



Goodwin-Niering Center for the Environment

Environmental Studies Certificate Program – Class of 2012 Senior Integrative Projects

Kelsey Cohen - New London and Connecticut College: What Was, What Is, What's Next...

This SIP is an exploration of the town and gown relationship between Connecticut College and New London. This project will explore the relationship from all angles – from the day the idea for the College came to fruition, to the present landscape, to what is on the horizon for the future. Through an urban planning and smart growth approach, I hope to propose solutions that will further this relationship, particularly, by overcoming the physical barriers that have plagued the College since its opening and additions such as Interstate 95.

Bryson Cowan - Fishy Nightmares and Dairy Dreams: Globalized Markets, Environmental Justice & Gender in Tanzania

With the growth of neoliberal trade policies and the spread of western capitalism, the distribution of environmental and social disparities has been unequal. By exploring the effects of globalized markets on two food industries in Tanzania, this paper aims to dive deeper to explain what is causing the cultural and ecological changes, extreme poverty and malnutrition in fishing communities. The core of this analysis is the exportation of the Nile perch industry, which in recent years has been referred to as “Darwin’s Nightmare”. To contrast this case, the localized, all-female cooperative movement within the dairy industry is explored. By widening the scope to incorporate women and the gender roles of the local communities, it becomes clear that international demand is not the only factor causing destruction along Lake Victoria.

Zoe Diaz-Martin - Testing the Keystone Plant Resources Concept in a Lowland Amazonian Forest

Many ecologists acknowledge the importance of keystone plant resources in the tropics because of their ability to provide a food source for frugivores during low fruiting seasons when the availability of nutritive resources is extremely scarce. John Terborgh paved the way for framing the keystone species concept in relation to the plant community of a neotropical forest by identifying 12 potential “keystone” concluding that these species alone support the nutritional requirements of the frugivore community during the dry season. Although this study was novel at the time, its salient results and conclusions have not been reexamined or revised in twenty-five years since its publication. In this study, I hope to identify potential keystone plant resources concept using an almost 10-year dataset to analyze fruiting patterns of species and identifying potential “keystone” species.

Stephen Dworkin - Popular Reality and ‘Freedom’ From Regulation: How Americans Forgot About the Environment and How the Media Must Remind Them

Recent political discourse, especially arguments revolving around the upcoming 2012 presidential election, has indicated that perceptions of certain sector of the population with regard to environmental regulation have warped. Opponents of environmental protection—from the E.P.A. to cap-and-trade—have framed the debate as one about jobs and freedom, both of which are depicted as threatened. My essay analyzes not only why this argument is based on inaccurate or biased information, but what role the media has had over the last few decades in shaping the urgency and human importance of environmental destruction. I also seek to understand the causes and implications of an American electorate with perceptions that do not match scientific reality.

Lucy Frye - *The Relationship between Historic Preservation and Sustainable Design*

This project examines the ways in which the two fields of sustainable design and historic preservation can work together to create a more environmentally friendly future. After compiling a complete history of the 1790s Appleton Farms Old House of Ipswich, MA and the 1840s Bullitt Reservation of Ashfield, MA, I studied the sustainable historic renovation that took place at each property. I then utilized what I had learned through the two renovations in order to design a sustainable and historic building plan for the 1890s Essex Falls Trolley Barn in Essex MA. The goal of this project is to show that both sustainable and historic characteristics can exist harmoniously in the same structure

Elizabeth Noonan - *Mainstream Tourism vs. Ecotourism in Costa Rica*

Ecotourism is a term that in recent years has become widely known and often used loosely. Defining the differences and variations in social and environmental impacts of these two types of tourism is important due to the misuse and mislabeling of many hotel and tourism companies who may be adopting some green practices, but are not invested enough to bill themselves as part of an ecotourism destination. Ecotourism establishments are often small scale and locally owned, which makes sustainability conscious practices more easily implemented and accessible. Mainstream hotels are far more likely to be owned by an international hotel company. The interests in environmental and social sustainability displayed by small scale, local businesses and large scale, international businesses are remarkably different. This paper will compare and contrast the approaches of these two types of businesses through the case study of Costa Rica and explore how their practices impact society and the environment of the host country.

Daniel Seehausen - *Benefits of, and Barriers to, Renewable Energy in Germany and the United States, and the Effectiveness of Feed-in Tariffs*

This project analyzes several economic, political, and social benefits and barriers regarding renewable energies and specifically photovoltaic energy. In addition, Germany's feed-in tariff policy, which is used to encourage the investment of and development of renewable energies, is examined. Finally, Germany's renewable energies development is compared to that of the U.S.'s with reasons for Germany's success.

Leah Varga - *The Effects of Anthropogenic Noise on Cetaceans*

Though often considered to be a serene and silent place, the ocean is full of noise. Anthropogenic noise, which has recently increased significantly, is dominating the underwater acoustics to an unknown and dangerous level. Two major sources of underwater anthropogenic noise include militaristic sonar and commercial ships. Cetaceans have highly developed acoustic organs, which are required for their survival. Anthropogenic noise has been found to be negatively impacting many cetaceans, both behaviorally and physiologically. Although there are some proposed solutions to reduce the impact of underwater anthropogenic noise on cetaceans, there must first be more research conducted to understand how noise affects marine life. Only then can these solutions be implemented successfully to protect and conserve cetaceans and marine ecosystems.