrate the School's daily operations with our values, by evolving from inefficient and wasteful operations to "green" field campuses and Headquarters.

➤ To move from operating only satellite summer programs to establishing Center semester programs as a more effective vehicle for a fully integrated program.

➤ And finally, to evolve from interacting solely with students towards developing an affiliate relationship with many of the SFS feeder schools, to better integrate SFS with our "suppliers" and traditional higher education.

These specific evolutions (which can also be read as goals) all lead to the same end point – an end point where the SFS mission is comprehensively manifested at different but fully integrated levels.

▶ STUDENTS SHARING OBSERVATIONS WITH FACULTY MEMBER JANET RASMUSSEN AT THE CENTER FOR WILDLIFE MANAGEMENT STUDIES. TEACHING AND MENTORSHIP ARE A PRIORITY FOR THE SFS FACULTY. AS A RESULT, MANY STUDENTS TELL US THAT ONE OF THE KEY BENEFITS OF THEIR SFS EXPERIENCE WAS THEIR CONSTANT ACCESS TO FACULTY AND THE OPPORTUNITY TO GET TO REALLY KNOW THESE IMPRESSIVE INDIVIDUALS.



PHOTO: DICK GARSTANG

IMPLEMENTING THE MISSION

▶ ONE OF OUR ONGOING RESEARCH PROJECTS AT THE CENTER FOR WILDLIFE MANAGEMENT STUDIES IS A STUDY OF TEMPORAL CHANGES IN BIRD SPECIES COMPOSITION ON THE RANCH WHERE THE CENTER IS BASED.



PHOTO: WEAVER WHITEHEAD

The School's mission calls for SFS to provide our students with not only an excellent practical education in environmental studies but also, as an integral part of that education, to offer students a chance to participate in a meaningful way in making a contribution towards solving environmental problems. Thus, our intent has been to develop a focus at each SFS Center which provides solutions to local and regional environmental problems, especially those problems which exist in many other contexts around the world. By involving students in case

A PRACTICAL EDUCATION IS DEFINED AS AN EDUCATION THAT IS ACTION-ORIENTED, EXPERIENCE-BASED, CAPABLE OF BEING PUT TO GOOD USE, MANIFESTED IN PRACTICE, AND CONCERNED WITH VOLUNTARY ACTIONS AND ETHICAL DECISIONS.

studies, environmental field work, and community projects, SFS programs emphasize both the value of a practical education focused on problem solving and the importance of making a contribution to a local community. (Recognizing the importance of this approach, a recent report from The American

Institute of Biological Sciences cited SFS as "particularly valuable" for its teaching methodology.)

The case studies and conservation field work in our curricula can only be successful to the extent to which we develop partnerships and client relationships with local individuals, organizations, and agencies interested in conservation. Case studies, field work, and community projects should be designed with partner and/or client input to insure coverage of the necessary theory as well as relevance to client needs. These joint ventures increase the likelihood that our case studies address real issues and that our field projects will be successfully implemented.

An SFS program partner is a collaborating organization, such as a university, government agency, non-governmental organization, or private group/individual. Our partners are working on environmental issues which we feel are important and will provide suitable material for an applied education – and most importantly, they are interested in SFS's help.

SFS clients are usually the stakeholders in an environmental issue: those individuals who are directly impacted by the work of SFS and our partners. By building our academic program to meet client needs, our students have the opportunity to see the value of their education as well as actually helping to impact a local problem.



▶ STUDENTS ON A FIELD TRIP TO A COSTA RICAN BANANA PLANTATION.

PHOTO: MOISES LEON

"When we first arrived, I bombarded my professors with questions such as 'should we boycott coffee and bananas to save tropical ecology or buy them en masse to support sustainable agriculture? One faculty simply smiled and said I should try to answer those questions for myself over the next three months.'"

FRED WERNER
Chevy Chase, MD – University of Michigan

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PHOTO: ALEX MAS

1. Students from Affiliated schools accounted for 14% of the total enrollment in SFS programs, including a record 24 participants from Davidson College.

2. Two SFS alumni were selected as Watson Fellows (Heather Swartz and Kevin Watt); both are using the fellowship to follow up on fieldwork they began in their SFS programs.

3. Total revenues increased 4%, and total fund balances improved by 28%. The value of student scholarship awards increased by 19%.

4. SFS and Boston University, the nation's fourth largest private university, signed an agreement making the University the primary accrediting institution for all SFS courses.

5. Host country scholarships were awarded to a ranger from the Kenya Wildlife Service and a student from Kenya's Egerton University to attend courses last summer at the Center for Wildlife Management Studies, and to two students from our Mexican sponsor, the University of Southern Baja California, to attend the spring semester course at the Center for Marine Mammal Studies and the summer Killer Whale Conservation course.

6. Construction began on a new open-air classroom at the Center for Sustainable Development Studies and new housing for interns at the Center for Rainforest Studies, thanks to support from the Andreas Foundation.

7. Presentations and/or papers on the SFS educational model were delivered by Paul Robertson (Society for Human Ecology Annual Meeting), Ed Stashko (the Society for Conservation Biology Annual Meeting), and Jim Elder (the North American Association for Environmental Education Annual Meeting). Faculty members Don Croll and Lisa Jerez from the Center for Marine Mammal Studies presented a paper on island biodiversity at the Society for Conservation Biology Annual Meeting; SFS student Camillo Carmargo from the University of Pennsylvania presented a paper on his work at the Center for Sustainable Development Studies entitled "The Dynamics and Interactions of Two Pests of Mango, *Anastrepha Obliqua* and *Ceratitidis Capitata*," at the Annual Meeting of the Society for Integrated Pest Management.

THE IMPACT OF OUR WORK

The SFS mission calls for us to provide students with an opportunity to make a contribution towards helping to solve a local environmental problem. Creating this opportunity through the development of conservation research projects is a key element of the design of a successful program. In every program, each SFS student must design and carry out a field project related to the current conservation goals of the Center. These projects last for most of the semester, culminating in presentations to the outside community of scientists, researchers and representatives from SFS partners and clients. In addition, during each semester, students at every Center engage in conservation related community service projects outside the formal academic curriculum.

