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**Annual Conference**

Palm Canyon Resort  
Borrego Springs, CA  
March 16-18, 2007

## Papers and Workshops

Joy K. Adams, Humboldt State University

**Authentically German-Texan: A Case for Symbolic Place Identity**

**ABSTRACT (paper):** Some observers have criticized the recent proliferation of ethnic-themed festivals in the American landscape as examples of "inauthentic" tourism development and the potentially corrosive commodification of ethnic heritage. However, I contend that we should perhaps regard the emergence of these festive, temporary place identities as an "authentic" reflection of the increasingly symbolic ethnic identities of later-generation European-Americans. Based on seven years of empirical and qualitative research in three central Texas communities that promote their German-American heritage as a tourism attraction, I conclude that the incorporation of a limited number of ephemeral, hyper-constructed elements into the fabric of the host communities provides opportunities for playful, self-conscious ethnic celebration alongside more "authentic," locally rooted German-Texan experiences. In doing so, these destinations offer an enjoyable entertainment-oriented experience while simultaneously protecting the uniqueness of place that is valued by residents and visitors alike.

James P. Allen and Eugene Turner, California State University, Northridge  
**Income Levels in Ethnic Residential Concentrations**

**ABSTRACT (paper):** Are residents of concentrated ethnic settlements necessarily poor? We tested this notion with household income data from Census 2000 for Asians and Latinos in the New York, Los Angeles, and San Francisco Consolidated Metropolitan Statistical Areas (CMSAs). Concentrations were defined as census tracts in which the ethnic group comprised at least 40 percent of the total tract population. While very low incomes characterized many ethnic concentrations, the median incomes of 11 percent of Latino households in concentrated tracts and 57 percent of Asian households in concentrated tracts were above the metropolitan medians for all households. Moreover, 18 percent of residentially concentrated Asians lived in tracts in which median Asian household incomes were at least 50 percent above the metropolitan medians for all households. Thus, in contrast to expectations, the evidence indicates that many residents of ethnic residential concentrations have moderate or high incomes.

Maurizio Antoninetti, San Diego State University

**Who's afraid of ADUs? An account of ancillary dwelling units, senior residents, and hostile local administrations.**

**ABSTRACT (paper):** In 2003, a survey conducted by AARP revealed that three quarters of Americans 45 and older "believe that they will be able to stay in their current home for the rest of their lives." However, the concrete ability to age in place is the byproduct of a filtering process through which mutating personal desires, ambitions, and abilities are hindered or compensated by the socio-spatial dynamic characteristics of homes and neighborhoods. Indeed, literature and practice show, aging in place cannot be successfully achieved in any place, especially where zoning regulations and building codes are a barrier to the flexible adaptation of environments. One possible answer to such impasse comes from what is commonly known as granny flats or more technically as Ancillary Dwelling Units (ADUs), which, however, are often ostracized by local administrations, also in California. This paper presents an updated overview of the situation including issues of intergenerational design.

Lorna Apper, UCLA

**California Native Grass Cultivation, Restoration and Distribution in Los Angeles County**

**ABSTRACT (paper):** California native grasslands have long been an endangered ecosystem; finding ways to successfully cultivate and restore this biome is essential to its survival. This research tracks the cultivation and restoration of nine southern California native grass species planted at nine sites in Los Angeles County. The grasses were cultivated and restored over two growing seasons, from winter 2005 through winter 2007. During the first growing season four species were cultivated and during the second, five different species were added to total nine. The native grasses were restored from plugs and seeds. One ounce of seeds was planted for each species except in two cases where they were cultivated from two specimens each, due to the lack of a seed and plant bank. The current and past distributions of these grasslands in Los Angeles County are analyzed via Geographic Information Systems and Remote Sensing maps. Sites that are suitable for habitat restoration are mapped. An examination of why native grass cultivation is relevant to bioresource managers and policy makers is argued through an analysis of the policies that are governing California native grasslands today. Native grasses are useful for conservation and habitat restoration, oakland, woodland, prairie, rangeland, wetland and grassland management, post fire seeding, alternatives to non-native agricultural species, and as vegetation options for landscape architects. The nine species used were: *Achnatherum hymenoides*, *Elymus condensatus*, *Elymus glaucus*, *Elymus triticoides*, *Hordeum brachyantherum*, *Muhlenbergia rigens*, *Nassella cernua*, *Nassella lepida*, *Nassella pulchra*.

**Cameran Ashraf, Cal State Fullerton**

**The impact of policy on the structure and development of light pollution and implications for surrounding ecosystems: A comparison of Palm Springs and Flagstaff**

**ABSTRACT (paper):** Humankind has illuminated the night since the discovery of fire as a way to both increase nocturnal visibility and decrease fear. However, this impulse has been taken to new extremes with the advent of the electric light and cheap electricity. Light pollution costs taxpayers millions of dollars, increases carbon emissions, decreases the visibility of the night sky, creates transnational legal issues, and disturbs sensitive ecosystems. This presentation is a research proposal determined to analyze the effectiveness of policy on decreasing light pollution using Flagstaff and Palm Springs as case studies.

**G. Donald Bain, University of California Berkeley**

**Looking Around: Documenting landscapes with 360° digital panoramas**

**ABSTRACT (workshop):** Panoramic paintings and photographs provide us with detailed views of now-vanished landscapes over the last two centuries. Modern digital technology provides amazing new opportunities for panoramic imagery. This talk will review the technical background then provide examples of how current VR photography differs from conventional imagery, and how it can be presented, both interactively on the a computer screen and as high quality color prints.

**Sean McLean Boone, Humboldt State University**

**The Ebb and Flow of California's Coastal Invertebrates**

**ABSTRACT (paper):** Abstract: Much of the worlds oceans are a mystery to us. We are only now realizing the impact we as humans have on this vast biome. This paper investigates the annual fluctuation of the sub-tidal invertebrates along the Californian coast. Using the Partnership for Interdisciplinary Studies of Coastal Oceans, or PISCO, invert swath protocol (PISCO 2006) and adjusting them to fit northern California, I am able to predict what past and future populations of sub-tidal invertebrates in Trinidad Bay and Van Damm State Beach, as well as the rest of California's coastline. Using Pycnopodia helianthoides and its prey (Pisaster brevispinus, P. giganteus, P. ochraceous, Strongylocentrotus purpuratus, S. franciscanus, and the genus Haliotis) to indicate not all of the world's fisheries are in decline, but are in a state of fluctuation. Keywords: PISCO, sub-tidal invertebrates, Pycnopodia helianthoides, population, fluctuation.

**Dr. William A. Bowen, California Geographical Survey**

**"Flying" the Arid Landscapes of Southeastern California.**

**ABSTRACT (paper):** During the last several months, the California Geographical Survey (<http://geogdata.csun.edu>) has been creating a series of photorealistic aerial animations that "fly" over all the landscapes of southeastern California. These movies have been buned onto DVD disks that may be played in standard home entertainment systems. The movies include flights over the Mojave Desert, Salton Basin and Imperial Valley, Death Valley and the Basin and Range, the Owens Valley and High Sierra, Mammoth Lakes and Mono Lake, and a flight down the Colorado River from the Grand Canyon to the Gulf of California. This paper will briefly review the technological aspects of creating the mathematical simulations from Landsat 7 and Shuttle Radar Topography Mission data and then present snippets from the several movies that will be distributed to registered attendees. The digital movies may be downloaded and viewed on high-speed Internet connections at <http://130.166.124.2/movies2.htm> after the conference, also.

