

**CALIFORNIA GEOGRAPHICAL SOCIETY**  
**63<sup>RD</sup> ANNUAL CONFERENCE – SANTA YNEZ VALLEY**  
**CONFERENCE ABSTRACTS**

**James P. Allen and Eugene Turner- California State University, Northridge**

*Benefits of Mapping Detailed Ethnic Change in Urban Geography (Faculty: Paper)*

Geographers can help their students and wider audiences understand urban developments in their own areas by mapping ethnic change between decades. Teachers and students who map ethnic (including race) group change between 2000 and 2010 may be the first in their area to see the most recent local trends. Using examples from our book *Changing Faces, Changing Places: Mapping Southern Californians*, we show how dot maps of absolute numerical change in census tracts for Whites, Blacks, Latinos, and Asians, as well as the larger Asian nationality groups, can illuminate much of a local area's changing ethnic geography. For each group the relative clustering of increases or decreases in different areas suggests different degrees of impact of change. Observed patterns of change often raise questions for local area research.

**John Allison- Sonoma State University**

*The Alluvial Fan; Friend or Foe. (Undergraduate:Paper)*

My research focuses on alluvial fan building processes, stream morphology, and the potential hazard to the Sonoma State University campus and the neighboring community. The study area is the watershed of Copeland Creek and No Name Creek, both located in Sonoma County, California. The potential threats to the area could come from a hundred year flood on Copeland Creek or a major earthquake on nearby Rodgers Creek fault. Both of these events could potentially cause Copeland Creek to change its course and flood the built environment. Field research methods include laser rangefinder surveying, GPS, aerial photo analysis, data from the USGS, NWS, and analysis of satellite images to determine potential channels that Copeland Creek might take during an overbank event. The result of my research aims to inform the community of potential threats to property, and contribute to a preparedness plan against for potential threats.

**Cameran Ashraf- California State University Fullerton**

*River of Water, River of Stars: The Separation of Earth and Sky in Cultural Landscapes (Graduate: Paper)*

The traditional view of what constitutes a cultural landscape has been largely restricted to what can be seen and built on the earth's surface. However, the cultural landscapes and sacred geographies of many cultures extend beyond earth and into the night sky. This presentation examines the role of the night sky as a cultural landscape worthy of geographic inquiry in its own right and emphasizes the necessity of studying the night sky in conjunction with earthbound cultural landscapes.

**James A. Bauml- CSU Chico**

*Unknown Mexico- The Lumholtz Expedition of 1894-1897 (Graduate: Map - Paper)*

This map documents the travels of Norwegian explorer Carl Lumholtz on one of his expeditions into Western Mexico in the late 1800s. It specifically highlights his journey of 1894-1897 from Bisbee, Arizona, down the crest of the Sierra Madre Occidental, to Mexico City. This map features his various explorations in the Sierra Huichol in the northern Jalisco state, featured in volume 2 of his two-volume book, *Unknown Mexico* (1902). The map represents the passage of time and movement and highlights of the various side-trips Lumholtz made into Huichol Indian territory from his base camp in San Andres Cohamiata.

**Nicholas Beeson- Cosumnes River College**

*Whaling. The Crime. The Culture. The Impact. (Undergraduate: Poster)*

Whaling is the practice of hunting and killing whales. The purpose of this poster is to explain the impact of whaling on whale populations globally, as well as to explore how various cultures and special interest groups view whaling differently. Each country and culture hunts certain types of whales for specific reasons. Whales are sometimes killed for food, oils and minerals contained in

their bodies, as well as for scientific research purposes. This poster will illustrate where the majority of whaling takes place globally as well as point out where whales are protected in sanctuaries. Whaling can change our marine ecosystem and its food chain more than one would think, this poster will educate viewers about the impact.

**Lucas Biging- University of Southern California**

*Sharing Klamath (Undergraduate: Poster)*

The health of Klamath River is a culmination of an intricate set of management practices designed to balance the environmental implications of agriculture, the viable salmon fishery, and the Natives rights to the river. This presentation examines how the Klamath River is managed to suit the often conflicting needs of farmers, fisheries and natives, and, specifically how the Klamath River Basin is managed as a sustainable watershed. The geography of fisheries, agriculture, and Natives use and rights defines the challenge and the key to effective management of this fragile but sustainable ecosystem. The Klamath River Basin is a closely managed watershed that provides a window into water management practices that can be applied in other river systems.

**Theodore Bliss- Humboldt State**

*The History of California's Redwood Industry (Undergraduate: Paper)*

The town of Scotia has helped develop and populate most of Humboldt County. In this paper I will examine Scotia's creation and its significance to the development of the Pacific Northwest Coast of California. Scotia is home for a company that was known as the Pacific Lumber for 133 years though, a because of a recent change in management it has been changed to Humboldt Redwood Company. Gold and lumber were the fundamentally supportive contributors to local Humboldt settlement and though mining has been successful, the famous ancient redwood trees are why Scotia exists and played a significant role founding industrial redwood logging on the Pacific Northwest of California. This mill remains and has always been the world's largest redwood extractor and producer proving that Scotia has had a substantial impact in establishing California's North Coast.

**Dr. William A. Bowen- CSU Northridge**

*California Imagined (Faculty: Paper)*

This presentation will introduce a new DVD that takes users on a series of high speed, high altitude flights over all of California's regions. A brief discussion of technical methodologies and production issues will take place, and at least one sample flight will be shown. If possible, the video display will occur on a HDTV screen. It my contention that none of us possesses a sufficiently complete visual sense of the state's complex geography. Furthermore, I believe that without it none of us can hope to understand the multitude of spatial relationships integral to California's many realities. Seeing the landscape from afar deepens our understanding of our surrounding environment. Free DVD discs will be distributed.

**Scott Brady- CSU, Chico**

*Crayfish, Crawdads, and Crawfish- Preliminary Observations of Incidental Aquaculture in California's Rice Paddies (Faculty: Paper)*

Introduction of the red swamp crawfish, *Procambarus clarkii*, into northern California's rice paddies during the 1960s has created an incidental aquaculture economy in a landscape devoted to irrigated rice production. This presentation traces the introduction and diffusion of the red swamp crawfish to and within California and describes the network that has emerged to link producers in California to markets as far-flung as New Orleans and Sweden. The presentation also discusses the emergence of California markets.

**Shea Broussard- California State University Northridge**

*Fired Up, Or Should I Day Fired Down, Master's Thesis Proposal (Graduate: Paper)*

The chaparral community in the Santa Monica Mountains of southern California has been noted for their deadly unpredictable and costly fires. With an influx of urban interface more time and money has been devoted to the study of these fires. The chaparral vegetation of these Santa Monica Mountains poses as the perfect fuel for these fire as soon as the right conditions persist. The attempts to understand and concurrently control fire behavior have been thwarted by the erratic nature the fires evolve into once in the chaparral biomes. Other factors being equal, a fire burning on level ground will spread twice as fast when it reaches 30% slopes. (Radtke, K.) However, analysis of fire behavior within the chaparral prove this theory inconclusive. As noted the fires in the Santa Monica Mountains burn erratically with no particular pattern that follow this logic, especially when comparing uphill versus downhill burn rates. My hypothesis states that fire within the Santa Monica Mountains burns at a more constant and/ or unpredictable rate due to the varied flammability and geographical placement of vegetation. Many geographers have studied factors effecting fire such as; topography, precipitation variability, fire weather, wind pattern, etc. However, my research will incorporate these factors but more further analyze and explore the factors that allow for differing flammability rates of specific vegetation as well as geographic placement. The methods will include Geographic Information System (GIS) methods, line transects, and the utilization of fire simulation models. I will attempt to demonstrate the power of modern programs and technologies to analyze, manipulate, organize and effectively piece together the overwhelming factors and issues at hand. Therefore an accumulation of articles, research, and experience will assist to provide sound evidence to support this hypothesis.

**Chelsea Buckland- University of Southern California**

*The Affect of the Borderwars on Mexico's Tourism Industry (Undergraduate: Paper)*

As talk of Borderwars floods the media, official warnings are being issued across the nation to Mexico-bound tourists. The University of Southern California recently issued a letter 'strongly advising' students against traveling to Mexico during their spring break. As the third largest industry contributing to their foreign exchange earnings, tourism declines are a main concern for the Mexican economy. My research begins by looking at tourism to Mexico from a broad perspective by creating a model about changing American attitudes and conceptions about border towns. Then, I compare statistical data to the changing American attitudes by systematically examining significant factors affecting Mexico's tourism industry, such the strength of the US dollar to peso, international arrival rates and international tourism receipts. Finally, I focus on a case study using the University of Southern California students and faculty actions and perceptions toward Border tourism to understand the link between the data and actual human actions. My research concludes by analyzing the relationship between the case study, statistical data, and model, and proposes solutions for the evolving tourism problem in Mexico.

**Brice Cameron Burkett- University of Southern California**

*The Impact of Wildfires on the Water Resources of San Diego County (Undergraduate: Poster)*

Every year California is devastated by horrific wildfires that are extremely difficult to extinguish. What effects do wildfires have on Southern California's water supply? These wildfires impact the water supply of a region in three ways. Large amounts of water are consumed in the effort to contain and extinguish these infernos. Wildfires also destroy watersheds, which can limit the water available for the recovery of the devastated communities and their neighborhoods. Further, wildfires burn substances that can pollute our water supply, and the wasted watersheds are conducive for floods, which carry toxins into our rivers and ocean. My research focuses on the water resources used in fighting the 2007 San Diego County wildfires. I begin with an inventory of the diverse types of water resources in San Diego County including lakes, rivers, reservoirs and watersheds. I use ArcGIS to display the fire perimeters along with the available water resources. Then, I investigate the different amounts of water consumed by aircraft, fire engines, and other equipment. Finally, I consider the potential dangers affiliated with the aftermath of the fires.

**Sharon Caddy- CSU Chico**

*Big Chico Creek Ecological Reserve- Management Zones (Undergraduate: Map - Paper)*

The map, Big Chico Creek Ecological Reserve - Management Zones, was produced in conjunction with the Center for Excellence in Learning and Teaching (C.E.L.T.) foundation, California State University, Chico Department of Geography and Planning, and the Big Chico Creek Ecological Reserve (BCCER). The 3,950 acre reserve, located 10 miles east of Chico, CA, is owned by the University Research Foundation. The BCCER contributes to the preservation and understanding of critical habitat by providing a natural setting for research and education. At the request of the BCCER, and to facilitate the mission of the reserve, this map was produced. Since no map existed for the BCCER, a 1 meter DEM was acquired for base mapping, while roads, trails, and site data was collected using a GPS device and through extensive field work. The GPS and DEM data was processed using ArcGIS and the spatial analyst extension, then exported to the Adobe Illustrator suite of products for printing, clean-up, and to assist with the distribution of the finished map.