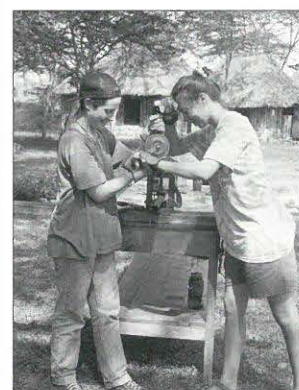


PHOTO: DICK GARSTANG

Without a directed research project which makes an impact on a local environmental issue, students will feel robbed of the chance to make a difference or become disillusioned about their ability to tackle complex environmental problems. On the other hand, a well designed project will not only motivate students, but also significantly help to define the academic component (lectures, readings, etc.) of the program.

We seek to create projects at each Center that provide solutions to real environmental problems at the local and regional levels and that offer models for creating policies, methodologies, and planning tools to deal with global environmental problems. Through the development of conservation projects, SFS stresses both the value of a practical education focused on problem solving and the contribution to the local community. Just as case-studies are based on address-

◀ PRACTICAL PROBLEM-SOLVING INCLUDES FINDING APPROPRIATE RESEARCH METHODOLOGIES FOR OUR FIELD WORK. HERE, STUDENTS AT THE CENTER FOR WILDLIFE MANAGEMENT STUDIES EMPLOY LOCAL MATERIALS IN THE DESIGN AND CONSTRUCTION OF A BIRD OBSERVATION TOWER FOR USE IN THEIR DIRECTED RESEARCH PROJECT.

ing a real, not just perceived, problem that requires that a decision be made or action be taken, the successful development of conservation projects is also based on the identification of a problem that requires resolution by an identified local decision maker. The conservation project should combine with the academic component of the program to produce students that are environmentally literate and who possess the critical thinking ability and problem-solving skills needed to tackle complex environmental issues effectively.

In FY94, we began a planning process at all Centers to ensure that all of our conservation projects are both problem-driven and client-driven. To satisfy both of these conditions, we need to be able to answer two key

▶ JOINT VENTURES WITH LOCAL PROGRAM PARTNERS INCREASE THE LIKELIHOOD THAT OUR CASE STUDIES ADDRESS REAL ISSUES AND THAT OUR FIELD PROJECTS WILL BE SUCCESSFULLY IMPLEMENTED. HERE STUDENTS CONFER WITH LOCAL FARMERS NEAR OUR CENTER IN COSTA RICA.



PHOTO: LIANA BABBAR

questions as a test of the appropriateness of an issue or problem for adoption as an SFS conservation project: "Who cares?" and "So what?" To answer the latter, we must be able to define the resources at risk and the resource management issue to be addressed. We must be able to define the resource management decisions that need to be made and the data or tools that are needed before decisions can be made. Answering the "so what" question requires identifying local participants that are being impacted by the environmental problem and those that will be making the resource management decisions. Creating a successful conservation program begins with this bottom-up approach to defining the problem and the local clients.

◀ STUDENTS AND FACULTY AT THE CENTER FOR RAINFOREST STUDIES HAVE PLANTED OVER 6,000 TREES IN DEFORESTED AREAS. OVER 5,000 SEEDLINGS ARE NOW GROWING IN OUR SHADE HOUSE; OUR GOAL IS TO PLANT 2,000 TREES PER YEAR.

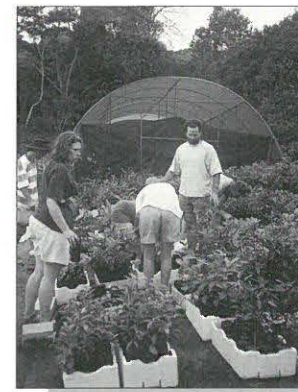


PHOTO: ED STASHKO

In AUSTRALIA, students again planted several thousand trees with the Queensland National Parks and Wildlife Service (QNPWS) and TREAT (Trees for the Atherton Tableland), a local volunteer organization, in experimental plots from the past four years. Today some previous plantings are already over 12 feet tall, and act both as a windbreak to reduce soil erosion and as wildlife habitat corridors. A database has been created to monitor propagation success and costs for our nursery production at the Center's shade house. This will allow us to assess the costs involved in employing various reforestation strategies on the Tableland. Already in progress is a program to plant over 12,000 rainforest trees on cleared areas of SFS-owned property. A promising new project is an evaluation of the habitat value of the Hasties Swamp National Park, one of the few preserved wetlands in Australia. The National Park Service is interested in working with SFS to develop a management plan for this park that includes the design and implementation of a wetland restoration program.

In COSTA RICA, the program developed a strong project focus very rapidly at our new Central Valley location in Atenas. With 10 protected areas in the west central valley around our Center, the investigation of the impacts of public and private involvement in the management of natural resources is a key issue. Working with the Direcccion General Forestal (DGF: National Forestry Directorate), we are developing a management plan for the protected zones near the Center. We are also assisting in the creation of guidelines to assess the impacts of local land use practices on the protected zones. With the University of Costa Rica (UCR), we are developing an integrated pest management program (IPM) for Costa Rica. This year, SFS students developed a strategy to control white flies with the Atenas mango cooperative. Their work was presented at an international IPM conference. Suggestions included low cost traps for white flies as well as some land management practices to control this pest without relying solely on pesticides.

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► STUDENTS IN THE SUMMER COURSE "VILLAGE DEVELOPMENT IN FRAGILE MOUNTAIN ECOSYSTEMS" WERE QUICKLY IMMERSSED IN THE RICH RHYTHMS OF NEPALESE VILLAGE LIFE, LIVING AND WORKING ALONGSIDE LOCAL FARMERS.