**Danielle Bram, Cal State University, Northridge**

**Mapping Wetland and Riparian Habitats in Southern California Coastal Watersheds**

**ABSTRACT (paper):** The fragmentation and loss of Southern California's wetlands and associated riparian habitat has resulted in the threatened extinction of numerous wetland-dependent species, and has also contributed to a decline in water quality. Unfortunately, recent habitat maps do not exist for over two-thirds of the region. As a result, a region-wide wetland mapping effort has been initiated for the coastal watersheds of Southern California. This presentation will review the mapping effort, associated methodology, and final products produced from the project. The resulting geospatial data and associated classifications are intended to be used by local, state and federal agencies to support objectives such as land use planning, comprehensive watershed management planning, long-term water quality and environmental restoration, conservation planning and others.

**John A. Carthew, Pierce College**

**EXPANDING REGIONAL GEOGRAPHY AT THE COMMUNITY COLLEGE LEVEL**

**ABSTRACT (paper):**

1. Dividing the World
2. Advantages to Americans in knowing the World Better
3. Feasibility of Regional Classes in Community Colleges
4. The Great Need for Geography in America in a Superpower Age
5. Enrichment of Geographical Knowledge for K-12 Teachers

**Kristen Conway-Gomez, California State Polytechnic University, Pomona**

**HUMAN USE OF TWO SPECIES OF RIVER TURTLES (*Podocnemis* sp.) IN LOWLAND EASTERN BOLIVIA**

**ABSTRACT (paper):** Centuries of harvest (of adults and eggs) have left remaining populations of two species of Amazonian freshwater turtles, *Podocnemis unifilis* and *P. expansa*, seriously reduced throughout their ranges. Today, these turtles remain important wildlife resources for ribereño communities in and near National Park Noel Kempff Mercado, in the Bolivian Amazon. Basking counts at three sites—two adjacent to human communities and one adjacent to an abandoned community site—were conducted. Tests of difference applied to these data show differences in turtle abundance between sites with and without human communities, which may be a result of hunting pressure.

Analyses of socioeconomic data show differences between subsistence and market consumption patterns of turtle between the two communities. My findings suggest different levels of market integration, not influenced by distance to market as anticipated, do affect turtle consumption. Local phenomena including household wealth, subsistence-based livelihoods and indigenous origins are suggested as explanations for turtle consumption.

**Shawna Dark, California State University, Northridge**

**The Historical Ecology of the San Gabriel River**

**ABSTRACT (paper):** Historical data represents a largely untapped resource for habitat restoration and management. Likewise, GIS is seldom used in historical ecology/geography projects. For this presentation, I will provide an example of how GIS (Geographic Information Systems) was used to map historical wetlands of the San Gabriel River. Our primary objectives were 1) to identify the benefits of using historical data with GIS, 2) to identify the historical distribution of wetland and riparian habitat in the San Gabriel River Watershed, and 3) to determine the extent of change in the wetland and riparian habitat of the San Gabriel River when comparing historical versus contemporary wetland distribution. This project emphasizes not only the importance of using GIS for the historical perspective, but also the increasing importance of geography in historical and applied research of our natural environment.

**Stephanie Davenport, University of Southern California**

**Childhood Obesity and Adequate Access To Recreational Space in California**

**ABSTRACT (paper):** The recent rise in incidences of childhood obesity across the United States bring to light sobering statistics and survey responses on the eating habits, exercise trends, and self-esteem issues of today's youth. In light of this unprecedented upsurge in obesity, this paper investigates a possible relationship between access to recreational parks and these alarming health trends in school-aged children. Thus far, research on this issue has largely been limited to exercise and eating habits and has not adequately tested obesity's potential connection to access to open space. Using Department of Education and government census reports to identify and map California school districts with high incidences of obesity, this project investigates the possible relationship between physical activity, obesity, and access to open space, recreational parks, and public lands. This research has valuable insights into the health implications of inadequate access to recreational parks and highlights the strong correlation between environmental issues and public health.

**Kathy Dicker, Humboldt State University**

**Shake Rattle n' Roll: Perceptions of Seismic Hazards on the Humboldt State University Campus; Are Students Prepared?**

**ABSTRACT (paper):** Arcata California is situated in a high risk seismic zone with a potential for geographic isolation. Are Humboldt State University students prepared for local seismic hazards? This study included a survey of about 1% of the HSU student body and an assortment of staff and faculty interviews. On average, 10% of students receive earthquake hazard education upon admission. Seismic warnings and preparedness training are currently not a priority for students or faculty at HSU. Hazard training is not mandatory for professors or students. Many survey participants voiced the necessity and desire for more training but at this time, findings indicate that roughly half of the student body is unprepared for seismic hazard. Statistics revealing a correlation between hazard education and preparation indicate future education efforts will effectively increase hazard perception and preparation.

**Brian W. Dunbar, California State University, Northridge**

**Occupational and Residential Trajectories of Zapotec Immigrants in Los Angeles**

**ABSTRACT (paper):** This study looks at indigenous Mexican migrants in Los Angeles, specifically Zapotec-speaking people from the central valley and mountains of Oaxaca, Mexico. My objective is to evaluate the degree to which employed men and women are improving their positions vis-à-vis mainstream society in economic and residential terms. To explore these trends, I conducted one-on-one interviews with Zapotec immigrants in order to generate a history of employment and residence in Los Angeles County. To measure possible upward mobility in employment, I then measured respondents' job trajectories using two different systems of scoring occupational status to compare employment trends against length of residence in Los Angeles. Trends in residence were examined by

measuring the median rents and income levels in the census tracts in which respondents resided. While these migrants have slowly and steadily improved their occupational lot at approximately the same rate as found for a national sample of Mexican immigrant men, there is little evidence of upward residential mobility.

**Tony Dupont, California State University Fullerton**

**Hurricane Katrina: Analyzing a Disaster in 3-D**

**ABSTRACT (paper):** On August 29, 2005, Hurricane Katrina devastated the Gulf Coast of Louisiana and Mississippi. The factors leading to the devastation of the New Orleans area can generally be divided between physical and cultural geography. The physical aspects include the elevation of the city, the degradation of the coastal wetlands that would normally break up storm surge, and of course the hurricane itself. The cultural aspects that contributed to the disaster are mainly rooted in the poverty of the area and issues stemming from that.

3-D Geographic Information Systems have been underutilized as a tool for analysis. This paper explores the factors leading to the cause of the destruction through the use of 3-D GIS, purporting to increase awareness on the issues facing New Orleans with an extra dimension of analysis.

**Karl Fielding, University of Southern California**

**TRANSFORMATIONS IN THE HERBIVOROUS URCHIN POPULATIONS IN THE TURKS AND CAICOS ISLANDS**

**ABSTRACT (paper):** While studying abroad on South Caicos Island, Turks and Caicos Islands, I collected data on the marine life around the islands and became particularly interested by the relationship between benthic cover densities and herbivorous urchin populations. Sea urchins are important organisms in benthic marine ecosystems. Throughout the Caribbean *Diadema antillarum* has traditionally been the dominant benthic feeder in the Echinodermata phylum. However, following the 1983 mass mortality of *D. antillarum*, there was a large void in the benthic food web of the Caribbean. Since then studies have shown that *Tripneustes ventricosus* has filled the niche of *D. antillarum* in Jamaica. To test if a similar species replacement has happened in the Turks and Caicos Islands, I analyzed data from a recent surveys conducted at the School for Field Studies. The statistical test of the SFS research data does not reveal significant evidence that *T. ventricosus* is taking the place of *D. antillarum* in the TCI. Still the *D. antillarum* population has not recovered, leaving room for additional research pertaining to *T. ventricosus* niche invasion in the TCI.

**Steve Graves, California State University, Northridge**

**On-line portfolios for Geography Program Assessment**

**ABSTRACT (roundtable discussion):** With the assessment paradigm looming for more colleges and universities, Geographers may find themselves challenged in ways that narrowly focused disciplines are not. The assessment of the geography program at CSUN has required a rethinking of the means by which students and the program are assessed. On-line portfolios are quickly becoming the key feature in the department assessment program. The features of [livetext.com](http://livetext.com), an assessment tool being piloted at CSUN's geography department are explained and discussed.