**Sylvana Cares- C..S.U. Chico**

*Tree-of-Heaven Introductions- Historic Transport Form China to the United States (Graduate: Map - Paper)*

This map was inspired by the literature review of my Master's Thesis, where it explains the historic transportation of the now invasive Tree-of-Heaven (*A. altissima*) from its native China to the United States. The initial world and inset maps were created in ArcGIS 9.3. Raster calculator was then used to mosaic many digital elevation model (DEM) files together to create world elevation, precipitation, and temperature images. The images were then imported into Adobe Photoshop CS4 to utilize its raster capabilities; default elevation colors were masked to give world image its own unique color. Inset maps, images, and photos were then manipulated in Photoshop by enhancing them with multiple artistic and photographic effects. Adobe Illustrator CS4 was then utilized for its vector capabilities that included world line work, journey, text and personalized fonts. The result is a press ready Illustrator file in CMYK color.

**Richard Carlos- UCLA**

*Using remotely sensed images and in situ measurements to better understand eddy development in the Southern California Bight (Undergraduate: Paper)*

The development of oceanic fronts off the Southern California coast is a common phenomenon due to the interaction of the California Current with topography and bathymetry of the Southern California Bight (SCB). Horizontal gradients formed across these frontal boundaries create a current shear that drives the development of rotating water masses. These eddies play an important role in the biology of coastal waters; the dissipation of energy is also an important, but less well understood function of oceanic eddies. The erratic motion of eddies, as well as their relatively small temporal scale, has proved problematic for researchers. Using MODIS satellite images and in situ measurements from the Santa Monica Bay Observatory mooring, we have tracked the development and motion of eddies within the SCB. This gives promise for future studies of these elusive formations.

**John A. Carthew- Pierce College**

*TEACHING COMMUNITY COLLEGE GEOGRAPHY CLASSES (Faculty: Paper)*

This workshop will cover the general course material for Physical, Cultural, World Regional, and California Geography. Discussed during the session will be the use of geographic terminology, map assignments, the use of critical concept study guides, and the benefit of the use of multiple choice practice test questions. For the community college student demographic it is often beneficial to give the beginning Geography student more guidance in planning their studies. A free California Geographical Society ball cap will be given to all attendees.

**Sarah Champion- SDSU**

*Geography of Change: Neighborhood Revitalization and Economic Impacts (Graduate: Paper)*

This paper examines the socio-economic impacts of recent revitalization efforts in the San Diego neighborhood of City Heights. City Heights has had a tumultuous history, is ethnically diverse, and for the most part has a lower socio-economic population. I examine the economic changes that have taken place in the area since its redevelopment, such as housing values, uses, and types, and job availability, and location. Does neighborhood revitalization truly benefit the surrounding community or take away from it? A longitudinal study covering the last quarter of the twentieth century to the present was conducted by analyzing various economic indicators over time. By observing landscape and land use change and understanding changing economic interactions in the neighborhood before and after redevelopment, the effects of the redevelopment process can be evaluated. This research displays how and where City Heights' socioeconomic restructuring fits into citywide and statewide trends.

**Corinne Cogger- Humboldt State University**

*Land Degradation and Human Migration in China and Tibet (Undergraduate: Paper)*

In this paper, I discuss the connections between environmental degradation and human migration in central and western Tibet, observed during my fieldwork in the region. I describe the marginal and fragile lands of the region and the effects of human migration on them, as well as how land degradation, in turn, has led to further impelled migration. Analysis of certain Chinese policies, such as the Great Leap Forward, the Cultural Revolution and the Western Development Strategy are essential in my investigation as they are intertwined with the issues that cause migration. I conclude that land-use policies need to be thoroughly researched before implemented, monitored for effectiveness and only then enforced if the arid lands are to remain healthy and if the communities that rely on them are to flourish. Keywords- Tibet, western China, human migration, environmental degradation, arid lands.

**Christine Combe- CSU Pomona**

*The American Dollar's Worth Against Other Countries Currency (Undergraduate: Map - Paper)*

These maps (2) are to show the state of the global economy focused on the United States. One map was made last year with the value of each currency in comparison to it's worth with the US dollar. The map illustrates which countries when a traveler or tourist is to visit would expect to get more or less money for their American Dollar when exchanging currency. A second map for this year's economy has been created with all of the same countries and new comparisons of that countries currency to the US Dollar. The comparison of the maps demonstrates the change or shift in the American Dollar's one year later and while going through this economic crisis.

**Samuel Cortez- San Diego State University**

*Globalization and Mexican Immigrant Youth in the US/Mexico Border (Graduate: Paper)*

The North American Free Trade Agreement (NAFTA) constitutes the most direct manifestation of globalization in the Mexico/US border region. This study examines how these global forces affect immigrant youth in the Imperial and Mexicali valleys. The US/Mexican border region is the subject of many studies; however, few focus on the geographies of globalization and youth. As Imperial Valley agricultural companies shift operations to the Mexicali Valley, Mexican-American immigrant families, and migrant families from interior Mexico who are largely indigenous carry the brunt of these transformations. Young people transcend border spaces to negotiate their responses and make decisions either to continue their education or to engage in the work force. The result is that some young people go to extraordinary efforts to attend school, often to the consternation of school officials and with little regard to international boundaries; while others become subjects of labor abuses, neglect and of limited opportunities in the global economy.

**Kevin Cram- Cosumnes River College**

*The Disappearance of the Geisha in Japan (Undergraduate: Poster)*

Japan has many exotic and vibrant subcultures that enrich its society. Geishas comprise one such subculture and are considered by many Japanese people to be a national icon. Geisha culture has existed for several centuries and carries with it a very interesting and controversial

history. This culture has been declining for decades and the exact reasons for this are unknown. Today, it is estimated there are less than two thousand geishas left in Japan. This poster will illustrate where geishas live within Japan and explore some of the reasons why their unique culture is declining.

**Shannon Crawford- Cal State Fullerton**

*The Likelihood of Transmission of the H5N1 Avian Influenza Virus: A Comparison of Northern Pintail Density to Poultry Density in California (Undergraduate: Poster)*

Avian influenza of the H5N1 virus subtype has been seen throughout Asia, the Middle East, Europe and Africa. A pathway of its introduction is contact between migratory birds and poultry at stopovers along migratory flight paths. The United States has not yet seen the virus, but it is an area used for stopovers by migratory birds, such as the Northern Pintail Duck (*Anas acuta*), that breed in infected countries. The objectives of this study were to determine where poultry and Northern Pintail density are located within California, and to analyze their spatial relationship to one another with a Kernel Density Estimate GIS model. My study revealed that larger count densities of Northern Pintails were found in the same vicinity as significant poultry density. In the case of a U.S. outbreak, such information could prevent the spread of the H5N1 virus in livestock before it is processed and sold to consumers.

**Jose Cruz- Cal Poly Pomona**

*Modeling Scenario for Selected Plants - Effects of Invasive Species on a Perennial (Undergraduate: Poster)*

One of the pressing challenges impacting the Mojave Desert is the introduction of invasive species. Through the application of GIS, a model is built to predict optimal sites where two (2) invasive plant species in the Mojave Desert are likely to flourish versus a native plant species. The invasive plant species are bromus and schismus which are grasses that outcompete the native perennial plant called *Encelia farinosa* A. Gray ex Torr. Findings revealed that schismus was far more pervasive than bromus but bromus prefers the most desirable areas inhabited by encelia. Application of this model in locating likely propagation sites of invasive plant species can be used to identify areas where removal is necessary to prevent further negative modification of the land and to prevent the likelihood of fires.

**Chester Densmore- Humboldt State University**

*The Modernization of Food Culture on the Tibetan Plateau (Undergraduate: Paper)*

Today globalization and the modernizing influences that it brings is affecting many aspects of cultural identity, including traditional food systems. Due largely to China's recent economic boom, the lifestyle of the Tibetan people is changing rapidly. My empirical, field-based research suggests that what Tibetans eat, where their food comes from, and food's role in Tibetan culture and society are among the many changing elements of regional culture. Historically, the diet of this isolated (mountain) society has been based on just a few key staple foods. Today domestic (Chinese) and global influences are reshaping the food culture on the Tibetan Plateau. Modernization, urban development, increased distribution and availability of goods in the Tibet Autonomous Region of China demonstrate the connection between globalization and changing food culture. Keywords Globalization, China, Tibet, Food Culture.

**Mike DeVivo- Grand Rapids Community College**

*Vietnam, Globalization, and Geographical Change (Faculty: Paper)*

The perception of Vietnam in the minds of many Americans is one of war, for this was a country to which the U.S. committed troops in the hundreds of thousands. At the end of April 1975, in violation of the Paris cease fire agreement endorsed two years previously, the Communist North Vietnamese Army engaged in military action and took the South Vietnamese capital of Saigon. This was the culmination of an effort to unify the country under Communist rule, arguably, which began with their victory against the French at Dien Bien Phu in 1954. Yet, it is not armed conflict that characterizes the country today. For example, Vietnam is one of the few places in the world to anticipate further economic growth in this present era marked by worldwide financial turmoil. Moreover, though a thorn in the side to a government that gives lip service to the "freedom of

religion,” Vietnamese Catholics play an important role on the cultural landscape. This paper addresses the historic past within the framework of the present to explain aspects of the contemporary landscape not usually considered.

**Nicole DeWitt- California State University Northridge**

*The Geography of Recession in the San Fernando Valley (Undergraduate: Poster)*

In this paper, the effects of the current economic recession on the San Fernando Valley are analyzed by examining three specific indicators: unemployment rate, foreclosures, and business bankruptcy filings. Drastic changes in the economy are shown by comparing data gathered from the years 2007 and 2008. By obtaining and mapping the zip code and address locations of these three indicators I study how they are spatially related to one another. The differences and similarities in data show the geography of a recession in the San Fernando Valley and whether or not certain communities are more susceptible to its consequences than others.

**Rajinder Dhaliwal- Cosumnes River College**

*Cultural Diversity Amongst Descendants of the Indo-Aryan People (Undergraduate: Poster)*

The Indo- Aryan people migrated and conquered much of Western Europe as well as parts of Iran and northern India. Throughout the lands once occupied by the Indo-Aryan people, the two closest remaining relations to them based on common haplotypes come from the Punjab region in India (from the Jatt Caste) and from the North Germanic people. While these two people are separated by land, the ancient blood that flows through their veins has allowed them to develop great cultures, and from them has sprung thinkers, artists, and great warriors. This poster will explain how these two cultures, while being blood relatives, have become different over time and space and yet they still maintain some cultural similarities attributed to their common ancestor.