PHOTO: DAVID BATHGATE

In conjunction with the representatives of Instituto Costarricense de Electricidad (ICE) and Ministry of Natural Resources (MIRENEM), we are building on past SFS projects to develop a watershed management plan for the Atenas region. MIRENEM recently published the results of one of our projects (the use of invertebrates as a measure of the ecological health of commercial tree plantations) in their national newsletter, and recently offered to make SFS a partner in their community tree program.

ICAFFE, the National Coffee Institute in Costa Rica, has agreed to work with SFS on projects that impact coffee production and agricultural policy. The Regulatory Research Institute of the University of Costa Rica (IIJUR) invited SFS to participate in a project that will investigate the role of environmental law as a framework for sustainable development. We will start by participating in projects that examine the effectiveness of environmental regulation on land use management in and near protected zones in Costa Rica.

The National Forestry Directorate asked SFS to collaborate on a project that is developing a reforestation plan in the protected zone of Escazu; a joint reforestation day with NFD was cited by many students as the high point of last summer's program.

Community service projects in Costa Rica in-

cluded an environmental education project with the local school, a mosquito control project with the community in response to a dengue fever scare, an environmental fair, and a cleanup of a local waterfall.

In the **TURKS AND CAICOS ISLANDS (TCI)**, our fieldwork continues to be the main source of information as the government struggles to create a sustainable management strategy for the lobster and conch fisheries. Increasing economic pressure is resulting in more undersized lobster and conch being harvested. To facilitate the development of a nationwide resource management strategy for the TCI, SFS hosted a national conference at our Center which was attended by the Governor and several Ministry heads among others. This conference resulted in the first conservation agenda ever established for the TCI. Additional fieldwork produced a marine park resource inventory and created a long-term monitoring program. Students installed an SFS designed underwater snorkel trail along a coral reef and produced a visitor's guide to Cockburn Harbor. Sea Day and Earth Day activities at the Center continue to be popular community service programs with local residents.

In **KENYA**, SFS worked with officials from

Nairobi National Park to develop a management plan for the Kittenjala Conservation Area. Students also worked on several educational programs to promote community wildlife programs.

In **BAJA**, SFS projects led to the adoption of a sea lion management plan to promote the coexistence of this key marine mammal with both fishermen and tourists. As tourism increases and fishing pressure grows, students have been assessing the long-term impacts of these activities on the biodiversity of islands. Introduced species and poor management of solid waste have degraded many of the nearby islands. The results of SFS investigations into these issues were presented by our faculty at the Society for Conservation Biology meetings in Guadalajara.

Summer **SATELLITE COURSES** had a productive season focusing on resource management topics. In Belize, SFS students created several trail maps and a children's guide to nature to

► RESEARCH CONDUCTED BY STUDENTS AND STAFF AT THE CENTER FOR MARINE MAMMAL STUDIES HAS LED TO THE ADOPTION OF A SEA LION MANAGEMENT PLAN TO PROMOTE THE COEXISTENCE OF THIS KEY MARINE MAMMAL WITH BOTH FISHERMEN AND TOURISTS.

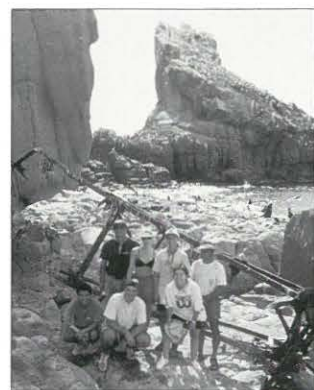


PHOTO: DON GROLL

promote local awareness of natural resource conservation issues. In Argentina, fieldwork provided insights into the creation of management strategies for newly created national parks. Students discovered that introduced plant species pose a threat to the native plant composition. In Nepal, our village development studies focused on soil fertility problems. Working at an alternative agricultural station, students investigated new planting schemes and soil enhancement strategies. The Puget Sound program coordinated with the Whale Museum on San Juan Island to organize a "No sound in the Sound Day" to draw attention to the impact of recreational boats on killer whales. In Montana, the raptors program continued a large-scale habitat mapping program in cooperation with the National Forest Service and the Maverick Mountain Ski Resort. Student projects investigated the impact of habitat fragmentation and wildlife corridors on raptor ecology.

"I now recognize that there are many sides to an issue to be taken into account before reaching a solution. I also know that education and opportunities like I had in Costa Rica are ways to bridge the gap between thinking about solutions and taking action."

TINA VAN METER
Keego Harbor, MI
University of Michigan

THE CASE STUDY MODEL OF INSTRUCTION IS ONE OF SEVERAL CORNERSTONES TO SFS'S EDUCATIONAL METHODOLOGY.

CASE STUDY 1 asks: "Does the current management and design of Costa Rican protected areas effectively meet the goals/objectives of conservation as defined from a sustainability perspective?" The Center's new location enabled the faculty to take advantage of a variety of local protected areas and new clients, including the Municipality of Atenas and the Ministry of Natural Resources. There are a large number of public and private protected areas in Costa Rica of various sizes, which are being impacted by tourism or adjacent land uses. Given that 25% of the country has already been set aside in protected status, it is unlikely that new protected land will be added to the system. Our students are working

NEW CASE STUDIES

► CLIENTS FOR OUR CASE STUDY EXAMINING THE POSSIBILITIES FOR GRASSROOTS SUSTAINABLE DEVELOPMENT IN COSTA RICA INCLUDE A COFFEE COOPERATIVE. HERE, SFS STUDENTS TRY THEIR HAND AT PICKING COFFEE.



PHOTO: MOISES LEON

Unlike the case studies approach used in many graduate professional schools which are often either hypothetical in nature or studies of past situations, an *SFS case study* analyzes an actual environmental situation or dilemma which requires making a decision. Faculty lectures and readings provide necessary theoretical background material to understand the problems raised by the cases. Guest lectures by individuals who are often intimately involved in the issue of the case provide students with the rich (and often conflicting and confusing)

context which is typical of major social problems.