**Abbey Grimmer and Patrick Guiberson, University of Nevada Reno, Department of Geography**

**How to play Geospatial Disc Golf**

**ABSTRACT (paper):** Geospatial technologies are seemingly everywhere - in our cars and homes, at work and at play. They offer tremendous opportunities to explore, measure, and map our world. Typically we learn how to use these technologies in a classroom setting, through laboratory exercises and demonstrations. The effectiveness of this type of instruction is debatable. Using this technology to play a game may be one way for us to improve understanding of how best to use these technologies. In this presentation we will discuss a game, Geospatial Disc Golf, designed to make the learning process fun and informative. A guide on how to play the game will be presented, as well as a discussion of the pedagogical implications of this type of learning experience.

**Robert W. Happle, California State University, Fullerton**

**Fiji's Problems in Paradise: Review and Brief Analysis.**

**ABSTRACT (paper):** Since its independence from Great Britain in 1970, The Republic of Fiji has endured three coup d'état's. Attempts to report the events by American media have been in the form of exaggerated coverage and has failed to provide an explanation for any of the disturbances. Economically underdeveloped with a polarized multi-ethnic population coupled with a fledgling government and constitution, Fiji is an ideal recipe for revolution. However, nothing is simple in Fiji. To complicate matters, the ancient beliefs and customs of the Native Fijians are a stark contrast to those of their almost sibling Indo-Fijians. Forced to integrate with Indo-Fijians in an increasingly industrialized and competitive world, Native Fijians react with militant tenacity. This presentation examines some of Fiji's post-colonial problems as they relate to the segregated populations and the objectives of the coup's organizers. Coup's objectives are evaluated as being either intuitively positive or negative.

**Jennifer Helzer, CSU, Stanislaus**

**Italian Immigrant Origins and Pacific Rim Settlement Societies: California and Australia**

**ABSTRACT (paper):** This paper focuses on the migration experiences, settlement patterns, and transnational networks of one of the largest and most unique out-migrations of people in history, Italians who relocated to California and Australia during the late 19th and early 20th centuries. For much of the Italian countryside, emigration became a constant phenomena and way of life as particular regions and villages became centers of out-migration to multiple destinations. California and Australia emerge as globally significant locales in part because of this era of mass migration. Emergent Pacific economies in the late nineteenth and early twentieth centuries resulted in both regions becoming major migrant-importing areas. This paper explores the linkages and parallels that exist between Italo-Californian and Italo-Australian immigrant geographies that may have played a role in shaping socioeconomic development and regional identity in the two regions.

**Kristiane Hill, University of Southern California**

**Urban Runoff and Coastal Pollution in Santa Monica Bay**

**ABSTRACT (paper):** One environmental issue that often goes unnoticed by the public, but has grave effects on many aspects of the community is urban runoff and coastal pollution in Santa Monica Bay. Over the past five years, more than eleven million gallons of raw sewage have flowed into Santa Monica Bay without being properly recorded contaminating the city's nearshore coastal habitats. However, stormwater, or urban runoff, carries contaminants from the streets of the city through the municipal storm drainage system and directly to the ocean. The central focus of this research is to evaluate the steps that have been taken to mitigate this form of coastal contamination, analyze the actions currently underway, and to propose potential solutions. This study begins with an overview of the environmental, economical, and health-impacts of urban runoff in Santa Monica Bay and then continues with past, present, and possible future resolutions for the contamination. This study argues the importance of cooperation among various stakeholders in order to reach timely and effective solutions for the issue of stormwater pollution and runoff.

**Chris Huddleston, University of Southern California**

**Industrial Los Angeles**

**ABSTRACT (paper):** Industry in Los Angeles has played a significant role in the development of the city. In this paper I examine the historical record of industry in Los Angeles, beginning with the transformation of Los Angeles from an agricultural society at the beginning of the 20th century to the rise of defense industry during World War II, the expansion of Fordist production in the post-war era, deindustrialization, and finally the dominance of the service sector near the end of the 20th century. Much emphasis has been placed on Los Angeles' ethnic diversity, on the importance of immigration, in-migration, and the social changes experienced in Los Angeles that affected the rest of the country. However, by considering the history of industry in Los Angeles, we are able to understand many other attributes of Los Angeles. The aerospace and service industries and the like have been vital to the survival of city Los Angeles, and Los Angeles' several urban centers are tied to key industries.

**David Z. Kalir, University of Southern California**

**Bugs Around the World: Regional Microbially Induced Corrosion**

**ABSTRACT (paper):** Microbes are often involved with furthering corrosion processes and breaking down an endless list of materials. The study of microbially induced corrosion (MIC) is of specific interest in that corrosion related to these microbes degrade human systems and the materials that make up these systems. MIC can occur on many materials utilized by man, including metals, stone, and glass. Due to preferences in growth environment, one would expect certain microbes to be more prevalent in certain areas of the world than in others. This study additionally looks at the correlation between varying regions of the world and MIC occurrence. There are a wide variety of technologies available to detect MIC and there are numerous methods that can be used to prevent and treat it. Environmentally speaking, MIC represents the concepts used in such technologies as bioremediation, turned against human-designed systems. As more is understood about the nature of the biofilm layers, more effective methods for treatment of MIC will emerge, but regardless of environment or microbe the best methods of protection seem to be preventative measures.

**Brenda Kayzar, San Diego State University**

**Defining Urbanity: Expectations versus experience of place**

**ABSTRACT (paper):** In this paper I explore how marketing materials and community plans, utilizing an underlying 'live, work and play' theme, shape expectations of urbanity, or urban life. Through interviews with members of a downtown neighborhood group in San Diego, I contrast resident and business owner expectations of urbanity with their actual experience of place, and demonstrate how this influences daily life activities as well as their interaction with various civic and community groups.

**David K. Lynch, Thule Scientific**

**Field Guide to the San Andreas Fault**

**ABSTRACT (paper):** The San Andreas Fault is the most accessible plate boundary in the world. Yet few people outside the geology/geography community know where it is or how to see it. This field guide presents twelve one-day driving trips along the fault reaching from Cape Mendocino to the Mexican border. There are about 1100 miles of annotated road logs with GPS coordinates for hundreds of locations including fault features such as scarps, pressure ridges, sag ponds, offset streams, etc. In this paper I will discuss the Salton Trough area and its many tectonic features: young rhyolitic volcanoes (Salton Domes), the spreading center in the Brawley Seismic Zone, mud volcanoes, Mecca Hills, the Painted Canyon Fault, and vegetation lineaments in the Indio Hills.

**Scott Mathers, Jet Propulsion Laboratories Research Apprentice**

**TerraLook: Providing Easy, No-Cost Access to Satellite Images for Busy People and the Technologically Disinclined**

**ABSTRACT (paper):** Access to satellite images has been largely limited to science communities with the necessary tools and expertise, even though other communities such as conservation or education, could also benefit from it. This situation has resulted in underutilization of valuable data. Fortunately, these access hurdles can be overcome with tools like TerraLook. Google Earth, for example, has had a tremendous impact on the availability and display of image and vector data. However, it is inappropriate for addressing certain types of questions such as those pertaining to change studies important to conservationists. Bandwidth and image processing options are also may be limited. TerraLook provides a time-series of no-cost georeferenced images in standard jpg format, and bundles this with open source desktop software for utilizing them. Together, these make image analysis capabilities available to people that lack time, or experience to use remote sensing software; or the resources to buy it along with the expensive data.

**Krista McCarty, University of Southern California**

**Factors Influencing the Distribution of the Pisonia Forest on Heron Island, Australia**

**ABSTRACT (paper):** The purpose of this study was to better understand the factors influencing the distribution of the Pisonia forest on Heron Island in order to promote better management of the forest and development of the island. Field research was carried out on Heron Island following transects that ran northwest along the forest and noting the tree species, tree height, diameter at breast height (DBH), aspect (orientation due to wind throw or otherwise), projective foliage cover (PFC), and any notable adaptations and or evidence of stress. Soil characteristics were also noted every 20 meters. This data was supplemented with background research that examines the presence of Pisonia grandis within the Great Barrier Reef as well as the influence of tropical cyclonic activity upon the forest. Our findings determined that wind and level of succession were the most dominant factors in determining direction of the forest growth and species that composed it.