**Faith Dincolo- CSUSB**

*The Role of Childhood Education in the Long Term Success of the Green Valley Initiative (Undergraduate: Paper)*

The Inland Empire suffers from a negative image because of smog, crime and ad hoc development. To solve this, an innovative plan, The Green Valley Initiative, creates an identity change for the region by encouraging and facilitating green resources, green jobs and a greener environment. Rebranding to the Green Valley promotes positive economic development and enhanced quality of life for all in the area. However, one critical component of this plan is missing- children’s environmental education. Our White Paper presents the impact of involving children as a source for success of the initiative. We researched model cities such as Toronto where enviro-education is working. The Inland Empire must involve our children in this “greening” effort, and using a successful educational technique known as “Transformative Sustainability Learning”, the Green Valley Initiative will see lifelong commitment by these students and, thus, the long-term benefits of a greener future.

**Dennis Dingemans- University of California, Davis**

*Landscapes of the New Deal in Yolo County (Faculty: Paper)*

The California Historical Society, with leadership by geographer Gray Brechin, initiated an inventory of New Deal projects and memories. The Yolo County Historical Society, working with geographers, is well underway in looking at federal-funded 1933-1941 projects in its mostly-rural territory. A democratic-voting county, Yolo received a disproportionate share of funding, projects went on for 8 years, and all sub-regions benefited. Major civic buildings got the greatest share of funding and many still serve their intended function as centers of community life a city hall, central parks and recreation facilities, a post office, a library, fire stations, an auditorium, and an armory. Transportation projects abounded, including bridge building, road maintenance, and street and sidewalk improvements. Environmental projects featured a groundwater percolation dam, flood-control levees, and tree planting. Other geographers and geography departments might want to join this effort to assess the lasting landscape contributions in their local areas.

**Heather Downing- Cosumnes River College**

*“Sustainability 101- A Guide to Increasing the Success of the Green Movement on Your Campus”  
(Undergraduate: Paper)*

California is one of the leading states in the nation when it comes to conservation and advancement of the growing sustainability movement. Many California colleges and universities are participating in this effort by taking steps to “green” their campus operations through such initiatives as compiling greenhouse gas inventories, formulating climate action plans, or stepping up recycling awareness and participation. Students at some institutions are becoming more involved with these efforts, but there are likely many more students who would like to help but are unsure how to get involved or what resources are available to guide them. In this paper, I will discuss how students can become involved with sustainability efforts on their campuses, how to develop and fund their own projects, and how to gather ideas and resources from other organizations, such as the National Wildlife Federation, to help their campus operate in a more environmentally-responsible manner.

**Ryan Drap- University of Southern California**

*Muslim France In 2030 (Undergraduate: Paper)*

The declining birth rates and labor shortages in many western European nations have encouraged the immigration of people from third world nations. A large portion of these have been Muslim. This means that more of the senior and aging cohort of the population will be European, while the younger and growing portion will be Muslim. Such a major change in demographics could cause a major social and politic transformation. This paper examines the current and past history of the Muslim population in France with the aim of predicting the possible changes in French demographics for the year 2030 from official French census data. I consider not only general population statics, but also age data and the distribution of Muslim communities in France. Then, I extrapolate this data to 2030. There are substantial implications to twenty more years of growth in France’s Muslim population

**Le Diem Duong- California State University, Northridge**

*Southern CA Indian Reservations & Casinos (Graduate: Map - Paper)*

Mapping is all about where we are in relating to everything around us. Casinos to some people might not be a good thing to start with but it is a form of entertainment that keeps us going. This map gives a general idea of where the Indian Reservations are in southern California and how many of them have casinos within their own area and geographically, why did they choose the locations that they did for their casinos. Also, the main focus of the study area is to find out why these Indian tribes focus on casinos and how they can be able to manage their own business without having the United States government to get involve.

**Ted Eckmann- University of California at Santa Barbara**

*New Animations of Global Climate and Climate Change (Graduate: Paper)*

Static maps cannot adequately portray some complex spatiotemporal aspects of global climate and climate change, prompting the question what phenomena can animated maps of climate data reveal? This presentation displays results from a project that addressed this question by creating over 100 new animated maps of climate-related variables, using datasets such as the National Centers for Environmental Prediction–National Center for Atmospheric Research (NCEP–NCAR) Reanalysis. These animated maps display monthly and multi-year changes in variables such as air temperature, precipitation, winds, and humidity, at multiple height levels above the Earth’s surface. Undergraduate students created most of these animations, and instructors have used the animations in several undergraduate courses. Observations have shown these animations to be useful educational tools that can help students to understand some spatiotemporal complexities of climate that other educational materials cannot portray effectively. This presentation also demonstrates how these animations can guide new climate research.

**Michael Farrell- San Diego State University**

*Evaluating the sensitivity of water resources in the Oregon Cascades to future climate change (Graduate: Paper)*

Throughout the mountainous western United States, warmer temperatures are expected to raise rain-to-snow transition levels, leading to increased winter flooding and increased water stress during summer low-flow periods. Throughout the Oregon Cascades, geologically-driven drainage patterns introduce spatial complexity to the pattern of streamflow sensitivity to climatic change. Distinctions between the subsurface drainage processes of the younger High Cascade province and the older Western Cascade province have been shown to affect streamflow recession rates, summer streamflow volumes, and seasonal patterns of streamflow sensitivity to climate warming. In addition, this geologic distinction also affects calibrated hydrologic model parameter values, spatial patterns of headwater stream sensitivity to climate warming, and relative sensitivities of dam operations to climate warming. By coupling a process-based hydrologic model (RHESSys) with reservoir operation models, water resources sensitivity to warming is evaluated at a spatial scale that incorporates elevation-based precipitation transitions, geologically-based drainage patterns, and water resources infrastructure constraints.

**Dana Fernbach- CSU, Chico**

*A Bottle's Journey in Northern California-the Lifecycle of a Coca Cola Bottle (Undergraduate: Map - Paper)*

The map "A Bottle's Journey in Northern California - The Lifecycle of a Coca Cola Bottle" illustrates the lifecycle of a plastic Coca Cola bottle over space and time. The map was created with the intentions of conveying how many resources are consumed in the creation and disposal of plastic bottles at the regional level. The map was created with the use of ArcMap and Adobe Illustrator.

**Nicole Fierro- California State University, Northridge**

*The Playground- Is It Safe and Equal for Everyone? (Undergraduate: Paper)*

This research examines differences in park space and playground equipment in two distinct sections of Los Angeles through the lens of environmental injustice. I examine the injustices by surveying a variety of people who frequent the parks often and analyzed that data to determine where those environmental injustices lay. I used various GIS maps to determine certain green space allocation injustices in comparison to population density in two distinct areas of the city. The level of environmental injustices experienced in lower class neighborhoods is much higher and more inherent than those of wealthier status. Key words- Environmental Injustice, Park Rich/Poor areas, Park Congestion, Park/Playground equipment.

**Alexandra Fischer- Humboldt State University**

*A Fading Piece of Brutal History: The Bridge Gulch Massacre (Undergraduate: Paper)*

The Bridge Gulch Massacre is a long-forgotten event that has remained embedded in the landscape of northwestern California. Very few accounts describe the slaughter of the Wintu Indians at this site in 1852; however, each of these documents reveals unique details that together provide a more complete view of this tragic event. In this paper, I trace the transformation of the landscape of Natural Bridge from a home to Indians to a littered picnic area, and I explore the controversies that have resulted from these changes. Drawing upon a variety of sources -- including first-person historical accounts of the massacre, academic texts, government documents, and empirical observations of the contemporary landscape -- my analysis suggests that the importance of this area to local Native populations contrasts with the lack of respect being shown toward the site and its history by recreational users.

**Kevin Flaherty- CSU Long Beach**

*Long Beach in Context (Graduate: Paper)*

Many groups use Geographic Information Systems (GIS) but why do these groups use them? This master's thesis project has crafted a survey to answer this question which focuses on three things. Goal formation and achievement are a major factor in why a group would choose a technical solution involving GIS. Additionally, software usage and data storage are also

important. Finally, effort should be made to understand how a group actually uses geographic information.

### **Mae Frantz- CSU Stanislaus**

*Students United for the Airport Neighborhood: Using the Geographer's Toolbox for Service Learning in Urban Geography (Undergraduate: Poster)*

The Airport Neighborhood is known as one of the marginalized areas of Stanislaus County, suffering from high rates of crime, gang activity, and poverty. Youth are particularly vulnerable in this neighborhood, with fully 100% of elementary school students classified as socioeconomically disadvantaged, and 60% classified as English learners, or students who are not proficient in English. Urban Geography students at CSU Stanislaus formed a group, Students United for the Airport Neighborhood (S.U.A.N.), to advocate for the neighborhood youth. This presentation focuses on how members of S.U.A.N. used diverse tools from their Geographer's Toolboxes, including spatial analysis and mapping, personal interviews, collaboration with community partners, and social networking to illustrate the impacts on Airport Neighborhood youth development and to outline possible strategies and opportunities to overcome these challenges.

### **Elizabeth A. Gaylord- Cosumnes River College**

*The Solution to Pollution: The Effects of Oil Pollution on the Oceans (Undergraduate: Poster)*

Do you know the majority of oil spills into the oceans are not from tanker accidents? Over half of the oil that makes its way into the oceans, is dumped there everyday by people like you and me. The oil that is washed into the ocean every year from leaky automobiles and people carelessly throwing their used motor oil down storm drains far exceeds the millions of gallons of oil spilled into the ocean by ship accidents. This project will quantify the number of gallons of oil spilled into the sea- both by ship accidents and other forms of human carelessness. It will also show the effects of oil pollution in certain places around the world, discuss the impacts this has on the environment, and offer solutions to help end this terrible problem.

### **Sanford H George- University of Southern California**

*Using Google Earth to Prioritize Potential Archeological Sites (Undergraduate: Paper)*

Geographic Information Systems (GIS) have become an essential tool of modern archeology used to locate and classify archeological sites. However, there are situations in which the capabilities of conventional GIS are insufficient. Google Earth has provided new ways to explore archeological sites and in this case was more useful than traditional GIS. For this project I examined a list of potential archeological excavation sites in Turkey. The intent of this project was to use Google Earth to identify the best sites for excavation. Latitude and longitude coordinates were geo-coded into Google Earth and then specific sites were zoomed and viewed from different aspects to consider its potential for excavation. Each site was examined to determine its accessibility, the current land use, terrain, slope, proximity to hazards, location of the nearest city and any other information that could be determined. From this data a prioritized list of potential sites was compiled.