Practical, interdisciplinary activities give students hands-on experience in addressing these issues. The case studies usually lead to several plausible

or compelling decision possibilities. Students are faced with the need to make the decision, usually in the face of less than full data and less than perfect solutions. Debates, policy statements, or management plans often serve as a concluding and evaluative stage to the program.

In FY'94, all three new case studies happened to be initiated at the Center for Sustainable Development Studies (CSDS) in Costa Rica. The Center relocated to Atenas in the Central Valley; as a result, faculty invested a significant amount of work in developing new Center case studies, which had familiar themes but were designed for new clients and required new decisions.

with the responsible agency or land owner to better understand if already protected properties are being managed effectively for conservation.

CASE STUDY 2 was designed with the Agricultural Extension Agency, General Forestry Directorate and the Association of Mango Producers to determine how agroecosystems can promote sustainable management in protected zones. This case study examines the agricultural, economic, political and social aspects of differing types and scales of agriculture and how these fit with the goals of protected areas in Atenas. As a class project, students produce a sustainable development plan for a local farmer in one of the protected areas.

CASE STUDY 3 examines the possibilities for grassroots sustainable development in Atenas, given the trends imposed by the globalization of the economies in less developed countries. Clients for this study include a coffee cooperative, banana cooperative, mango cooperative and the National Center for Cooperative Education. Students are evaluating these enterprises, as well as multinationals and other traditional organizational models, based on the following factors: productivity, profit, social influences, income generation and distribution, inputs, outputs, impact on natural resources, cultural impact and impacts on adjacent conservation areas. Students are using the data to better

understand what contributes to successful grassroots sustainable development.

These case studies represent a new level of interdisciplinary problem solving skills by our faculty and students at CSDS. The sophistication of the CSDS reports and products continues to attract new clients with new problems, which we view as increasingly better learning opportunities for our students.

NEW FACULTY

Our twenty full time and twelve part time faculty members have a unique blend of academic achievement as well as hands-on practical experience. In order for our

programs to be successful, it is critical that our faculty be skilled in the actual problems of managing change necessary for sustaining natural resources. Committed educators and conservation

professionals are attracted to SFS as an opportunity to truly make a difference in the lives of students.

We are pleased to note several new full time faculty appointments this year:

ROBIN BAIRD (*Center for Marine Mammal Studies*) received his Ph.D. in Behavioral Ecology from Simon Fraser University. His research has focused on the foraging behavior and ecology of transient killer whales, and utilizing radio-telemetry to examine killer whale diving behavior. Robin has extensive experience conducting boat and land based surveys for marine mammals off both Vancouver Island and the San Juan Islands of Washington.

DEREK CARRINGTON (*Center for Marine Resource Studies*) has a Master's degree in Regional Planning and Resource Development from University of Waterloo. His thesis was on the pursuit of regionalism in the Caribbean community, with a special focus on regional fisheries development. For the past four years, Derek worked in his native Trinidad as a resource economist for the Institute of Marine Affairs, working on environmental impact statements and socio-economic management plans for marine parks. As part of an on-going project, Derek has been involved in the Park Resource Assessment and Monitoring program in southwest Tobago, where he provided the socioeconomic component of a management plan for marine parks.

TONI JACKMAN (*Center for Wildlife Management Studies*) has a Master's degree in Geology from Wichita State University, where she subsequently held a lecturer's post for 3 years and coordinated a five week multi-university geology field program in Colorado. Earlier, while studying for an undergraduate degree at Cornell University, Louis Leakey recruited her to do a long-term study on pygmy chimpanzees in Zaire. Toni has been acting director of Kenya's National Primate Center, and worked at Gombi Stream with Jane Goodall. After seven years in Africa, she returned to work at the Sedgewick County Zoo as supervisor of the African Collection. Toni also has participated in the foreign service, where she had postings in Tunisia and Morocco as an Information Officer.

JEAN KENYON (*Center for Marine Mammal Studies*) received her Ph.D. from the University of Hawaii in Zoology. Jean has been a researcher on a dolphin/whale watching fleet, studied seabirds in the Hawaiian Islands, lead ecotourism tours in the Caribbean, South Pacific, Indian Ocean, Sea of Cortez, Central America and Antarctic peninsula. For four years, Jean taught marine science at the Leeward Community College and coral reef ecology on board a topsail schooner in the Virgin Islands.

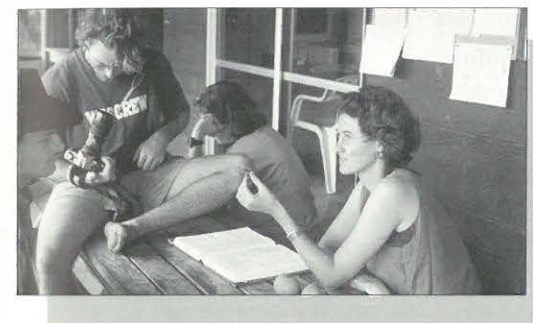
BRUCE MACNAB (*Center for Rainforest Studies*) received his Master's degree in Forest Economics from the University of Alberta. For two and a half years, he worked as a forest economist for the Saskatchewan Department of Environment and Resource Management, conducting socio-economic studies on the benefits of changing current forest management practices to practices which are consistent with the joint management of timber and wildlife resources. Bruce most recently spent two years as a lecturer in the Department of Economics at the University of Tasmania. Prior to that, he worked for the Yukon Department of Renewable Resources on development and implementation of a socioeconomic survey of two recreation areas.

BOB MCCREADY (*Center for Marine Mammal Studies*) received his Master's degree in Marine Affairs from the University of Oregon. Bob's work has focused on integrated coastal zone management and the development of coastal and marine resources in developing countries. For his thesis, Bob worked in Ecuador on the problems associated with the shrimp aquaculture industry: replacement of large areas of mangroves; the degradation of water quality; declines in biodiversity; and the displacement of artisanal fishers. Bob worked for the Alaska Department of Environmental Conservation on the Exxon Valdez oil spill, where he supervised clean up crews and the coordination of government and non-government organizations. Bob also co-lead a field course for the University of Washington, focusing on water quality issues in Puget Sound.