**Norman Meek, California State University, San Bernardino**

**Origin(s) of the Arrowhead landmark near San Bernardino**

**ABSTRACT (paper):** A 7-acre vegetation feature in the shape of a large Arrowhead is visible from much of the San Bernardino valley. The Arrowhead is a local cultural icon, and appears in the names and logos of innumerable organizations. There are a large number of legends that explain why it exists. A common theme of these legends is that the Arrowhead is a natural landmark. The widespread public acceptance of its natural origin has been enhanced because the Arrowhead has persisted despite several major fires that have burnt across it.

The soft-chaparral vegetation inside the Arrowhead clearly differs from the hard chaparral surrounding it. To examine the possible causes of this difference, numerous soil samples were collected from both inside and around the Arrowhead. The concentrations of 32 elements were examined in detail. Only phosphorus and lead levels are elevated in the Arrowhead, and it has lower levels of potassium, lanthanum and scandium compared to the surrounding areas. The chemical and field measurements strongly suggest that there is no "natural" reason for the Arrowhead to exist, and that it might be a manmade feature.

The earliest photographic record of the Arrowhead is in 1864. No mention of the landmark has yet been found in the railroad survey or Mormon narratives written during the 1850's. A tentative conclusion of this work is that the Arrowhead may be a manmade advertisement created sometime in the mid-1860's, but some legitimate doubts remain.

**Alan Rice Osborn, San Diego State University**

**Red State, Blue State: Random Chance? Or is it Fate?**

**ABSTRACT (paper):** "Red state" and "blue state"; these terms are used universally now by politicians, journalists, and academics as an easily understood shorthand way of referring to the predominantly Republican or Democratic parts of the United States. But this terminology is astonishingly new. Less than a decade ago there was no commonly used spatial color scheme associated with the distributions of either political party. This paper explores the processes which have shaped our current lexicon, and considers both the advantages and the limitations of a

simple two-value system for describing the complex social and political reality that exists in the US today.

**ROSANNA PETRALIA, SAN DIEGO STATE UNIVERSITY**

**Historic Preservation and "Traditional" Cityscapes in Sicily**

**ABSTRACT (paper):** While there are spirited preservation efforts afoot to protect a variety of landmarks throughout Sicily, even within the areas most associated with historical preservation, some "traditional" building practices have shown resilience, thanks to spontaneous—and often illegal—citizens' initiatives. This paper examines historic cityscapes in Sicily raising questions about current urban preservation plans. What to do, for example, with "minor" rural building types and traditional, if questionable, construction practices? Or the omnipresent signs of the laissez-faire mafia-driven economy? In some cities around the world similarly haunted by such discomfiting landscapes, urban preservation has shifted from a straightforward structural conservation to more conceptual modes of conservation, which address the importance of social healing through commemoration of place. These latter trends in urban conservation might suggest that threatening the future existence of the Sicilian "traditional" landscapes' could undermine the possibility of transforming them into sites which might give rise to renewed civic involvement.

**Kim Pham, California State University, Fullerton**

**Urban Ethnobotany: Kitchen Gardens in the Vietnamese American Community**

**ABSTRACT (paper):** Significant literature in ethnobotany focuses on the relationship between longstanding diasporas and plants. To date, few ethnobotanical studies have been conducted on recent diasporas, although research in this area may be useful in elucidating the process by which diasporic communities develop their plant repertoire in new social and physical environments. This study examines the relationship of socioeconomic and cultural factors on the composition of kitchen gardens cultivated by Vietnamese immigrants in Southern California. In a preliminary survey, six households were interviewed for the names and uses of cultivated plants. Survey results indicate experimentation with plants reported as native to Vietnam is still occurring. Evidence that Western landscape values play a role in kitchen garden composition was also found. Further research is needed to more accurately assess the diversity of plants cultivated by the Vietnamese immigrants and how Western landscape values interact with socioeconomic and cultural factors to influence this diversity.

**Philip R. Pryde, San Diego State University**

**Effects of Global Climate Change on Southern California**

**ABSTRACT (paper):** This paper explores the possible impacts of global climate change on Southern California's regional ecology and economy. Numerous concerns involve coastal changes. Rising ocean levels will inundate beaches and accelerate sand depletion, letting storm waves attack coastal bluffs more aggressively and endangering bluff-top structures. Rising oceans will also drown coastal estuaries and salinize habitats further inland. Other concerns involve water supply. The predicted drier southwestern United States will reduce both Colorado River runoff and mountain snowpack 'reservoirs', while simultaneously increasing irrigation demands. Increasing warmth and aridity will affect wildlife and their habitats. For example, montane forests will see aridity extend upslope, increasing fire and bark beetle damage, and severely stressing conifers. Warmth and aridity will affect bird migrations, and perhaps food supplies for all classes of wildlife. Climate change implies major alterations for Southern California's environment and economy. We should be planning now to meet these challenges.

**Waverly C. Ray, Mira Costa College**

**International Undergraduate Collaborations with the Center for Global Geography Education Modules**

**ABSTRACT (paper):** The Association of American Geographers' Center for Global Geography Education (CGGE) offers three online modules that utilize Internet discussion boards for collaborations among undergraduate geography students in different countries. A project evaluation based on trials in 10 countries served three main purposes: to assess the students' content gains in the three modules – population, nationalism, and the global economy; to determine the extent the international collaborations fostered student appreciation for geographic and international perspectives on global issues; and to make content and logistical recommendations for additional CGGE module development. Using the CGGE's population and nationalism modules during the Spring 2007 semester, geography students at MiraCosta College are collaborating with students at the University of Goroka (Papua New Guinea), Beijing Normal University (China), and Weingarten University of Education (Germany).

**Melanie Patton Renfrew, Los Angeles Harbor College**

**Geography Coloring Book (should be in bold print) Exercises for Physical and World Regional Geography Critical Thinking Skills**

**ABSTRACT (paper):** The Geography Coloring Book (3E, Wynn Kapit, Prentice Hall) is a useful tool for hands-on map activities in the college and high school classroom. Beyond place-name learning, the

glossary and world thematic maps can stimulate spatial analysis skills for comparing landforms, climate variables, population, and land use patterns.

**Melanie Patton Renfrew, Los Angeles Harbor College**

**Plant, Rock, and Landform Sketching as Physical Geography Teaching Methods**

**ABSTRACT (paper):** Students today are inundated with flat-screen images. Drawing increases observational skills, scientific understanding, artistic appreciation, and longevity of memory, because the eye, hand, and brain are connected. Even students who feel "artistically challenged" gain self-confidence as they merely copy designs in nature. Plant characteristics show adaptations to climate, so enhance understanding of atmosphere - biosphere connections.

**Melanie Patton Renfrew, Los Angeles Harbor College**

**The OUTDOOR METHOD: Teaching Physical Geography Outdoors (K-12 to University)**

**ABSTRACT (workshop):** Nature, plant growth, sprinkler drainage, rocks, and the sky provide vivid examples for teaching Physical Geography content for all ages of students, even on a school campus or city block.

**Anthony Rice, California State University, San Bernardino**

**Inland Empire Urbanization and Flood Hazard Analysis: Upper Santa Ana Watershed**

**ABSTRACT (paper):** This study reports data obtained in the field using past flood debris measurements (rocks) in order to determine the hydraulic forces needed to move the rocks. Using GIS, recent residential urbanization trends are mapped and overlaid with the rock measurements, which illustrates the spatial distribution of the rocks compared to recent urbanization. The physical environment of the study area will be discussed in detail to facilitate a sense of the risk of strong potential flooding. The final result will be maps of flood risk potential based on the sedimentological measurements obtained in the study area.