### **Denise Goerisch- San Diego State University**

*The Feminization of Social Entrepreneurship in the Developing World (Graduate: Paper)*

In 2006, Muhammed Yunus and the Grameen Bank won the Nobel Peace Prize for their efforts to stimulate social and economic development through microcrediting in Bangladesh. This gave women the opportunity to escape poverty and gain gender equality. Yunus' efforts have been labeled as social entrepreneurship which is described as the use of innovative business strategies and techniques to create social capital rather than financial gains. Social entrepreneurship is sometimes believed to be the work of wealthy philanthropists, but now it seems that many marginalized individuals, the majority being women, are now being trained as social entrepreneurs in order to develop sustainable communities in the Third World. In addition to their reproductive and productive roles, women are also held responsible for managing their communities. This paper seeks to investigate the feminization of social entrepreneurship and how this contributes to the gendering of community management within the Third World.

**Andreea Greavu- CSULB**

*"If you want to run, run a mile. If you want an Experience, run a marathon."* (Graduate: Poster)  
Over a decade ago, marathon running was reckoned as an odd activity potentially dangerous to the runner. Today, marathon competitions have increased in popularity; the races sell out within days, have record numbers of participants and money is raised for different goals. The purpose of this study is to research the emotional geographies experienced by non-professional athletes who ran their first marathon. It is hypothesized that these emotions are considerably different depending on the training and individual determination for finishing the race. The study is guided by the literature on using the Internet for data collection and by ethical guidelines for research online. Data was collected online from 50 first time marathon runners and Nvivo program was used to code the qualitative data. The results will assess the experience of first time marathons. The research contributes to understanding the new approach on the 26.2 miles run and doing online research.

**Aline Gregorio- Cal State Fullerton**

*"The Caigaras of Serra do Mar, Sco Paulo: Perspectives for Participatory Conservation"*  
(Graduate: Paper)

Currently, the Brazilian Atlantic Forest is one of South America's regions with the most areas under strict protection that combine different strategies of parks, reserves, ecological stations, and private reserves. With much of these areas being designated as restrictive, the resident traditional populations such as the Caigaras face the impositions of conservation goals. Considering that the major rainforest areas where the populations of Caigaras are found have been largely well preserved, it has been argued these populations are largely responsible for the conservation of these tracks of forest. This paper addresses the implications of an analysis of this traditional group as isolated subjects of study. I draw from geographical and historical papers that address the dynamics of the Caigaras within the regional phenomena and various factors that have shaped their relationship to the surrounding forest in addition to the implemented conservation areas and its restrictions on traditional use.

**Alexandra Hall- University of Southern California**

*Living and Playing Along the San Andreas (Undergraduate: Paper)*

California is earthquake country. All of us who live here have become accustomed to the occasional shaking, and we all live with the knowledge of the "Big One" that is bound to occur. While there has been considerable research on the dynamics of earthquake faults and the resulting damage associated with earthquakes, the effect of faults on the attitudes of people who reside in close proximity is less studied, and this is the focus of my research. Wrightwood California, is an ideal place to conduct this research. It lies astride the San Andreas Fault Zone and is home to the Mountain High Ski Resort. My primary research tool is a brief attitude survey conducted on the residents and visitors in Wrightwood regarding their perceptions of the natural hazard in their midst. My findings reveal sharp differences between the attitudes of those who live here and those who play here.

**William Harmon (and students from Geography 186 course)- San Jose State University**

*Views of a Field Methodology Course at San Jose State University (Faculty: Paper)*

This presentation will describe the teaching (and learning) of field methods for Geography students at San Jose State University. Initially, this presentation will review the goals and learning objectives of the department's field methodology course Geography 186. This will be followed by a presentation of the outcomes of student effort in this semester's course – "30 Years of Land Use Change on the USGS Morgan Hill 7.5' map." This presentation will conclude by realizing the practicality of this type of learning environment for future employment in the field of Geography and other related disciplines.

**Jamin Haro- Cal State University Northridge**

*Spatial Distribution of Los Angeles Galaxy soccer fans (Undergraduate: Map - Paper)*

This study examines the spatial distribution and the collection of demographic data for Los Angeles Galaxy soccer fans. Several surveys were given randomly at the Home Depot Center in

Carson to fans before the start of the home field season opener game of 2009. The survey was conducted by several Los Angeles Galaxy interns using P.D.A. system technology. There was a total of 26 questions asked within the stadium including- What is your zip code?, What is your ethnic background?, What is your age?...etc. The data will show the distribution of fans within L.A. County and reveal what ethnic fan base is most loyal to the Galaxy Soccer Club, based on the distance traveled by ethnic groups and how many fans within those ethnic groups are season ticket holders. After the data is analyzed a map is created to visually explain the most loyal ethnic fan base.

### **Peggy Hauselt- CSU Stanislaus**

*The Curious Case of the Death Valley Monuments (Faculty: Map - Paper)*

As part of a CSU Stanislaus undergraduate Death Valley Field Class approximately 50 rock monuments were noted in the proximity of Ubehebe Crater. The location of the rock monuments were noted with a GPS receiver and photographed. After mapping the rock monuments and consulting with archaeologists the rock piles were determined to be mining claims. This map was co-authored by Peggy Hauselt & Chuck Bowen

### **Steven Clark Henson- California State University, Northridge**

*Digital Billboard Safety Among Motorists In Los Angeles (Undergraduate: Paper)*

The paper discusses the impact of digital billboards and driver safety in Los Angeles, CA to see if a hazardous relationship exists. The Outdoor Advertising Association of America (OAAA) defines a digital billboard as "a static roadside display that rotates advertising messages every 8-10 seconds". They do not have any video motion flashing lights, only a still poster viewed on an LCD screen; this definition is used for purposes of this paper. For determining if a hazardous relationship exists, a review of literature, driver behavior surveys and a spatial analysis of high traffic collision intersections and digital billboard locations were examined. Although few studies proved a hazardous relationship does exist, other literature and data gathered for this study showed no relationship exists. However, they do cause greater distraction and longer eye glances than standard billboards.

### **Mark Jacobi- Cal State University, Northridge**

*Landscaping Trends in the Antelope Valley, California, 1950-2009 (Undergraduate: Paper)*

California's water delivery system has permitted tremendous growth in the arid southern part of the state. This artificial abundance has underwritten widespread, wasteful landscaping practices with a limited and precious resource. After years of public effort to reduce water consumption, developers continue to build new homes with turf grass lawns, which in turn require huge amounts of water, especially in desert communities where much recent development has occurred. This paper examines the landscaping practices employed in subdivisions in the Antelope Valley. 13,289 front yards were evaluated and assigned a score based on each home's landscaping. Neighborhoods of similar ages were analyzed to measure trends in xeriscaping through time. Results indicate that xeriscaping is not widely employed in the Antelope Valley and that adoption of more climate appropriate landscaping could result in significant water savings.

### **Pascale Joassart-Marcelli- San Diego State University**

*A Place to Play? The Role of Nonprofits in Providing Parks and Recreation Opportunities*

*(Faculty: Paper)*

A vast and inter-disciplinary literature underscores the benefits of urban parks and recreation on a variety of outcomes, including child development, immigrant assimilation, quality of life, socialization, and health. Yet, urban parks and public spaces are increasingly threatened by fiscal pressures and state restructuring. In addition, our fears of crime, homelessness and otherness have lead to privatization and surveillance. In this context, the nonprofit sector has been increasingly called upon to provide, maintain, and monitor public parks and places of recreation, raising important questions about governance and equity. This paper combines multiple sources of fiscal, economic, nonprofit, land use, and demographic data to investigate the role of the voluntary sector in providing recreation opportunities on public parks in Southern California, and analyze disparities in voluntary resources and the activities they support.

**Starlene Justice- California State University San Bernardino**

*The Role of Childhood Education in the Long-Term Success of the Green Valley Initiative (Undergraduate: Paper)*

The Inland Empire suffers from a negative image because of smog, crime and ad hoc development. To solve this, an innovative plan, The Green Valley Initiative, creates an identity change for the region by encouraging and facilitating green resources, green jobs and a greener environment. Rebranding to the Green Valley promotes positive economic development and enhanced quality of life for all in the area. However, one critical component of this plan is missing- children's environmental education. Our White Paper presents the impact of involving children as a source for success of the initiative. We researched model cities such as Toronto where enviro-education is working. The Inland Empire must involve our children in this "greening" effort, and using a successful educational technique known as "Transformative Sustainability Learning", the Green Valley Initiative will see lifelong commitment by these students and, thus, the long-term benefits of a greener future.

**Daniel Kane – California State University, Northridge**

*Using Arcades to Improve Walkable Spaces in the Suburbs (Undergraduate: Paper)*

Suburban neighborhoods are frequently poorly suited to pedestrian traffic. In addition to a host of other problems, the spaces that are set aside for pedestrians are unsafe, inefficient and aesthetically depressing. To correct this problem, and to aid in other efforts to make suburbia more pedestrian friendly, sidewalks could be transformed into arcades, adding overhead awnings supported by poles on one or both sides. Arcades have been employed effectively in multiple places and eras. Successful arcade environments suggest the arcades' potential as an effective insulating and beautifying force; one capable of placemaking. Arcades could produce protection from harsh climate, create barriers between pedestrians and cars; expand greenspace and artisanship; and bind locations of significance together.

**Sarah Kang- USC**

*Deconstructing Arizona's Border Wars (Undergraduate: Paper)*

Of the four U.S. states bordering Mexico, Arizona emerges as distinct locality in their ability to craft radical outcomes in the border wars. The combination of post-9/11 ideological fervor, holes in federal policy, and Arizona's unique sets of actors have produced outcomes that are not in the state's best interests. This paper focuses on three case studies illuminating these novel interactions between state and civil society, with agents and institutions operating at the federal, state, and local levels. The first involves Operation Streamline, a U.S. Customs and Border Patrol operation that expedited prosecution of border crossers at the expense of resources that would have ordinarily been directed at more serious drug and security crimes. In the second case, local businesses sued the state of Arizona against legislation holding employers responsible for the legal status of their employees. Finally, I focus on the creation of a new "Arizona Rangers" group. Their de facto policing along the border is often accused of civil rights violations.

**Dr. Eric T. Karlstrom- California State University, Stanislaus**

*Status of New Proposed Federal Energy Corridors (Faculty: Paper)*

The Department of Energy recently designated three massive federal energy "corridors." The West-Wide Energy Corridor would include over 6000 miles of 2/3 mile-wide corridors covering 3.3 million acres of federal land in 11 Western states, including California. The Southwestern Energy Corridor is not a "corridor" at all, but rather, is a 45-million-acre area that encompasses Los Angeles, San Diego, Las Vegas and Phoenix and large portions of southern California, Nevada, and Arizona, including 3 million acres of national parks, monuments and wildlife refuges, and 7.5 million acres of wilderness and wilderness study areas. Similarly, the Mid-Atlantic Area National Corridor is a 74+ million acre zone that encompasses Washington D.C., Baltimore, Philadelphia, and New York City, large portions of New York, Pennsylvania, Ohio, Virginia and West Virginia, and all of New Jersey, Delaware, and Maryland. State representatives and citizens' and environmental groups have raised concerns that these "corridors" violate States' rights, private

property rights, and environmental laws, including the National Environmental Policy Act. Lawsuits are pending.