"Nothing can compare with seeing theory from the classroom come to life in the field. I now have a greater understanding of the course material at my home school, knowing that it does apply to real life. Many students never get this chance to see how their education is relevant to everyday situations."

LEE ROEBUCK
Greenwood, VA
Virginia Polytechnic Institute

SASCHA STEINER (*Center for Marine Resource Studies*) received his Ph.D. in Zoology from the University of Vienna. His field work has been primarily conducted in the Caribbean, where he spent several years in Puerto Rico on various coral reef ecology projects. His prior experience includes working on Eastern Pacific corals in Costa Rica (where he also taught a course in marine ecosystems), teaching invertebrate zoology at the University of Vienna, and participating in a research cruise to the Antarctic. Sascha is also fluent in six languages.



◀ FACULTY MEMBER
AT THE CENTER FOR
RAINFOREST STUDIES,
AMY JANSEN.

PHOTO: ED STASHKO

"The faculty were one of the best parts of my experience. They were great teachers who taught us in subtle ways... The teaching didn't end when the lecture was over; it continued through the afternoons, over conversations at dinner and into the evening. Their perspectives on environmental problems and environmentalism as a field of study were immensely valuable to my development as an environmentalist."

PATRICK LEE
Auburn, MA
Connecticut College

WAYNE VOS (*Center for Wildlife Management Studies*) has completed all but the defense for his Ph.D. in botany from University of Natal, which focuses on the symbiosis between wildlife and habitat. Wayne worked at Kruger National Park as a research assistant on elephant projects. His field work also includes a 4 month rhino project and tagging marine turtles on the South African-Mozambique border. While working for 2 years on several South African game ranches, Wayne gained experience in anti-poaching techniques, and wildlife species management and conservation. Wayne also has a Master's degree in botany.

THE 1994 SFS STUDENT BODY OVERVIEW

The 679 students who participated in SFS programs in 1993-94 represent perhaps the most geographically, ethnically and academically diverse enrollment in the School's history. Over 80% of all participants enrolled in programs based at the five SFS Centers. Semester enrollment continued to increase and now accounts for 45% of our total enrollment base.

- SFS students came from over 275 public and private colleges, universities and secondary schools across the country;
- 17 international students from 9 countries attended SFS programs. Home countries included Canada (5), England (1), Mexico (2), Japan (2), Columbia (2), Kenya (2), Austria, Saudi Arabia, and India. In addition, students from 46 of the United States participated in SFS programs;
- Six percent of participants were minority students;
- Seventy-five percent of participants were female; twenty-five percent male;
- The average participant was 19 years old and a college junior;
- The average grade point average of entering semester students was a 3.2 (B+); the average SFS student grade point average was a 3.3;
- Seventy-nine percent of SFS participants are or plan to major in the natural sciences with a rapidly growing number focusing on environmental studies;

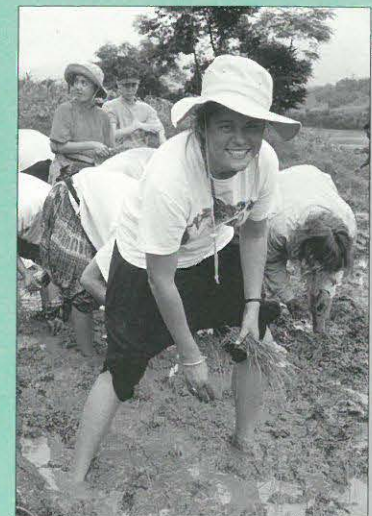


PHOTO: DAVID BATHGATE

- Nine percent of all summer participants were high school juniors and seniors, eighty-four percent were college undergraduates;
- Twenty-eight percent of all participants received SFS financial aid to enable their participation in an SFS program. Through the generosity of a growing number of scholarship donors, SFS was able to provide scholarship assistance totaling \$190,715 to 183 students. The Merck Family Revolving Student Loan Fund was the principal source for loans to 186 students totaling \$198,450. In the case of most semester participants, this aid was supplemented with assistance from their home schools or from government sources;
- Home schools having 10 or more SFS participants in 1993-94 were Colby, Davidson, and Dickinson Colleges and Cornell, Duke, Emory and Tufts Universities as well as the Universities of Colorado, Michigan and Vermont and the University of California system;

What the above statistics say is that our students come to SFS from different places and backgrounds; we also know they come to us with a broad and sometimes surprising range of goals and expectations.

(CONT'D ON NEXT PAGE)

tations. At the same time, they start out sharing a number of characteristics – they are bright, inquisitive, and adventurous; and, they are looking for a way to make a difference – in the environment and in both the

local and global communities to which they belong. We hope and expect that their SFS accomplishments are the early steps on a lifelong journey of caring, sharing and proactive environmental commitment.

"I was looking for adventure... Thrills were what I was seeking. Thrills were what I got – only they were a little different than what I first expected.

Everything SFS promised came true. We did live in thatched roofed huts and were pretty isolated, but these 'adventures' took a back seat to the thrills of learning how to live with 31 students and five faculty, twenty-four hours a day, seven days a week. Where I once was enticed by the thought of braving it out alone in a one-on-one match against the wilderness, I soon found that the largest part of the whole experience was learning to become a member of a functional team. Everything each one of us learned was pooled together so that every one of us left with the experiences of not just one person, but of thirty-seven different people, all making different observations and sharing different discoveries, from determining the browsing preferences of giraffes to learning how to take a shower in the middle of nowhere.

As the semester flew by, our adventure-seeking changed to knowledge-seeking. Before we left the States, we had envisioned ourselves jumping into the middle of adventure after adventure, throwing ourselves into the excitement. We soon learned that it was much more fulfilling to hold ourselves back from the adventure, to allow it to unfold before us as if we were not even there. Through classes, research, and fellow students, we learned that quiet observation would bring much more drama to our eyes than gung-ho adventure-seeking.