**Martin Roark, University Of Southern California**

**Deconstructing Chuck Palahniuk's "Fight Club": A Postmodern, Geographic Critique**

**ABSTRACT (paper):** In this paper I critique Chuck Palahniuk's novel, Fight Club, using Zygmunt Bauman's framework of Postmodernism. I interrogate aspects of popular consumer culture, pain, religion, and globalization in critique of the novel, while viewing it from a slightly unorthodox platform. After commenting on the paths of the novel's main characters and what they mean in a postmodern world, I then employ the concept of placelessness from Canadian geographer, Edward Relph, to add a consideration of space and place to my critique. I conclude by discussing how the fiction of Fight Club translates to the streets of American cities with reports of actual fight clubs in recent years.

**Zia Salim, California State University, Fullerton**

**Impacts of Downtown Revitalization on the Homeless: Skid Row, Los Angeles**

**ABSTRACT (paper):** The hyper-marginalized status of the homeless makes them particularly vulnerable to processes of urban restructuring, including downtown renewal. Los Angeles's Downtown is a focal point of both homelessness and urban renewal. Within this context, I examine some of the effects of this redevelopment on the homeless using Los Angeles' Skid Row as a case study. How does downtown renewal impact the lives of the homeless? To answer this question, I undertook a spatial analysis to determine the extent of redevelopment and its encroachment on Skid Row. I also interviewed individuals involved in, and impacted by, downtown redevelopment. There are direct and indirect impacts on the homeless, and I conclude that understanding these impacts can help mitigate some of the negative effects of revitalization.

**Aaron R. Salles, Humboldt State University**

**Tourism in China and Tibet**

**ABSTRACT (paper):** With the opening and development of Western China, tourism is a force that will shape the future of Sino-Tibetan relations in a new global era. This research focuses on how, and by whom, tourist destinations and infrastructure are being developed in the Tibetan cultural realm through the analysis of first hand interviews and empirical observation during the 2006 Humboldt State University China and Tibet Research Program. Keywords: Alternative Tourism, Tibet, Sino-Tibetan Relations.

**Dan Scollon, Shasta College**

**Are you going to San Francisco? Mapping Population Change in San Francisco and the Bay Area**

**ABSTRACT (paper):** The modern history of the San Francisco Bay Area effectively arrived with the Gold Rush in 1849. San Francisco grew rapidly in population and was the dominant economic and population center over the next 50 years. Gradually surrounding populations grew and their composition changed. Push and pull factors motivated migration into different parts of the Bay Region. Using demographic data this paper will present maps that illustration changes through time

in both population size and composition. San Francisco and its unique neighborhoods will be given particular attention.

**William A. Selby, Santa Monica College**

**Planning for Change in California's Desert Landscapes**

**ABSTRACT (paper):** California's unique desert resources and landscapes have attracted people from all over the world, including millions from nearby coastal cities. Today, the state's population spreads and crowds farther inland in search of an affordable California dream, squeezing natural desert landscapes and open spaces into smaller islands. Will these people create the same lifestyles and landscapes they fled or will they build new, sustainable living and working environments? How will they find land, water, energy, and other resources without destroying the very desert resources Californians cherish? Join our discussion of how we might meet some of these 21st Century challenges.

**Myles Shuler, University of Southern California**

**Effective Oil Cleanup**

**ABSTRACT (paper):** Oil is one of the most abundant and harmful pollutants in the ocean. The pollutant can cause damage to coastal ecosystems and all of the organisms that call them home. Through investigation of three separate oil spills I will compare affects on the ecosystem, amount of oil spilled, and how successful the cleanup was. To conclude my research I will point out the reasons why some spills were worse than others in the way that more oil was spilled and more animals were affected. To add to my research all three of the spills are located in different parts of the world showing how other countries respond to oil in the marine environment.

**Brenton G. Smith, CSU Northridge**

**An acute health risk assessment of school encroachment on Highway 14, near Palmdale, California**

**ABSTRACT (paper):** The Hotspots Analysis and Reporting Program (HARP) is the standard for assessing health risk posed by air pollution sources in the State of California. A newly built school, near a highway, is the subject of this analysis. The result is an assessment of risk that the school community experiences consequent to its location proximate to the freeway. Roadway vehicles, not typically evaluated for air pollution effects on local scales, directly affect the health and welfare of breathers of air in the vicinity. The investigator is familiar with sources of air pollution, the notion of sensitive receptor, and how to use public domain software to evaluate risk caused by air pollution. The final finding is that the school lies on the edge of a zone of health impact deemed to be marginally significant to the California Air Resources Board (CARB).

**Brenton G. Smith, California State University Northridge**

**Globoilzation**

**ABSTRACT (paper):** 'Globoilzation' is a discussion of the increasingly global links in the age of oil exploitation. Global transportation networks hasten the rate at which the world consumes oil. The quest for oil is ever expanding as the actual product found diminishes. Countries rich in oil may not be serving their best interests by allowing transnational corporations to 'help' market the oil. The future of oil is finite.

**Karen Stahl, California State University, Northridge**

**The Effects of Official Development Assistance in Landlocked African Countries**

**ABSTRACT (paper):** The continent of Africa faces innumerable difficulties in the process of development. An inherent lack of arable land and animals suitable for domestication has been further complicated by colonialism and post-colonial despotism. African and non-African opinions on how to provide a path to success for the continent are numerous. I attempt to bring a basic geographic understanding of the problems faced by the landlocked nations of Africa through the analysis of selected development indicators and how they are affected by aid funding from the World Bank. I use African landlocked countries in my study because these nations are less likely to successfully develop without the assistance of organizations like the World Bank due to their geographic isolation. My study of the effects of outside aid on landlocked African nations will provide a better understanding of the results of such assistance.

**Jamie D. Stern, University of Southern California**

**Bark Beetle Infestation of the San Bernardino Forest**

**ABSTRACT (paper):** By spring of 2003 the San Bernardino Forest had been dehydrated due to a lengthy drought. Conditions were favorable for the Southern California bark beetle to flourish. This resulted in substantial tree damage that prompted the governor of California to declare a state of emergency. One-third of the trees in the San Bernardino National Forest died from this infestation. This dead wood acted as fuel which increased the risk for uncontrollable wildfires. This report maps out the areas destroyed by the bark beetle infestations in the San Bernardino Mountains. It is no surprise that the map of infestation matches patterns of fire damage that resulted in October of 2003. The bark beetles spread from the wilderness into areas of residential communities including Big Bear Lake and Fawnskin. The infestation was so widespread it was impossible to manage. City and

forestry officials were left to contend with the mess of dead and damaged trees, the increased wildfire hazard and the inevitable destruction of wild habitat.

**Teresa Terry, California State University, San Bernardino**

**Inland Empire Flood Hazard Analysis**

**ABSTRACT (paper):** The Santa Ana River Basin has historically been prone to episodes of intense flooding as demonstrated by the geography of the area. By measuring the size of flood-transported rocks found along flood paths, a flood velocity analysis shows how powerful past flooding events have been. The California State University San Bernardino Geomorphology class has collected this data to show what current construction zones are in areas of high risk for flood damage.

**Nicholas Vaughn, California State University, Fullerton**

**Vietnam and its Impacts on the Global Coffee Commodity Chain**

**ABSTRACT (paper):** Coffee is one of the world's largest traded commodities. The coffee market is an intricate web of producers, distributors, and consumers that affects millions of people the world over. Developments on one end production chain can easily have ramifications all the way down to the other end. Using a commodity chain approach, this study looks at the political, economic, and environmental factors that were responsible for Vietnam's entry to the global coffee market, its early success, and its rapid ascent to the top ranks of world coffee producers. The country's quick prosperity within the coffee industry would lead it to further expand coffee production - a course of action which would ultimately lead to a depression of global coffee prices.