**Kevin Kelly- University of Southern California**

*I can guess your Weight: Predicting levels of Obesity Geographically (Undergraduate: Paper)*

Obesity has become a major epidemic in the United States. More than 26% of the population has a body mass index greater than 30. Obesity is tied to increased medical risks for heart disease and diabetes as well as associated medical costs. In this presentation I begin by examining the alarming growth of obesity over the last twenty years and consider possible social causes such as the prevalence of fast food restaurants. Next I investigate the geographic dimensions of obesity. The rise in obesity across the United States appears to have a correlation to certain social factors. The factors I examine in this study include median income, life expectancy, and access to fast food restaurants. By analyzing these features on the state level I can reliably predict obesity rates at the county scale.

**Marti Klein- Saddleback College**

*Temporary Mobility, Travel Narratives, and the "Pull" of the Sea (Faculty: Paper)*

It was not unusual in early nineteenth century New England for well-educated young gentlemen to dream of "running away to sea". The pull factor that was responsible appears to have been travel narrative literature, a genre that enjoyed widespread popularity, particularly with young men. Travel narrative stories celebrated the typically exaggerated exploits of naval officers, adventurers, pirates, and so on. Young gentlemen who answered the pull of the sea usually did so in the form of leisure travel. A few, however, voluntarily chose the hardships of "shipping before the mast" for a few years as common seamen on merchant vessels. An examination of the lives of three young men depicted in Richard Henry Dana Jr.'s nonfiction travel narrative, *Two Years Before the Mast*, affords an unusual opportunity to explore the significance of this pull factor and the accuracy of decisions based on it.

**John Krafft- Sonoma State University**

*Carbon Sequestration in Vernal Pool Soils of the Laguna de Santa Rosa Watershed*

*(Undergraduate: Paper)*

Vernal pools have long been a part of the natural environment, providing essential functions within local and global cycles. The carbon cycle has become the most talked about area of concern in recent years as climate change has become widely accepted. Seasonal wetlands sequester carbon within soils at a larger rate than non-wetland areas; vernal pools are no different. In this study I demonstrate, on a fine scale, the difference in carbon sequestration between the most anaerobic conditions of a vernal pool compared with more aerobic conditions just outside the vernal pool. With these results in mind I then look at the impact of seasonal wetlands targeted for development due to urbanization. The loss of these seasonal wetlands not only degrades the intrinsic value of our environment, it also contributes to the changes in climate we have seen due to increasing CO<sub>2</sub> in our atmosphere

**Danielle Kreuzer and Anna Leeper- Humboldt State**

*Humboldt County Fresh Food Culture (Undergraduate: Paper)*

Humboldt County is an anomaly among most American communities, given that its food system is dominated by local farms and there has been longstanding community support for local food production. In this study, we explore how the place-specific agriculture of Humboldt County has generated a successful localized fresh food culture in the midst of a larger, increasingly globalized food industry. Interviews with farmers and community members, archival research, and participant observation suggest that Humboldt County has been able to manifest a strong local food culture due to its diverse climates (ranging from a moderate coastline to seasonally variable inland regions), its isolated relative location and distance from urban centers, and community support. We contend that the region's successful agricultural economy could inspire other communities hoping to increase their local food markets and might serve as a model for them to follow when beginning such an undertaking.

**Corie E. Lahr- University of California, Los Angeles**

*Cambodia's post-crisis population rebound: Evaluating population growth and modernization in Krouh Chhmar (Undergraduate: Poster)*

The civil turmoil period that begot high mortality rates in Cambodia during the 1970s now allows the country to act as a development model for the process of population "rebounds," or recovery, after human-induced or natural disaster scenarios. Charting changing standards of living in periphery countries depends on more than outdated census data; shifts toward modernization and declining poverty directly relate to securing infrastructure and agriculture development, which is indicated visibly on a local scale. High-resolution remote sensing imagery provides accurate census-caliber population counts by comparing a time series of digitized geographical locations of homes and community structures in rural Cambodia, while comparing roof materials of these structures and access to electricity simultaneously traces flux in poverty conditions for rural populations. Remote sensing proves to compliment census data on local, regional, and countrywide scales, filling in the gaps of population characteristics previously delegated to field validation.

**Anna Leeper and Danielle Kreuzer- Humboldt State**

*Humboldt County Fresh Food Culture (Undergraduate: Paper)*

See abstract from Danielle Kreuzer (co presenter)

**Sharlene V. Lucina- Cosumnes River College**

*Hetch Hetchy: A Case Study in Varying Environmental Perception Over Space (Undergraduate: Poster)*

Hetch Hetchy Reservoir, situated in the picturesque Yosemite National Park, has been a controversial topic for preservationists and conservationists since the early 1900s. This hidden jewel, located within the boundaries of a national park, was once a valley with lush meadows but has been artificially manipulated in order to store and supply water and electricity for San Francisco and other parts of the Bay Area. Preservationists continue to demand the restoration of the valley to its former natural state but it remains altered by an Act of Congress for the benefit of an urban area located 150 miles away. This poster will present the viewpoints of different individuals and groups in relation to Hetch Hetchy Reservoir and analyze how their perceptions vary over space.

**Alex Mandel- University of California, Davis**

*Spatialite: a new geospatial data format and analysis tool (Graduate: Paper)*

The shapefile, a common format for geospatial data, no longer suffices for efficient exchange and use of data. Limits on index length, multiple required files and limitations of the dbf format for storing attributes all inhibit the effective use and exchange of shapefiles. Several new formats primarily based on single file databases could potentially replace shapefiles. During the course of research, I assessed the ability of Spatialite, one new open source format based on the sqlite database, to replace the shapefile for everyday GIS applications and data exchange. Spatialite is an extension to sqlite that enables the storage and analysis of spatial data in a single file that overcomes many of the limits of other spatial formats and includes many features not found in previous tools. I'll discuss and demonstrate some of the common and unusual features of this new format and it's potential as a new common geospatial format.

**Angelyne Martiniuc- CSU Stanislaus**

*The Spatial Typology of Crime (Undergraduate: Map - Paper)*

Criminal typologies are used to organize our understanding of crime, those who commit it, and policy responses. Criminal typologies are typically divided into crime centered (e.g. violent versus property crime) or person centered (habitual versus sporadic) typologies. While crime mapping is a longstanding tradition in criminology and criminal justice, no published work deals with the spatial distribution of crime as a possible source of typology. Here, I explore the potential for a spatially centered typology of crime. Results suggest that spatial correlations exist among crimes that are commonly separated into at different typologies. That is, certain violent crimes correlate

more with certain property crimes than with other violent crimes, and vice versa. A third typology also appears, which includes crimes that display no certain spatial correlation to others.

**Lee McAuliffe- University of Southern California**

*Vacation at Home - The emergence of resort style residential design and planning (Undergraduate: Poster)*

Man-made beaches, private marinas and resort-style architecture have become the home of choice for many Hong Kong residents. While the growing population and pattern of high density living continues, many of Hong Kong's middle class residents are being drawn into large, mixed density resort-style residential developments on the outskirts of the city. This resort-residential environment produces a unique sense of community and has attracted residents to a life of seeming luxury and upward mobility. Well developed transport links between these developments and the city's Central District provide residents with a reasonable commute to and from the city. This poster examines three such residential developments in Hong Kong—Discovery Bay, Gold Coast Hong Kong and Caribbean Coast. My research argues that these developments sell a vacation-at-home lifestyle as an incentive to get people to live in outlying areas as part of an overall planning strategy to evenly distribute the growing population.

**Jonathan Mears- Humboldt State University**

*Sustainable Agriculture Techniques in Northwestern California (Undergraduate: Paper)*

Proponents of sustainability seek to establish a food paradigm that can exist in perpetuity by conserving soil fertility, water, energy, and genetic diversity; reducing/eliminating pollution; creating socially equitable food systems; and caring for the earth's natural systems and resources. This research project explores methods and philosophies of the sustainable agriculture movement that are proposed as solutions to the many ecologic and economic problems of industrial agriculture, within the context of Northwestern California. I compare organic, biodynamic, permaculture, and conventional agriculture techniques, and my analysis draws upon three main data sources - (1) interviews of small-scale farmers in Humboldt and Mendocino counties; (2) information gained from agroecology, geography, and botany classes at Humboldt State University; (3) books and articles on sustainable agriculture. This project not only outlines why sustainable agriculture is a necessary alternative to industrial agriculture but also how it may be implemented and what challenges it faces in the future.

**Reed Michaelsen- University of Southern California**

*Toward a Binary Border: The Open and Closed Frontier Between the U.S. and Mexico (Undergraduate: Paper)*

The U.S.-Mexico border was once simply an open and uncharted region of North America. But now, in the post 9/11 era, tracing the border from coast to coast reveals a "binary" line which funnels travelers through constructed crossings while blockading cross-border travel elsewhere. This scheme of physically organizing border crossings has a geographic metaphor in often-contradictory American policies, and encourages the development of illegal pathways across the line. What are the geographic and infrastructure ramifications of building such a sharply-defined line? The closed, and now walled-off, sections of the border contrast with the heavily-regulated border crossings, increasingly stressed by the high volume of travelers, migrants, and trade in both directions. This is an exploration of future and growing problems along the world's most frequently-crossed borderland.

**Deborah Milam- San Diego State University**

*An Epistematic Approach to Environmental Modeling in the Arctic (Graduate: Paper)*

This paper describes the application of an epistematic approach to the spatiotemporal modeling of the dates of snow melt across a region of tundra in northern Alaska. The date of snow melt (DOS) is an important metric for analyzing vegetation dynamics and can be helpful in analyzing climate change. Previous work was done to derive the DOS for the area from three years of MODIS satellite imagery (2003-2005). However, interference from cloud cover prevented determination of the exact DOS for portions of the landscape. In order to model and map the DOS surface for the entire area, it is important to consider the uncertainty inherent in the natural

processes that influence the DOS. The application of the spatiotemporal epistematic knowledge synthesis and graphical user interface (SEKS-GUI) methodology and techniques to the problem results in a more informative and accurate estimation than results from typical modeling approaches.