It is hard not to laugh out loud now when I remember how I thought of Kenya as a closed book waiting for me to open it and reveal all the answers; nothing could be further from the truth. Kenya was an open book, inviting me to tiptoe through its pages once I learned how. But I did not walk away with all the answers. Every question I answered was followed by ten new questions. As I learned, I learned how much more there is for me to learn.

And there Kenya lies, along with every other country in the world, enticing us to learn their questions. Asking us not to prove ourselves by defeating their mysteries, but to become a part of them. And that is the greatest adventure of all."

KERRY MARTIN
Greencastle, IN
DePauw University

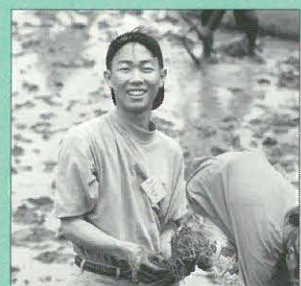


PHOTO: DAVID BATHGATE

"I thought I'd share with you an example of one of those SFS students who make teaching worthwhile (a high school student, no less). Marion Rawson was the kind of good sport who wiped the sweat from her brow and made a strong effort that really paid off in terms of her personal achievements. Her research report was remarkably well written – bordering on upper level undergraduate to graduate level skills. Her other academic performances were top notch, landing her near the top of the class. She really enjoyed being part of our crew, and we knew we could trust her to do a quality job. And she was cheerful! She was a 'teacher's dream.'"

JACK KIRKLEY
SFS Faculty

HOME SCHOOLS

Below is a partial list of the home schools of SFS participants. Many of these schools have accepted or awarded credit for SFS programs. (Because each school has its own procedures which can change, past credit does not guarantee future credit.)

Albion College
Allegheny College*
American University
Amherst College
Barnard College
Barry University
Bates College
Baylor University
Bennington College**
Berea College
Boston College
Boston University
Bowdoin College
Brandeis University**
Brown University
Brigham Young University
Bryn Mawr College
Bucknell University
Carnegie Mellon University
Case Western Reserve University
Claremont-McKenna College
Clark University**
Colby College**
College of Charleston
College of William and Mary
College of the Atlantic
Colorado College
Colorado School of Mines
Connecticut College
Cornell University
Dartmouth College
Davidson College**
Denison University**
Dickinson College***
Drake University
Drew University
Duke University
Emory University
Evergreen State College
Framingham State College
Franklin and Marshall College
Franklin Pierce College
Georgetown University

"The SFS programs are an integral part of the environmental curriculum at Boston University. We have a hard time keeping students on campus! To me, the greatest feature of the SFS programs is their ability to integrate information from many traditional disciplines into a coherent, reasoned analysis of environmental problems. We have undergraduate environmental majors in the natural and social sciences. Students from both programs reap great benefits from the SFS experience that ties important concepts together and gives them a real-world laboratory in which they apply those ideas."

CUTLER CLEVELAND
Director
Center for Energy & Environmental Studies
Boston University

George Washington University
Gettysburg College
Goddard College
Guilford College
Hamilton College
Hampshire College
Harvard College
Hiram College**
Holy Cross College
Humboldt State University
Ithaca College
Kenyon College**
Knox College
Lehigh University
Lewis and Clark College
Macalester College
Marlboro College
McGill University
Miami University**
Middlebury College*
Mills College
Mount Holyoke College**
Mount Union College
New York University
Northeastern University
Northwestern University
Oberlin College
Occidental College
Ohio State University
Ohio University
Ohio Wesleyan University
Oregon State University
Pennsylvania State University
Pitzer College
Pomona College
Prescott College
Providence College
Purdue University
Randolph Macon College
Rutgers University
Saint John's College

Saint Lawrence University
Saint Michael's College
Saint Olaf College
Salem College
Scripps College**
Shimer College
Simon's Rock of Bard College
Skidmore College
Smith College
Stanford University
Stockton State College
S.U.N.Y. College of
Environmental Sciences and
Forestry**
Swarthmore College
Trenton State College
Trinity College
Trinity University
Tufts University
Tulane University
Union College
University of Alberta
University of
California/Berkeley
University of California/Los
Angeles
University of California/Santa
Cruz
University of California/San
Diego

University of Cincinnati
University of Colorado
University of Connecticut
University of Iowa
University of Kansas
University of Maryland
University of Massachusetts
University of Miami**
University of Michigan*
University of Minnesota
University of New Hampshire
University of North Carolina

University of Pennsylvania
University of Pittsburgh
University of Puerto Rico
University of Puget Sound
University of Rhode Island
University of Tennessee
University of Utah
University of Vermont
University of Victoria
University of Virginia
University of Wisconsin
Vanderbilt University
Vassar College
Villanova University
Virginia Polytechnic Institute
and State University
Warren Wilson College
Washington University
Washington and Lee University
Wellesley College
Wells College**
Wesleyan University
Whitman College
William Smith College
Williams College
Wittenberg University
Xavier College
Yale College

* Sustainable Development
Studies Consortium

** SFS Affiliate Schools

*** Member of both

AFFILIATED COLLEGES AND UNIVERSITIES

Bennington College
Brandeis University
Clark University
Colby College
Davidson College
Denison University
Dickinson College
Hiram College
Kenyon College
Mt. Holyoke College
Miami University
Scripps College
S.U.N.Y. College
of Environmental
Sciences and Forestry
University of Miami
Wells College

SFS SUSTAINABLE DEVELOPMENT STUDIES CONSORTIUM

Allegheny College
Colby College
Dickinson College
Middlebury College
University of Michigan