**Sarah Wingert, University of Southern California**

**Are National Marine Reserves in the Turks and Caicos Islands Effectively Protecting Commercial Fish Species?**

**ABSTRACT (paper):** The Turks and Caicos Islands in the Atlantic Ocean are home to a diversity of tropical marine life protected through a system of Marine Protected Areas (MPAs). With tourism increasing the pressure on commercially viable fish is on the rise with a heavy focus on the Haemulidae (Grunts), Lutjanidae (Snappers), and Serranidae (Groupers) families. This research was conducted to determine if the MPAs are effectively preserving the species and if there is a correlation between population density of commercial species and location inside a MPA. Benthic surveys were conducted to determine species concentration and locations were listed in relation to park status. Statistical analysis of the data revealed no correlation. This implies there are problems with the MPA structure and rule enforcement. My findings indicate the need for redrawing of park lines to incorporate more of the vital ecosystems to protect the populations of the fish species in question.

**Christine Zuhlsdorf, UCLA**

**The Creation, Destruction, and Resurrection of Owens Valley**

**ABSTRACT (paper):** Owens Valley has a complex history that helped to determine its fate long before Western settlement occurred. Beginning with its formation to its Hollywood attraction of the twenty-first century, Owens Valley has experienced dramatic landscape changes. Many of these changes have been due to natural influence combined with anthropogenic influences that could have been better implemented or more carefully managed. Most of the dramatic changes have taken place in the last 100 years, a great amount of effort and money continues to be invested in the area to keep the valley livable and potentially profitable. The focus of the presentation is to look at the history of the valley to understand what to expect for the future.

## Posters

**Aaron Benavidez, Cosumnes River College**

**The Sun Never Sets on a Red Light District: Is Globalization Exacerbating the Sex Trade in Thailand and Abroad?**

**ABSTRACT (poster):** For the past two decades, the international sex trade has been growing in correspondence to the rise of global capitalism in so-called developing countries. These sex markets have been fueled in part by tourism, unemployment, reduced social services and limited occupational possibilities for women. While the feminization of poverty is nothing new for developing countries, the influx of foreign investment in less developed regions and the general erosion of state power have sparked a global demand for sex, thereby inciting women to fill these growing labor sectors. Looking specifically at Thailand, this poster will examine the region's tourism, sex trade and migration out of Thailand into more developed countries to determine whether globalization caused and ultimately intensified Thailand's involvement in sex trade markets—both in Thailand and abroad.

**Cynthia Bernal, Cal Poly Pomona University**

**Why is Redding So Hot?: An examination of environmental factors that contribute to the abnormally**

**high temperatures in Redding, California**

**ABSTRACT (poster):** The city of Redding, California is uncharacteristically hot for its latitude. While it does receive a significant amount of rainfall, the summers are very hot and dry. I researched what geographic characteristics might contribute to these conditions. Mountain ranges, precipitation, surface features and wind/air pressure patterns were examined to determine why Redding, California is so hot.

**Gregory R. Burns, California State Polytechnic University, Pomona**

**Potential Factors in the Formation of Mixed *Larrea tridentata* - *Yucca brevifolia* Mojave Communities.**

**ABSTRACT (poster):** Several ecological factors can result in plant communities with co-dominance. Although narrow bands of mixed communities can occur at ecotones, resource partitioning or differential mortality are necessary to maintain stable co-dominant relationships. This study focuses on the factors that allow mixed communities of *Yucca brevifolia* and *Larrea tridentata* in the Mojave Desert. *L. tridentata*, a relatively cosmopolitan desert shrub, appears to form stable communities with the Mojave endemic *Y. brevifolia* at select elevations. Although no conclusion can be reached without experimental fieldwork, this study will use GIS to investigate the influences of precipitation, temperature, elevation, and fire.

**Brandi Butze, California State University Fullerton**

**My Hike for Discovery**

**ABSTRACT (poster):** This coming June, I will be hiking Rocky Mountain National Park, in Colorado as part of Hike for Discovery (HFD). HFD is the Leukemia and Lymphomas Society's new fundraising program geared towards individuals wanting to participate and raise awareness in a more adventurous style. As a geographer, and as the granddaughter of a man fiercely battling cancer, this opportunity grabbed me from the start. The only requirement was a fundraising minimum of \$4,000. Each week in preparation for our large final hike, I and about 25 others head out on a new trail and experience the morning as it awakens the landscape around us. Hiking Rocky Mountain National Park is bringing me together every week with individuals under the same cause and with similar interests, in an environment we all respect and enjoy. I am making a difference by hiking; it is an awesome feeling.

**Ryan Josef Ek, Cal Poly Pomona**

**The Effects of Clearcutting and Selection Management on the Forest Ecosystem**

**ABSTRACT (poster):** Timber harvesting in any form can damage the forest ecosystem. The practices of clearcutting and selection management stand as two starkly different examples of timber harvesting methods. I will compare these two methods to show that the use of selection management, also known as selection harvesting and uneven-age management, leaves a healthier forest ecosystem after the harvest process when compared to clearcutting. The evidence for this can be measured mostly in terms of floral and faunal diversity and soil health. Selection management does less damage to the soil than clearcutting and allows more biodiversity. Issues of erosion, pollution, soil compaction, and forest fragmentation will be addressed.

**Justin Gottfried, California State Polytechnic University, Pomona**

**Analysis of Housing Costs in San Francisco**

**ABSTRACT (poster):** San Francisco is a high priority area to live in because of industry and business, so naturally housing prices are going to be high. In this analysis of tract level census data several maps are implemented to show how different statistical breaks can alter the visual interpretation. Median rent and home values are analyzed as this is a big financial decision people must make. The findings will provide insight into appropriate use of classifications and analytical corrections when comparing dissimilar numeric fields.

**Jirawud Jirasook, University of Southern California**

**Consequences of Urban Development on Coastal of Thailand**

**ABSTRACT (poster):** There has always been a dynamic relationship between people and nature. However, people continue to put nature at risk and themselves at hazard by over-occupying marginal natural areas. A good example is urban development along the coastal zone. My research focuses on four main areas: 1) the history of urban development along the Thailand coast, 2) issues caused by coastal development, 3) consequences on both nature and human society (Southeast Asia tsunami), and 4) solutions from the past and improvements for the future. Living along the coast puts people's lives in danger and destroys natural systems. This disregard to the damage on nature continues to enlarge the risks to people. Development along the Thai coast has dramatically transformed the landscape and results in greater exposure to natural disasters.

**Mario Landa, California State University, Fullerton**

**South and Southeast Mexico: National Policy, Social Uprising and Deforestation**

**ABSTRACT (poster):** Mexico, like many other Latin American countries, has found itself caught in a situation where developmental pressures on ecologically critical biomes are mounting in the face of

economic policies that emphasize private investment, decentralization, and international free trade as the basis for modernization (Klepeis 2003). To understand present-day Mexico this paper will assess the impact of Spanish colonization and exploitation of south and southeast Mexico. This, combined with a study of the region's socio-economic conditions, the influence of relevant local and national policies, as well as the current and continuing impacts of tropical deforestation in the area, will attempt to explain why deforestation is affecting an area as important as Mexico's tropical rainforest.

**Albert Li, University of Southern California**

**Fluoride and Its Distribution, Effects, and Potential in Los Angeles**

**ABSTRACT (poster):** Public water fluoridation has been touted as one of the great public health achievements of the century," according to Dr. Timothy Collins, chairman of the California Fluoridation Task Force. This October, the Metropolitan Water District of Southern California plans to add fluoride to Los Angeles County water supplies. Presently, only four city systems fluoridate their water. This study examines the harmful and beneficial effects of fluoride, and how Angelinos stand to benefit. A Dental Health Foundation study found that children from low-income, minority households were more likely to suffer from oral disease than any other group, This is especially true for Latino children who experience almost twice the rate found among their Anglo counterparts. This study includes maps which display how fluoride is presently distributed in Los Angeles, and how much will be distributed. The American Dental Association estimates that every dollar spent on fluoridating water saves about \$80 in dental health care costs.