**Michael Moore- Humboldt State University**

*The Salvation Army Atlas: A guide to the presence, population, and work of the Army in the West (Undergraduate: Paper)*

The Salvation Army is a non-governmental organization working to meet the social, physical, and spiritual needs of people worldwide. Despite its global presence, public knowledge of the Army appears limited. Numerous documents record its locations and roles within the United States, but none have done so cartographically. In this presentation, I discuss the creation of an atlas that chronicles the current geography, populations, and activities of the Salvation Army, based on data collected from both primary and secondary sources. The 14 maps focus primarily on the Western U.S., but global and national maps are included where data permit. As the first maps of their kind and scope, this original project provides inspiration, guidance, and a point of departure for future cartographic work on NGOs and their outreach efforts. Keywords Salvation Army, cartography, non-governmental organization, atlas, United States

**Juan R. Morales - University of Southern California**

*The Geography of Foreclosure (Undergraduate: Paper)*

The catastrophic downturn in the economy has hit Los Angeles hard. In Los Angeles County alone, over 20,000 houses and condos have fallen to foreclosure. This number is projected to double in the next few months. Families are losing their houses due to job loss, ballooning mortgage payments, etc. This presentation examines the factors that seem to be tied to the foreclosures, who are the those affected most severely, where are the areas of high risks and what else beyond income and job loss contributes to foreclosure susceptibility. Data relating to foreclosures, job loss, race and income for Los Angeles were analyzed, and interpreted in ArcGIS 9.3. The results reveal that both race and income, appear to be factors. There are also clusters of foreclosures that require further investigation. GIS is an important tool to anticipate where foreclosures will likely happen next, and provides a unique window on the distribution of despair as the economy continues to unravel.

**Ashly Morgan- Orange Coast College**

*Gentrification of Santa Ana (Undergraduate: Poster)*

The City of Santa Ana is in the process of gentrification, which is bringing higher- income residents and business owners into the inner city. My poster project shows the City of Santa Ana in three stages of maps; where the city was 5-10 years ago, where it is now, and where it will be in 5-10 years. The project explores property values, unemployment, the business sector, and other issues. The project also investigates the question of how the City will manage the displacement of the lower-income residents who currently reside there.

**Diana Muncy- Humboldt State University**

*Alaska (Undergraduate: Map - Paper)*

If the state of Alaska were placed over of the "lower 48," the Aleutian Island chain would touch California's coast, the southeastern coast near Juneau would rest atop Georgia, and the North Slope would cover Minnesota. Alaska's 39 mountain ranges contain 17 of the 20 highest peaks in North America including the highest, Mount McKinley (Denali); as well as the Brooks Range in the northwest, the Chugach Range near Anchorage, the St. Elias Mountains, and the Fairweather Range stretching into the southeast panhandle. This cartographic interpretation displays the spectacular physical relief of Alaska and highlights its numerous volcanic features. Keywords: Alaska, physical relief, geography, mountain ranges, peaks, volcanoes.

**Christina Murphy- Sonoma State University**

*Earthquake Preparedness in the San Francisco Bay Area (Undergraduate: Poster)*

California likes to shake things up, not only is it a hip state, but also because it is located on the boundary between the North American and Pacific plates – thus the State is highly prone to

earthquakes. According to the USGS (2007), there is a 62% chance that the San Francisco Bay Area will experience an earthquake of 6.7 or greater magnitude by 2032. Earthquake preparedness is essential. However, the degree to which individual households are sufficiently ready is low. This poster investigates the ways in which governmental institutions and local organizations are working to improve overall preparedness. This study is based on a review of literature that addresses earthquake risks and disaster mitigation, as well as informal interviews with relevant personnel. My work presents key strategies and concerns of these organizations and compares local conditions with those in selected quake prone regions in the world.

**Elod Nemeth- California State University, Northridge**

*Growth of City of Guadalupe (Undergraduate: Paper)*

The City of Guadalupe is a small town west of Santa Maria. The land is predominantly used for agriculture, though development of other sorts has changed the region recently. Guadalupe was established in 1840 and incorporated on August 3rd, 1946. Most of the development started in 1954, and it is a fast growing city today. Aerial photography has been used to analyze and evaluate changes in the area through time. Special attention is given to development in 1954, 1974, 1987 and 2007. Both human induced change and naturally occurring changes are discussed, including shifting sand dunes, agriculture, wetlands, rivers and forest. Analysis indicates that change is largely due to the increase in farming around Guadalupe and from development by wealthy individuals who come to enjoy the weather and the oceanside amenities.

**Jameson Newton- San Diego State University**

*Effects of Changing Precipitation Characteristics on Water Resource - A Review (Undergraduate: Paper)*

In recent decades changes in precipitation have been observed in the Sierra Nevada Mountain Range. There has been a greater occurrence of rainfall instead of snowfall throughout the region. It is believed that this is an effect of global climate change. Much of the Western United States depends on seasonal snow pack as a means of supplying water to urbanized areas. When more precipitation falls as rain and less as snow, water resource systems become stressed. These systems, such as reservoir systems, are designed to work with seasonal snow pack that provide stream flow during the dry summer period. This paper is a review that investigates and synthesizes the work of other researchers on these effects, comparing and contrasting their methodologies and results.

**Mary Ngo- CSU Long Beach**

*Loss of identity: The emotional battle to (re)gain federal recognition and reparation by the Winnemem Wintu of McCloud River (Graduate: Poster)*

The Winnemem Wintu tribe in northern California has lost over ninety percent of their ancestral lands due to Shasta Dam and Shasta Lake. The Winnemem have also lost their federally recognized status without explanation; they received Bureau of Indian Affairs services such as higher educational grants, housing assistance and health services up until 1985. Since then the Winnemem Wintu have been continuing their fight, an emotional battle, against government agencies for reparation of land and (re)establishment of their federal identity. Effects on emotional health due to the loss of federal recognition and loss of ancestral lands are not well-documented and are not understood by government agencies or the public. Employing feminist geographical analyses, I will show the importance of regaining federal recognition and how significant ancestral lands are to the Winnemem's identity and emotional well-being.

**Jared Nineberg- California State University Northridge**

*Racial segregation of west-central San Fernando Valley's single family residential housing market- an analysis of the spatial distribution of foreclosure (Undergraduate: Paper)*

The current financial crisis is largely a result of failed economic and fiscal regulations. Many regulators in Washington, on Wall Street, in Sacramento and on Main Street chose irrational exuberance over rational action. The resulting housing bubble forced many American to buy homes they could not afford and rely heavily on home equity to secure their future. When the housing market collapsed, many homeowners became economically distressed and were forced

to sell their homes. Many were foreclosed upon. This paper examines the pattern of foreclosure in Los Angeles' San Fernando Valley where single family home foreclosures are significantly concentrated in Latino neighborhoods. Also discussed is the peculiar pattern of foreclosures in neighborhoods that are majority white, but adjacent to Latino neighborhoods.

**Jenny Novak- University of Southern California**

*Spatial patterns in neighborhood scale post-disaster recovery: A case study of one Hurricane Katrina community (Graduate: Paper)*

Over three years after Hurricane Katrina made landfall, many neighborhoods in New Orleans have still to reach pre-disaster normalcy. Abandoned homes, storm damaged properties, severe vegetation overgrowth and complete return can often be found within a single street segment. This neighborhood scale recovery process remains relatively under studied in comparison to other phases of the disaster cycle. This paper will employ a spatial analytical approach more commonly applied to health data. Google Streetview Footage for the Holy Cross neighborhood of New Orleans is used as input data for a spatial filtering approach used to identify hotspots of recovery and continued abandonment. This method is further explored by testing different filter sizes and post-disaster built environment input measurements to determine the spatial stability of the resulting hot spots. Keywords Hurricane Katrina, spatial filter, disaster recovery, geographic information systems

**Fletcher O'Brien- CSU Chico**

*Castles of Wales (Undergraduate: Map - Paper)*

The map "Castles in Wales" was created for an Advanced Cartography course at CSU Chico during the spring of 2007. This map depicts the distribution, history, and modern accessibility of a selection of medieval castles in Wales. It was created due to personal interest and for supporting my travels during a year abroad. The main tools I used to create this map were Adobe Illustrator and Photoshop; it is suitable for printing on a four color offset press in CMYK color.

**Matthew Ottoson- California State University, Fullerton**

*Post World War 2 Expansion in the City of Orange (Undergraduate: Poster)*

The poster dives into the major topics related to expansion that were on going in the City of Orange during the Post World War 2 growth of Southern California. Major topics include: the reasons for the large population influx within the city after the war, land annexation and acquisition, major problems that occurred for the city during expansion and the increased segregation that subsequently occurred from expansion of the city.

**Michael Owens- Humboldt State University**

*Humboldt County Agriculture: variety and viability of Grain Production. (Undergraduate: Paper)*

Humboldt County is located on Northwest coast of California. With dense forests and mountain ranges, agriculture is limited to the Klamath, Eel, Trinity, and Mad river valleys and the converted wetlands around Humboldt Bay. Historically Humboldt has produced award-winning grain, including first prize at the Columbian Expedition in Chicago during the late 1800's. However, the growing of grain for human consumption has declined since. My study explores the soil types, microclimate, and varieties of grain grown along the coast and in the mountain valleys. In this paper I will examine the relevance of crop disease/insect infestation, transportation, and market changes within a historical-geographic context. Keywords Grain Production, Agriculture, Humboldt County.

**Dario Padilla- Humboldt State University**

*Exploring the effects of illegal camping in the Arcata Community Forest (Undergraduate: Paper)*

Illegal camping in the Arcata Community Forest increased dramatically in 2008, most likely associated with the receding economy and the rise in homeless in the nation. The park, previously visited by local residents, now is rarely visited because of the presence of homeless men and the fact that there is no ranger on duty. There is a proliferation of litter on the forest floor including abandoned tents, sleeping bags, clothing, plastic containers, glass bottles, and aluminum cans, and other household trash. In my field observation, I discovered over 12 sites in

one half-mile trail (#14). These data indicate that most camps are located in close proximity to Redwood Park. Since the park is not designed for camping, the immediate effects appear to be environmental but in reality they are more social as reflected in declining use, particularly among women and children. Keywords- Illegal camping, Arcata Community Forest, Public parks, Homelessness.

**Pam Patipanavat- University of Southern California**

*An Interactive map of LEED certified commercial buildings in greater Los Angeles”  
(Undergraduate: Map - Digital)*

Rising energy costs and the need to conserve finite resources has stimulated a movement to incorporate environmentally friendly technologies into the built environment. Adopting green building strategies dramatically reduces electrical operating costs, optimizes life-cycle performance, and enhances the comfort and health of building occupants. Here in California the demand for green buildings has been encouraged by the passage of Executive Order S-20-04 in December 2004. The U.S. Green Building Council (USGBC) has developed the Leadership in Energy and Environmental Design (LEED) green building rating system, to certify environment, economic, and social benefits in specific buildings. With the endorsement of the USGBC Los Angeles chapter, I have constructed an interactive map showing the distribution of LEED certified commercial buildings in greater Los Angeles. I constructed this map using html with coding to create a webpage where the user can visualize specific details of each building and its location. Clicking on the building icon reveals a photograph of each structure and detailed information, including address, type of business, level of LEED certification, and other information.