FINANCIAL STATEMENTS

BALANCE SHEET – August 31, 1994

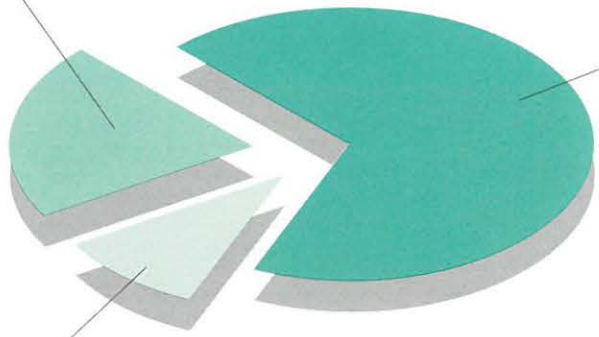
	Current Unrestricted Fund	Current Restricted Fund	Loan Fund	Plant Fund	Total 1994	Total 1993
ASSETS:						
Cash & Short Term Investments						
at Cost Which Approximates Market	1,919,268	146,993	34,974	684,024	2,785,259	2,102,740
Tuition Receivable	295,204				295,204	125,438
Loans Receivable			214,305		214,305	215,410
Advances to Course Sites and Other Assets	255,690	16,000		25,000	296,690	212,636
School Plant, Net				987,145	987,145	1,028,770
Total Assets	2,470,162	162,993	249,279	1,696,169	4,578,603	3,684,994
LIABILITIES:						
Accounts Payable / Accrued Liabilities	292,669	24,005			316,674	197,926
Student Deposits and Deferred Tuition	1,791,231				1,791,231	1,494,350
Notes Payable				178,630	178,630	189,758
Total Liabilities	2,083,900	24,005	0	178,630	2,286,535	1,882,034
FUND BALANCES:						
Unrestricted	386,262		120,879	690,114	1,197,255	769,895
Restricted		138,988	128,400		267,388	194,053
Net Investment in Plant				827,425	827,425	839,012
Total Fund Balances	386,262	138,988	249,279	1,517,539	2,292,068	1,802,960
TOTAL LIABILITIES & FUND BALANCES	2,470,162	162,993	249,279	1,696,169	4,578,603	3,684,994

EXPENSES – Operating Fund

19% Administration
2% Development

21% Total

10% Program, Headquarters



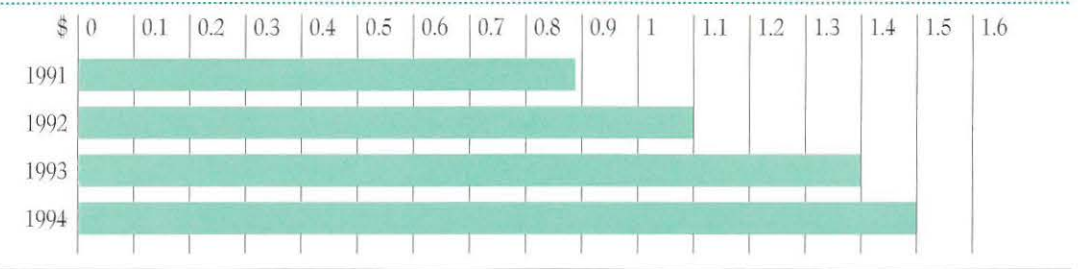
Programs	
Center for Sustainable Development Studies	7%
Center for Rainforest Studies	9%
Center for Marine Resource Studies	10%
Center for Wildlife Management Studies	11%
Center for Marine Mammal Studies	10%
Admissions and Marketing	10%
Scholarships and Financial Aid	5%
Summer Satellite Courses	7%
Total	69%

SFS's financial statements for Fiscal Year 1994 have been audited by KPMG Peat Marwick who have rendered an unqualified opinion on them. A copy of these financial statements is available upon request.

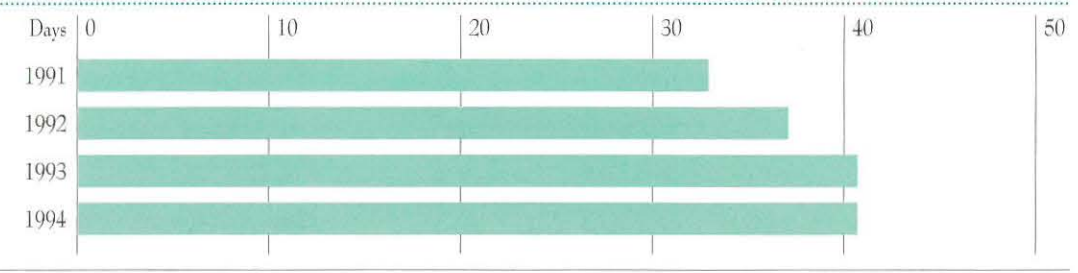
STATEMENT OF CHANGES IN FUND BALANCES – as of August 31, 1994

	Current Unrestricted Fund	Current Restricted Fund	Loan Fund	Plant Fund	Total 1994	Total 1993
REVENUES AND OTHER ADDITIONS:						
Educational and General Revenues	4,201,233				4,201,233	3,905,640
Private Gifts, Grants, and Contracts	109,598	124,643		100,130	334,371	434,594
Expended for Plant Facilities				75,546	75,546	99,222
Retirement of Indebtedness				30,089	30,089	24,196
Net Proceeds from Sale of Plant Facilities				26,549	26,549	24,052
Other	107,344		4,879	(18,962)	93,261	89,599
Total Revenues & Other Additions:	4,418,175	124,643	4,879	213,352	4,761,049	4,577,303
EXPENDITURES AND OTHER DEDUCTIONS:						
Educational and General Expenditures	3,971,879	44,098	1,350		4,017,327	3,620,058
Expended for Plant Facilities				75,546	75,546	99,222
Interest on Indebtedness				16,581	16,581	21,346
Retirement of Indebtedness				30,089	30,089	24,196
Net Cost of Plant Facilities Sold				21,011	21,011	26,577
Depreciation				111,387	111,387	110,007
Allowance for Doubtful Loans						10,000
Total Expenditures & Other Deductions:	3,971,879	44,098	1,350	254,614	4,271,941	3,911,406
TRANSFERS AMONG FUNDS – ADDITIONS (DEDUCTIONS)						
Mandatory Debt Transfer	(46,670)			46,670		
Net Additions to Plant Assets	3,443	(7,210)		3,767		
Transfer to Fund Depreciation	(111,387)			111,387		
Other Transfers	(21)		21			
Total Transfers	(154,635)	(7,210)	21	161,824	0	0
NET INCREASE (DECREASE) for the year	291,661	73,335	3,550	120,562	489,108	665,897
FUND BALANCE (DEFICIT) at beginning of year	94,601	65,653	245,729	1,396,977	1,802,960	1,137,063
FUND BALANCE (DEFICIT) at end of year	386,262	138,988	249,279	1,517,539	2,292,068	1,802,960