**Kimberly Ornellas, Cosumnes River College**

**Birds of a Fever: The Diffusion of the Avian Flu Virus (Influenza A and H5N1 Virus)**

**ABSTRACT (poster):** The Center for Disease Control (CDC) predicts the "Avian Flu" virus will be the next global pandemic. The spread of this virus is a hot news topic worldwide. What is going on with this disease? Where did it come from? How is it spreading through bird and human populations? How can we prevent, or at least reduce, the impact of this deadly virus? This poster will answer all of these questions as well as explain the origins and diffusion of the Avian Flu virus in both birds and humans. A map showing the location of reported cases in the United States, as well as elsewhere in the world, will also be presented.

**Randi Peterson, Cosumnes River College**

**The Dying Delta**

**ABSTRACT (poster):** The Colorado River stretches from the northern Rockies of central Wyoming all the way through the Southwest and into the Gulf of California. While weaving its way through this vast amount of territory the Colorado River has created homes for wildlife, vegetation, and people. The once rushing river led to a grand delta. However, the flow of the water into the delta is now a trickle. In fact, where some boats are currently sitting in sand is where they once floated. Unhealthy and diminishing, the dying delta has greatly affected ecosystems and people. One major cause of this is the Water Treaty of 1944 between the United States and Mexico. Numerous adjustments have been made and still need to be made to the treaty. The purpose of this poster is to explain how the loss of the delta is affecting Mexico.

**Dylan Porter, University of Southern California**

**Why Are Minorities Absent From America's National Parks and Forests?**

**ABSTRACT (poster):** National Parks and Forests were intended to provide Americans the opportunity to experience wilderness largely preserved from human meddling. However, according to recent studies the majority of visitors are white. Is this difference in accessibility due to the concentration of minorities in urban centers without close proximity to natural areas? Or, do cultural differences about visiting wilderness areas play a role in the type of visitors to national parks and forests? This research focuses on Southern California and includes an examination of the distribution of parks and forests and census data to find the ethnic demographics of the surrounding cities. A survey of 200 students recorded the relationship between ethnicity and visits to national parks and forests. My research found that access to wilderness areas is a factor in the disproportionate number of white and minority visitors, which is likely to influence future interest in national conservation of parks and forests.

**Vicki Rabin, Jenea Woodward, Cal State Fullerton**

**Mt. Whitney**

**ABSTRACT (poster):** Vicki Rabin and Jenea Woodward would like to present a poster about the physical and environmental aspects of Mt. Whitney. Mt. Whitney is the highest mountain in the contiguous 48 states reaching well over 14,000 feet. Both Vicki and Jenea have climbed to the top of Mt Whitney and have experienced first hand the change in vegetation and the effects of high elevation, and would like to present a poster at this years California Geography Conference.

**Aaron R. Salles, Humboldt State University**

**Mapping Population in China**

**ABSTRACT (poster):** This visual display depicts different methods in cartography and graphic design that represent population data for the People's Republic of China. I have used Choropleth and Proportional Symbol mapping, along with non-spatial graphic representations to not only portray the population distributions of China, but also to illustrate different techniques in the visual representation of population.

**Darrell Schulz, University of Southern California**  
**AN APPLICATION OF GIS TO THE REAL ESTATE INDUSTRY**

**ABSTRACT (poster):** The application of Geographic Information Systems into the real estate business has been a very useful tool. I have investigated new practical means to organize critical real estate information in an easily understood medium. Market knowledge has traditionally been acquired by word of mouth and new ways of organizing such a plethora of information in a widely accessible fashion must be devised. I have developed such a method of organizing market knowledge by means of aerial mapping and attaching informational spreadsheets to correspond with aerial imagery. With mapping technologies I have created a series of images that number specific industrial buildings in Los Angeles. This numbering system corresponds to a spreadsheet that has critical information including lease expiration date. The specific images allow for a real estate broker to know exactly what is going on in each of the industrial buildings.

**Lisa Scott, Consumnes River College**  
**Monterey Bay: A protected, but unhealthy home**

**ABSTRACT (poster):** In 1969 a huge oil spill devastated the coastline of Southern California. This brought public attention to the importance of protecting North American coastal waters. To protect the North American waters resulted an establishment nationwide of National Marine Sanctuaries. Established in 1972 to protect ocean waters, habitats, and local cultural history, the Monterey Bay National Marine Sanctuary is one of the 13 National Marine Sanctuaries. Stretching from San Francisco to Santa Barbara, extending an average of 31 miles into the ocean, and covering 13,730 square kilometers, it is the largest sanctuary. Despite this area's protected status, storm water pollution poses a major threat to its marine ecosystem and to the economy of the Monterey Bay region. The purpose of this poster is to explain how water pollution is affecting sea life in Monterey Bay.

**Irene M. Seelye, University of Nevada, Reno**  
**Fencing in the Fencers: A Study in Redistricting the United States Fencing Association**

**ABSTRACT (poster):** This study will look at Olympic Style Fencing geographically to see where it has grown in the United States, and by how much, over the last twenty years. This growth has created the need for the divisions to be redistricted for better organization and efficiency in the future of the sport. It is the intent of this study to use the population information, coupled with the physical and political geography of the nation, to analyze the internal divisions of the United States Fencing Association (USFA), and to offer several possible solutions where the rapid growth has outpaced the current divisions.

**K. Naoma Staley, California State Polytechnic University, Pomona**  
**BioDiesel: Production, Distribution, & Feasibility.**

**ABSTRACT (poster):** With increasing awareness of decreased fossil fuel availability, alternative fuels are being given greater attention. One alternative fuel is BioDiesel. I have analyzed the distribution of BioDiesel production and distribution centers against climate regions across the United States. My findings suggest reasons for a predominantly East-coast production and distribution pattern, and highlight factors that make west-coast BioDiesel manufacture and use both feasible and desirable.

**Jenae Woodward, Cal State Fullerton**  
**Carpobrotus edulis and it's effect on the Bolsa Chica Wetlands**

**ABSTRACT (poster):** Highway Ice Plant, *Carpobrotus edulis*, is an invasive species that has caused much destruction within California's native plant populations. A part of the Aizoacea family, it was originally introduced in the early 1900's from South Africa in order to prevent land erosion. It has a shallow root structure that allows it to grow in places where other plants can not. The Mediterranean climate of Southern California and the lack of competition have created an atmosphere for this plant to spread rapidly. It is becoming an increasing problem as it invades the areas populated by other species and wiping them out. The Bolsa Chica Wetlands, in Huntington Beach, has experienced this firsthand. After Cal-trans planted the Ice Plant alongside the Pacific Coast Highway in the late 1900's, it spread into the wetland area wiping out the native plants. Since 2003, volunteer groups have been trying to control this situation by removing the invasive plant from areas it has overrun. This poster will present the geographic distribution of *Carpobrotus edulis* in Northern Huntington Beach. It will also show how it has spread, and the destruction it has caused.

**Jenny Wrye, Humboldt State University**

**Investigating Earthquake and Tsunami Preparedness Organizations in Humboldt County, CA.**

**ABSTRACT (poster):** Humboldt County, California is located along a tectonic subduction zone, making it especially vulnerable to large earthquakes and tsunamis. This rural, coastal county is distant from regional urban centers, a situation that underscores the importance of planning for an aftermath of extended isolation in the wake of disaster. Several local organizations are working to plan for these potential disasters and mitigate their aftermaths, including the Humboldt Earthquake Education Center, NOAA's Tsunami Ready Program, Redwood Coast Working Tsunami Group, Humboldt County's Hazard Mitigation Steering Committee, American Red Cross, Americorps Youth Serve and Volunteer Center of the Redwoods. Numerous interviews and participant observation at several emergency preparedness events indicate that a large number of planning and preparedness activities are currently underway in the region. I contend that Humboldt County is a model of tsunami preparedness for similar communities in California. Although Humboldt County is ahead of the game in planning and preparedness for earthquakes and tsunamis, many organizations seek to develop and implement further education outreach campaigns in the community.