**Russell Peck- CSU Stanislaus**

*Mapping the Empire Mine Railroad (Undergraduate: Poster)*

The Empire Mine Railroad was constructed in 1878 to connect the coal mines south of Antioch six miles to the Sacramento River. The railroad ran until 1897 and played an important role in the early industrialization of the Bay Area, with coal from the mines shipped to Sacramento, Stockton, and San Francisco. The purpose of this project was to determine what remained of the railroad grade after over a century of abandonment. This was accomplished by comparing a historic map of the line with modern topographic and aerial images of the same area to locate and document remains of the railroad's route. Field work confirmed the presence of remains along the line and geographic information system applications were used to compile the collected data into an accurate map of the railroad as it appears today.

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

*Vietnamese Immigrant Kitchen Gardens: Cultural Change from an Ethnobotanical Perspective  
(Graduate: Paper)*

Few ethnobotanical studies have been conducted on recent diasporas to date, although research in this area may be useful in elucidating the processes 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. The results are presented with respect to the "presentist" bias characteristic of diasporic studies, and moreover, demonstrates the manner in which culture - both past and present - is a process, rather than a static state, as indicated by ways in which historical and contemporary trade linkages affect Vietnamese ethnobotany.

**Kristen Pope- Humboldt State University**

*Examining Community and Place in the “Seeker” Seasonal Worker Community in Denali National Park, Alaska (Graduate: Paper)*

Seasonal workers in Denali National Park, Alaska's Parkside community redefine traditional concepts of community and place. Instead of fostering a year-round place-based community, they have constructed a strong and functional community within a mobile context. This study includes interviews with community members during the 2006 and 2008 summer seasons and a review of literature on transience, seasonal work, and mobility. Five key factors contribute to the

functionality of this community, including: common goals and values, a physical housing infrastructure that requires communal living, facing adversity (including illnesses and the chronic struggles of seasonal life), lack of traditional family structures, and networking that allows for low-cost off-season travel. Parkside defies the traditional parameters of community and establishes a strong and functional community within a mobile and transient context.

**Dayna J. Quick- University of California, Santa Barbara**

*Investigating the Influence of Owens Lake Playa Dust on Alluvial Soils using Strontium Isotopes (Graduate: Paper)*

I present preliminary results from an ongoing study of soil-ecosystem responses to dust flux from Owens Lake Playa in Owens Valley, California. My goal is to document the spatial impact of the dust on soils with distance from the playa by using strontium isotopes as an ecosystem tracer. We have sampled soils on alluvial fans derived from Sierra Nevada granites along the north-south valley axis. There are distinct contrasts in trace element chemistry, strontium isotopic composition and particle size among the granitic parent material, the playa sediments and the regional dust rain. These contrasts allow us to develop quantitative estimates of the role of salts and fines in the soil profiles and to assign fractions of contribution from different sources. Results will move the analysis of the prodigious dust clouds that are thought to impact human health to an analysis of their impact on the ecosystems of Owens Valley.

**Rachel R. Rodriguez- Humboldt State**

*Humboldt Archipelago (Undergraduate: Map - Digital)*

The County of Humboldt, in the eve of the year 2006 was isolated by a torrential storm and became "Humboldt Archipelago" or better known "Humboldt Island". Many locations in Humboldt County were secluded for days after the storm due to high water levels, inaccessible roads and debris. Utilizing GIS analysis, I will visually show the impact of the storm, and the potential for a greater severity storm to block resident's access to emergency services.

**Zia Salim- San Diego State University**

*Mecca: A Sacred City's Urban Past, Present, and Future (Graduate: Paper)*

Although Mecca is the religious center for the world's billion-plus Muslims, little is known about the city itself. This paper examines urban form and function through a review of Mecca's past, present, and future. Although it has a unique history, some aspects of the built environment are reflective of common elements of Islamic city design, and to an extent the city follows Stewart and Ziegler's Middle Eastern city model. The past and present are inextricably linked Mecca's past has shaped the present urban form of the mosque (the city's sacred center) and the city as a whole in a continuing process of evolution. A consideration of the city's future raises interesting questions about the balance between historic preservation and development (in an era of regional urban mega-projects), questions that urban geographers are well-positioned to study and explain.

**Tiffany Seeley and Zia Salim- CSU Fullerton**

*Housing Compounds in Saudi Arabia: Spatial Distribution and Urban Form (Undergraduate: Poster)*

In the major cities of Saudi Arabia, housing compounds hold hundreds, sometimes thousands, of expatriate workers and families. Despite the significant presence of these gated communities across the Saudi urban landscape, they have largely been understudied. In this poster we analyze the spatial distribution and urban form of housing compounds in three major cities in Saudi Arabia. By illuminating the connections between urban form and social processes, compounds provide a unique example of space-society relations. This research is part of a broader project examining the urban form of compounds and the experiences of the expatriates who live in them. We conclude that research on these understudied areas is a valuable addition to previous work on ethnic enclaves and gated communities.

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

*Discovering and Researching California's Cultural and Biological Diversity (Faculty: Paper)*  
Geographers at Santa Monica College have discovered two new species, produced one film about the natural history of the Santa Monica Mountains and another film about the ethnic neighborhoods of Los Angeles, with a self-guided field booklet. How? Working in partnership with the National Park Service, geography students have helped restore habitats along the coast and discovered species in Death Valley. Working with our Global Citizenship Initiative, we have been reaching out to communities in the L.A. area, studying their incredibly diverse cultures and producing products that share our discoveries with a wider audience. These interdisciplinary activities and research projects have provided invaluable educational and problem-solving opportunities for our students and have revealed the biological and cultural diversity that qualify these landscapes as important biological and cultural hot spots.

**Debra Sharkey- Cosumnes River College**

*Global Climate Change: A New Interdisciplinary Lower-Division Course (Faculty: Paper)*  
This paper will present curriculum ideas, enrollment data, as well as student feedback from a new, interdisciplinary lower-division course on global climate change taught at Cosumnes River College in Sacramento, CA. This course was originally conceived and developed by two faculty colleagues one a geographer and the other a biologist. The course has been offered twice since Spring 2008. Those interested in developing a similar course at their home institution are especially encouraged to attend.

**Brian Shepard- Sonoma State University**

*Look Both Ways: An Assessment of Crosswalk Effectiveness and Pedestrian Safety at Sonoma State University, California (Undergraduate: Paper)*  
This paper explores the interacting relationships between pedestrians and drivers at various crosswalk intersections located throughout Sonoma State University in Rohnert Park, Ca. The objective of the survey is to assess the effectiveness and safety of crosswalks on campus through observation and data collected from Sonoma State Campus Security. Primary factors to be focused on include: traffic flow, law abidance, driver awareness, driver population, driver speed, pedestrian awareness, pedestrian population, pedestrian speed and crossing intervals. By locating the higher risk areas more vulnerable to accidents I will suggest implementing additional measures of safety to be considered by campus security for the future benefit of our school's student population. In deciding what safety precautions should be introduced I am analyzing similar secondary studies and comparing them to my own research.

**Daniel Siegel- CSU Chico**

*Fall Migration of the Small Cackling Goose. (Undergraduate: Map - Paper)*  
Every August the small cackling goose (*Branta hutchinsii minima*) departs from its breeding grounds in Alaska's Yukon-Kuskokwim Delta for wintering grounds in Oregon and California. The map shows the flight paths and habitats used by the goose, as well as information on spatial distribution shifts over the last 50 years. The map was constructed using ArcGIS and the Adobe CS2 software package based on data compiled by the Pacific Flyway Council, an international organization responsible for the protection and conservation of migratory birds in North America.

**Heather Siler- California State University, Chico**

*Big Chico Creek Ecological Reserve- Management Zones (Undergraduate: Map - Paper)*  
The map, Big Chico Creek Ecological Reserve - Management Zones, was produced in conjunction with the Center for Excellence in Learning and Teaching (C.E.L.T.) foundation, California State University, Chico Department of Geography and Planning, and the Big Management Zones, was produced in conjunction with the Center for Excellence in Learning and Teaching (C.E.L.T.) foundation, California State University, Chico Department of Geography and Planning, and the Big Chico Creek Ecological Reserve (BCCER). The 3,950 acre reserve, located 10 miles east of Chico, CA, is owned by the University Research Foundation. The BCCER contributes to the preservation and understanding of critical habitat by providing a natural setting for research and education. At the request of the BCCER, and to facilitate the mission of

the reserve, this map was produced. Since no map existed for the BCCER, a 1 meter DEM was acquired for base mapping, while roads, trails, and site data were collected using a GPS device and through extensive field work. The GPS and DEM data were processed using ArcGIS and the spatial analyst extension, and then exported to the Adobe Illustrator suite of products for printing, clean-up, and to assist with the distribution of the finished map.

**Betty Elaine Smith- Eastern Illinois University**

*Ancient Paths of Highland Ecuador (Faculty: Paper)*

A vast network of prehispanic trails exist along the ridges of highland Ecuador connecting cultures both past and present. Switching back and forth down steep western slopes, dirt paths and rough roads are still used by locals who make their way along the Pacific facing mountains through rich cloud forests and lush highland pastures. As the trails drop in elevation to more temperate environments, small sugarcane and tomato producers are evident on the landscape. This paper discusses the history and present use of the trails. During August 2008 a global positioning system and local knowledge were used to identify and trace on digital topographic maps a small portion of an east-west Andean-Coastal pre-colonial trade route located west of the Panamerican Highway in Cotopaxi Province approximately 30 miles west of Lasso, Ecuador. Photos and maps help us understand the significance of these trade routes that are both ancient and modern.

**Brenton Smith- California State University, Northridge**

*Where to live without a car (Graduate: Paper)*

In the future consumers will seek out places where daily travel can be managed with less daily use of a personal private car. These places will be more compact and more oriented to accommodate human powered transportation and to make use of public transportation networks. Some places will be built from scratch to accommodate this postulated market demand. Some places will be modified to accommodate the lifestyle that relies less on an automobile. Advances in technology will create opportunities to use less of the petroleum distillates that fuel the transportation fleet. These are expensive options; however, and it is the consumer who will pay for new developments and new technological solutions. To the extent that a place can be identified where lifestyle is already possible where one can negotiate quotidian affairs with less use of a personal private automobile, consumers may realize present and future savings by relocating to, and living in these places. United States Census 2000 data will be queried and calculations will be performed to evaluate characteristics of places where one can live without a car to use in one's daily affairs.