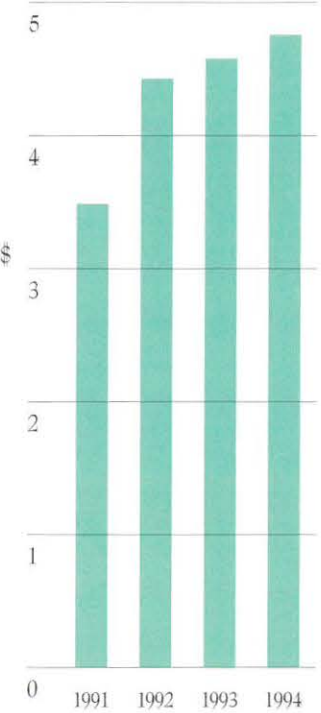
PLANT FUND BALANCE – millions



STUDENT FIELD DAYS – thousands



TOTAL REVENUES – in millions of dollars



The primary purpose of the Annual Fund is to provide scholarships and financial aid to SFS students. The primary purpose of the Capital Fund is to support the acquisition and improvement of property for each SFS Center. We sincerely thank the people, corporations and foundations who have made contributions this year and have helped the School reach some of our goals.

For over fourteen years, SFS has received sizeable donations from the **Andreas Foundation** for capital improvements. They deserve much of the credit

for the School's constantly improving physical plant. This year, the Foundation and the *Andreas family* continued their remarkable pace-setting leadership giving by supporting plans for the "greening" of the Center for Marine Resource Studies. These plans call for an integrated, com-

prehensive master plan which will reduce or eliminate the environmental impacts of SFS's presence on the small island of South Caicos.

General operating support was provided by a substantial grant from the **Charles Engelhard Foundation**, whose ongoing commitment to SFS has contributed significantly to the development and expansion of SFS programs. The **Archer-Daniels-Midland Company**, the **Homeland Foundation**, the **Henry Foundation**, and the **Curtis and Edith Munson Foundation** also provided vital support for which we are extremely grateful. The School also offers special thanks to several individuals for their continuing and substantial contributions in 1994: *Herbert Allen, Jr.*, *Astra Davis*, and *Mr. & Mrs. Whitney Hatch*.

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Ms. Astra Davis	Arnold D. Frese Foundation
Mr. and Mrs. F. Whitney Hatch, III	The George Gund Foundation
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Mr. David Rathke
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New England
The Sumner Gerard Foundation

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▲ PLANS FOR THE "GREENING" OF THE CENTER FOR MARINE RESOURCE STUDIES, WHICH WE HOPE WILL BECOME A MODEL FOR OTHER FACILITIES, ARE NOW UNDERWAY THANKS TO THE GENEROUS SUPPORT OF THE ANDREAS FAMILY.

“Before this semester I was not sure what I wanted to do in the future but now a graduate program in Environmental Risk Assessment sounds perfect for me...I have often become overwhelmed by the number and complexity of environmental disasters but an important view I learned through my SFS program is that it takes the collective effort of realistic people to reach realistic goals.”

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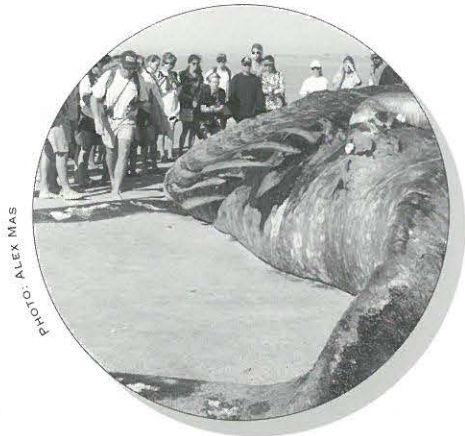
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Laurie Hunt, M.Sc. Wildlife Conservation, University of Alberta

Killer Whale Conservation, Washington

Rich Osbourne, Ph.D. candidate Biogeography, University of Victoria
Robin Baird, Ph.D. Behavioral Ecology, Simon Fraser University

Planning Parks for Preservation, Argentina

Julieta Von Thungen, M.S. Wildlife Management, Universidad de Cordoba
Susan Pierce, M.S. Resource Management, Colorado State University

Conservation Education, Belize

Abigail Rome, M.S. Plant Ecology, Duke University
Daniel Kirkpatrick, M.A. Educational Design, Antioch University

Ethnobotany, Mexico

David Siegler, Ph.D. Organic Chemistry, University of Oklahoma
Andrew Jones, M.S. Botany, Miami University

Village Development in Fragile Mountain Ecosystems, Nepal

David Bathgate, Ph.D. Ecological Anthropology, University of Colorado
Blair Leisure, M.S. Environmental Studies, Yale University

South Caicos:

Samia Sarkis (Fall), Ph.D. Biological Science, University of Plymouth

Kenya:

Abdelwaheb Sinnary (Fall), Ph.D. candidate Conservation Biology, University of Nairobi
Maxine Miller, (Spring) Ph.D. Biology, Imperial College (London)

Baja:

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David Auriolos (Summer), Ph.D. Biology, University of California - Santa Cruz

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Peter Coppolillo* (Kenya/Spring)
Karyl Whitman* (Kenya/Spring)

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