**Rachel Yuriiko Noelani Yukimura, University of Southern California**

**Comparing Human and Elephant Damage to Woody Vegetation in the Ololorashi-olulugui Group Ranch, Kenya**

**ABSTRACT (poster):** Human encroachment on wildlife habitats due to the expansion of agriculture and the subsequent rise in permanent settlements in the Amboseli-Tsavo ecosystem, Kenya, is compressing wildlife into increasingly smaller areas. As a result of this compression, high concentrations of elephants are causing severe damage to woody vegetation in the dispersal areas around Amboseli National Park. This study assessed the extent and severity of damage to woody vegetation by humans and elephants in an Acacia woodland in Ololorashi-olulugui Group Ranch near Amboseli. Results showed that only 10% of all individuals of dominant woody species were impacted by humans, but over half (53%) of all individuals of dominant species were impacted by elephants. Thus, elephants inflicted more damage to the vegetation than humans. Branch cutting and branch breaking were the most common forms of human and elephant damage, respectively. For all damage types except uprooting, Acacia mellifera experienced more damage by elephants than other dominant species. The extent and severity of damage by humans was species-dependent for all damage types except stem cutting, while the extent and severity of damage by elephants was species-dependent for all damage types. The severity level of elephant damage was significantly higher than that of humans. Mortality of plants was species-dependent, with Acacia mellifera being found dead most often. This study demonstrates how the growing populations of two keystone species, humans and elephants, can dramatically change their habitats by shifting the species composition of woody vegetation.

## Maps

**Sylvana Cares, California State University, Chico**

**Ernesto Che Guevara's tour through South America**

**ABSTRACT (map):** The map "The Adventures of Ernesto 'Che' Guevara" was produced as a result of a cartography class at C.S.U., Chico. The assignment dictated that a press ready file be produced that depicted a journey. The journey had to be presented spatially and temporally, in a visually pleasing and communicative fashion. By mapping the journey of Ernesto "Che" Guevara, I hope to communicate the journey and history of one of South America's most influential Marxist scholars. The map was produced in Adobe CS2 using both Illustrator and Photoshop. Photoshop was utilized to leverage the strengths of raster graphics, producing a continuous background image. Illustrator was then used to add the journey, text, and vector line work. The result is a press ready Illustrator file in CMYK color.

**Gareth T. Erhart, Effie Kokrine Charter School**

**Dog Mushing Routes in Fairbanks, Alaska**

**ABSTRACT (map):** The NSF-funded MapTEACH project (Mapping Technology Experiences with Alaska's Cultural Heritage) is developing a culturally responsive geoscience education program for middle- and high-school students in Alaska that emphasizes local landscape knowledge and hands-on experience with spatial technology, including GPS, GIS, and remote sensing imagery. This digital student map was made using ArcExplorer Java Edition for Education (AEJEE) and interactively shows sites that are important to dog mushing activities in the Fairbanks area. Individual locations and trails were documented by GPS and are digitally linked to photos and text describing the sites and their importance. Sites include the family dog yard, local feed stores, important sled dog race locations, and trails where the student trains and races his dog team. The student plans to carry a GPS unit to document trails when he and his team run in the Junior North American Championship sprint dog races on March 2-4, 2007.

**Cesar Espinosa, California State University Long Beach**  
**Strategic Mobility 21 - An ArcIMS Advanced Logistics Project**

**ABSTRACT (map):** The Department of Geography at California State University Long Beach was hired to develop a web-based GIS portal as a subtask for Strategic Mobility 21 an Advanced Logistics Concept Project funded by the Department of Defense. The purpose of this project is to provide stakeholders the ability to remotely explore the study area through visualization, and allow basic GIS functions. Development of the web portal required several steps; (1) Data layers which include transportation corridors (e.g. rail roads, streets, and freeways), airports, cities, military and intermodal facilities within six counties in Southern California were identified. (2) Training in ArcIMS and its installation was required. (3) The map layout was designed in close consultation with the funding entities. The end result of this project is an interactive ArcIMS web portal, which contains data layers including a Digital Elevation Model and Satellite Imagery.

**Kristin Schoenborn, Cosumnes River College**  
**Fires in Sequoia and Kings Canyon National Park**

**ABSTRACT (map):** Sequoia and Kings Canyon National Park is home to the world's largest tree, the Giant Sequoia. Although these Giant beauties are the main attraction, the park is home to many more species of trees that, together, create a diverse ecosystem. Fires, once thought to be harmful to ecosystems, were suppressed for years. Over time fires have become much more damaging due to the build up of an extensive fuel load on the canopy floor. More recently, fires have been found to be extremely beneficial as they reintroduce nutrients to the soil, bringing healthier growth. This map shows the fire history and frequency amongst various vegetation communities in the park from 1921 to 2003. Most fires have occurred close to wilderness boundaries and near access roads. These areas are closest to human populations, where decades of fire suppression has led to an increased fuel load and greater fire risk.

**Kristin Schoenborn, Cosumnes River College**  
**Geologic Map of New Zealand**

**ABSTRACT (map):** New Zealand is a country renowned for its beauty and geologic activity and is evidenced by frequent earthquakes, geothermally-active areas, volcanoes, and high mountains. New Zealand's location has shaped the country's size and also defines its geology. Situated on the boundary between the Indo-Australian and Pacific Plates, the country's islands were built through such geologic processes as uplift, sedimentation accumulation and volcanism. This map was my final project in physical geography lab (the first geography class I took), before I had any knowledge of GIS. My intention was to show the geologic features of the island in an interactive way. I created data layers on transparencies so they could be lifted and layered for viewing purposes. Upon completion, I learned from my instructor that this layering method was used in early map-making, before the use of computers.

**Simon Wright, California State University Long Beach**  
**Japans Tectonic Hazards: An Interactive Map**

**ABSTRACT (map):** Japan, in terms of the natural hazards it suffers, is arguably one of the most volatile and dangerous places to live in the world. As a result of its location in the Pacific Ring of Fire, earthquakes and volcanoes present the Japanese with a very real threat to their everyday way of life. Capturing and visualizing these hazards is the primary concern of this project which ultimately will act as a reference for information on earthquakes and volcanoes in Japan. Taking the form of an interactive digital map, this project was created in ESRI's MapObjects with the aid of Visual Basic 6.0 programming. There were several stages to its completion, including acquiring knowledge of the programming language, collecting & georeferencing the necessary data from the internet, before designing and implementing interactive map functions and effectively visualizing the map features. In essence, the finished product is a historical interactive map of Japanese tectonic hazards.

**Charles P. Yaska, Effie Kokrine Charter School**  
**Historic Trails of Huslia, Alaska**

**ABSTRACT (map):** The NSF-funded MapTEACH project (Mapping Technology Experiences with Alaska's Cultural Heritage) is developing a culturally responsive geoscience education program for middle- and high-school students in Alaska that emphasizes local landscape knowledge and hands-on experience with spatial technology. This student map was made using ArcExplorer Java Edition for Education (AEJEE), and shows historic trails in the Huslia-Koyukon area of Alaska. These trails are used for trapping and to travel to other villages and fish camps. Some were used in ancient times to trade with other villages and to travel between summer and winter camps when the local people led a nomadic lifestyle. Winter trails are used by snowmachine, dog sled, or on foot. Summer trails can be used by truck or 4-wheeler, and some are used by boats. These trails were shared by the student's grandfather and other Elders who still live a subsistence lifestyle in the village of Huslia.