**Kathleen Soneson- Cosumnes River College**

*Escaping Paradise- Changing Climate Is Destroying Fiji (Undergraduate: Poster)*

The effects of global warming and climate change have deeply impacted Fiji. Climate change is affecting one of Fiji's largest islands, Viti Levu, because of intensive deforestation, pollution, and exploitation of coastal resources. It is causing areas of the coast to be eroded. It is predicted that the health and agricultural conditions of the island will decline as the sea level rises and massive storms bring excessive rain to the islands. Even though Fiji is a low emitter of greenhouse gases they are attempting to change their ways to preserve their land, agricultural stability, and health. Projects are being proposed to help improve Fiji's water, crops, and land for its inhabitants. The purpose of this purpose is to explain the impact of climate change on Fiji.

**Jennifer Steffler- CSU, Stanislaus**

*Foreclosure Activity and Animal Abandonment for Turlock, CA 2008 (Undergraduate: Paper)*

Increased pet abandonment due to foreclosure has received media attention, yet research on the topic is limited to informal reports by municipal shelters. I use foreclosure locations and dog relinquishment locations (Turlock, CA 2008) to explore the potential hidden side of foreclosure related pet abandonment. A moderate relationship is found between foreclosure location and dog relinquishment location. No citable relationship was found between altered (spayed/neutered) versus unaltered dogs and foreclosure location. However, when foreclosures were divided according to home loan amount (as a measure of socio-economic status [SES]) dogs from lower home price areas were more likely to be unaltered. Results suggest that the

potential for feral, unaltered animals is greater in lower SES areas, creating yet another disproportionate adversity faced by these communities. Policy implications are discussed.

**Jamie D. Stern- California State University Northridge**

*Baseline Development: Soil Study Techniques for Graduate Geographers (Graduate: Paper)*

Soil studies were conducted at a stream flow site in Owens Valley, California to develop a baseline soil transect. Manual augering was used to obtain 15 soil samples at various depths in the vadose zone. Soil samples were taken at the surface as well as two feet below grade. Regional soil and vadose zone characteristics have been catalogued and include moisture content, specific soil characteristics, hydraulic conductivity, ground water elevation, (total) soil hydrocarbon gas, and surface biota. Methodologies used in this study specifically address the analyses of soil gas, moisture content, hydraulic conductivity, and soil and rock identification. Results include soil characteristics identified by standard classification criteria and include composition, particle description, moisture, pH and possible inclusions or trace contaminants. The results from this study are being used as base data and will be compared to future rounds of sampling at the study site.

**Ray Sumner- Long Beach City College**

*Human Influences on Natural Vegetation of Palos Verdes Peninsula: Geosciences Diversity Enhancement Project, CSU Long Beach (Faculty: Poster)*

In summer 2008, members of the Geosciences Enhancement Diversity Program (GDEP) analyzed the vegetation of selected plots in lands managed by the Palos Verdes Peninsula Land Conservancy (PVPLC), using aerial photos, GIS, and field sampling. Current research into preservation and restoration of the California Coastal Sage Scrub on the Palos Verdes Peninsula is contextualized in the ongoing narrative of human occupancy. Four phases of sequential occupation were driven by differing values placed on landscape by sequential occupant groups. This preliminary analysis develops a historical narrative of the social function of landscape with reference to the study area of the Palos Verdes Peninsula.

**Michele M Tobias- University of California, Davis**

*Beach Builders: California Beach Plants as Potential Biogeomorphic Agents (Graduate: Paper)*

Plants are thought to build foredunes on beaches by stopping the landward movement of sand, holding sand in place as they grow up through deeper deposits. In Texas, some species of plants are associated with specific topography, but no study exists in California indicating that beach plant species are associated with slope angles. In this study, ten California beaches were sampled using one-meter wide belt transects from the first vegetation encountered to the top of the foredune. A multi-response permutation procedures (MRPP) test indicates that California beach plants differ in terms of their distance from high water line, elevation, and slope. Hierarchical clustering divides these plants into two groups that may correspond with the ability to build topography and the need to grown on already established elevations. Graphs combining an averaged beach profile and distributions of species along the transect help explain the results of the MRPP test and clustering.

**Jorge L. Tovar- CSU Long Beach**

*Culture of Consumption and Emotional Health & Wellbeing in Retail Spaces (Graduate: Poster)*

American consumerism and way of life has become popular in many countries, one might say the American Dream is alive all over the world. My research project will demonstrate how America's culture of consumption creates imbalance and inequality; how those who were disadvantaged by the unequal distribution of opportunities that enabled movement up the economic ladder (college tuition and mortgage money) were discriminated against and discouraged from participating in the attainment of the American Dream. Included will be the effects of American consumerism on current populations. The research will elaborate on the hard to reach economic goals, and how the American Dream is seemingly slipping away from most. Using geographical analyses, my research will be a valuable contribution to geographic knowledge, investigating the emotional health and well-being of those excluded from participating in the American Dream and the problems associated with American consumerism.

**Eugene Turner and James Allen- California State University, Northridge**

*Benefits of Mapping Detailed Ethnic Change in Urban Geography, (Faculty: Paper)*

See abstract from James P. Allen (co-presenter)

**Vienne Vu- CSU Fullerton**

*Are you what you eat? Assimilation and changing foodways among Vietnamese Americans (Graduate: Paper)*

Immigrants are often exposed to a new culture, traditions, language, and foods. Research shows that those who feel more comfortable with the host culture and identify with the cultural environment around them have an easier time assimilating. One of the pathways for assimilation is the adoption of new food habits. This research investigated the changing foodways of Vietnamese immigrants living in Orange County, California as they assimilate to American culture. Differences in food consumption habits between various generations, waves of immigrants, and proximity to Little Saigon, the cultural hub of Vietnamese Americans, were examined. Qualitative and quantitative data were collected by means of open-ended questionnaires, participant observation, and formal and informal interviews. The results of the study revealed a positive correlation between changing food habits and cultural assimilation in some categories but not in others.

**Jan-Eave Wan- University of Southern California**

*A River of Sickness? Pollution in the Colorado River (Undergraduate: Paper)*

While conflict over Colorado River water allocations have often been the main issue of the river, water pollution is an equally important subject. Even though the river averages only about 1% of the Mississippi River's annual flow. Its basin covers about 250,000 square miles, coursing through 7 states providing drinking water for about 25 million people. A dangerous contaminant of perchlorate, a chemical used in rocket fuel, is found along the river with its source a former facility of the Kerr-McGee Corporation in Henderson, Nevada. Perchlorate is known to cause thyroid disease. Levels in Lake Mead have been found to be as high as 24 parts per billion but there is no federal health standard for perchlorate levels. This project tracks perchlorate pollution of public water supplies and links this to patterns of increased thyroid disease in communities along the river.

**Evan Watson- Cosumnes River College**

*The Ming Armada-A Cautionary Tale (Undergraduate: Poster)*

The printing press. Gunpowder. Compasses. At first, these seem to have little in common, but upon closer examination, that's not true. All three were pivotal in the European conquest of the rest of the world. All three were invented in China hundreds of years before Europeans had them. So why was it Europe that subjugated every other continent during the colonial period, rather than China? The answer, as this project will clearly demonstrate, is not inherent in the people themselves, but in the places they inhabited. The surprising truth and its implications on our modern world give new context to modern globalization.

**Patrick Weber- CSU Long Beach**

*Community Gardening in South-Central Los Angeles (Graduate: Poster)*

Los Angeles County has 60+ community gardens. Among them used to be the nation's largest; the 14-acre South-Central Community Garden (SCCG). After 13 years of operation, the garden was bulldozed for a warehouse in 2006. This poster first explains the urban situation that led to community gardening. Extraordinary in size and media attention, the rise and fall of the SCCG is a case study in lack of access to open space and fresh food in inner-city L.A. Second, the poster sketches how the gardeners made their urban farm their social and cultural center point. Finally, it shows the destruction of the garden due to land development pressures. Many evicted gardeners feel that with their garden also a part of their social and cultural identity has been razed. Strengthened in their determination, some of them now farm their own land, 130 miles to the north.

**Shane Western- California State University, Northridge**

*Mapping Wetland and Riparian Habitats in Southern California Coastal Watersheds (Graduate: 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, a loss of biodiversity, and has contributed to a decline in water quality. Unfortunately, recent wetland 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 by the Southern California Coast Water Research Project (SCCWRP) and California State University, Northridge (CSUN). This paper 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, and conservation planning.

**Amber White- Humboldt State University**

*Arcata California Tsunami Risk and (Undergraduate: Map - Digital)*

Tsunamis, historic and pre-historic, along the Northern California coast have been documented with help from many scientific disciplines. Guidelines have been setup by both state and federal agencies to implement minimum safety standards for tsunami hazard mitigation. This map was created to show evacuation routes and to identify neighborhoods that are situated in areas of risk, and to show locations of temporary shelters and emergency services in case of such an event.

Using the inundation models and base data from state and federal agencies, including NOAA's Pacific Marine Environmental Laboratory and the USGS, an animated tsunami risk map was created using ArcGIS, Adobe Illustrator, and Adobe Flash.

**Jenae Woodward - University**

*Coca as a Threat to Cultural Diversity The coca plant is distributed throughout the Andean region where its medicinal properties play an intricate role (Undergraduate: Paper)*

The coca plant is distributed throughout the Andean region where its medicinal properties play an intricate role in the lives of many Indigenous groups. Increased globalization has resulted in the exploitation of this plant. The effects have been extremely detrimental on both the social customs and cultural practices within these native communities. In understanding the depth of this problem, I focused my research on the history of coca, the process of developing it into cocaine, the exploitation of coca growers, and the effects on coca chewing communities. Due to the vast diversity of coca, I centered my research on case studies of both Bolivia and Peru. Current day issues, in Bolivia, have resulted in extreme conflict with the United States. The intention of my research was to gain an understanding of this problem while bringing to light the corruption that has affected thousands of people.

**Christine Zuhlsdorf- UCLA**

*Reconstruction of Holocene Vegetation and Paleoclimate of the Uinta Mountains, Utah (Graduate: Paper)*

Areas of the interior Western United States have expressed an array of responses to climate forcing in the Holocene. The east-west trending Uinta Mountains in Northeastern Utah are an ideal region for studying climate changes because of their location at the limits of both Eastern Pacific and monsoonal influence. Of particular interest are climate changes that took place in this region during the mid-Holocene warm period. We present a late Pleistocene and Holocene paleoclimate reconstruction of vegetation change for the Uinta Mountains. Ideally situated on the northern side of the Uinta Mountain Range at the boundary of sagebrush and conifer forest, the vegetation surrounding Little Lyman Lake is sensitive to moisture and temperature variations.

Using a modern pollen template created from 42 lake surface samples collected around the Uinta Mountain Range we infer climate induced vegetation changes in a 9-meter sediment core taken from Little Lyman Lake. The results from this study are compared with previous paleoclimate research in the Western United States.