

**STUDENT DIRECTED
RESEARCH PROJECTS
Titles and Authors**

Spring 2009



The School for Field Studies

environmental field studies abroad

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Carapace size versus gonadic development of the blue crab (*Callinectes bellicosus*) in Magdalena Bay, Baja California Sur, Mexico. Kimberly Schubert, University of Maryland.

The Abundance and Distribution of the Male and Female Pacific Blue Crab, *Callinectes bellicosus*, in Magdalena Bay (Baja California Sur, Mexico). Patrick T. McGettigan, Boston University

A comparison between biological data collection of the blue crab *Callinectes bellicosus* fishery in Magdalena Bay, Baja California Sur, Mexico in 1999 and 2009 and its application for improved management of this fishery. Amelia Johnson, University of Pittsburgh.

Gonadic Distribution in *Callinectes bellicosus*. Meredith Cavanaugh, Franklin and Marshall College.

Population structure of green sea turtles (*Chelonia mydas*) in three sites within Bahía Magdalena, Baja California Sur, Mexico. Shahla Farzan, Mount Holyoke College.

Sea Turtle Mortality in Bahía Magdalena. Alicia Barlow, Clark University/Massachusetts.

The average yearly growth rates of sea turtles captured at Banderitas and San Buto, Bahía Magdalena. Cynthia L. Everitt, Hollins University.

Population and distribution of *Eschrichtius robustus* in Bahía Magdalena, BCS. Elizabeth McNamee, Boston University.

Uses and Limitations of Photo Identification of the Gray Whales of Bahía Magdalena, BCS Mexico. Emma Gildegame, Colby College.

Rate of Weight Change of *Chelonia mydas* at Three Different Sites in Bahía Magdalena. Monica Joshi, Swarthmore College.

Imaging Conservation: Sea turtle morals and their affect on communities' environmental consciousness and behaviors in Baja California Sur, Mexico. Alyssa Irizarry, Tufts University.

Experiential environmental learning and charismatic species: The retention of knowledge and change in pro-environmental actions. Alysha Cahlan, Williams College.

Experiential environmental learning and charismatic species: The retention of knowledge and change in pro-environmental actions. Sarah Ebel, Bowdoin College.

Sea Turtle Conservation NGOs in Baja California Sur, Mexico: Communication and Government Interaction. Larissa Liebmann, Brandeis University.

Sea Turtle Conservation: Communication and Participation. Madeline Emde, The College of New Jersey.

(KENYA – Spring 2009)

Assessment of cultural Manyattas as tools for wildlife conservation in the Amboseli region, Kenya: economic, cultural and environmental implications. Anna Law, Barnard College, Columbia University.

Assessment of cultural Manyattas as a means of local communities capitalizing on conservation benefits and its implications within the Amboseli Region, Kenya. Valerie Valant, Hamilton College.

Analysis of cultural manyattas as a community conservation tool in the Amboseli region, Kenya: socio-economic and cultural implications. Anna Sakellariadis, Harvard University.

Assessing the effectiveness of cultural manyattas in distributing conservation benefits and their impacts within the Amboseli region, Kenya. Morgan Carr-Markell, Wellesley College.

Cultural manyattas as a means of achieving wildlife conservation and social development in the Amboseli region, Kenya: Perceptions and benefits. Sarah Huntington Hall, Loyola University/New Orleans.

Assessment of cultural manyattas as a means of attaining benefits from conservation and its implications in the Amboseli region, Kenya. Catherine Dann, Boston University.

Assessment of the cultural manyatta model as an instrument for local community benefits: conservation and implications in the Amboseli region, Kenya. Christopher Adams, Hawai'i Pacific University.

Assessment of cultural manyattas capitalization of conservation benefits in the Amboseli region, Kenya: Impacts. Jake Tull, University of the Ozarks.

Range Condition Changes in Kenya's Amboseli Region: Analysis of Ecological Trends and Human Impacts within Kuku Group Ranch. William Blom, University of Southern California.

An Assessment of Range Condition Changes and Trends in Kuku Group Ranch, Kenya. Anna Petterson, Denison University.

Community perceptions and vegetation assessment of range condition changes and trends in Kuku Group Ranch, Loitokitok District. Cybil W. Covic, Rhodes College.

Community perceptions and assessment of changes in rangeland condition in Kuku group ranch. Emma Impink, Barnard College.

Condition and Trends of the Kuku Group Ranch in the Amboseli Region of Kenya. Frances Armstrong, College of William and Mary.

A Field and Community Based Assessment on Range Conditions and Changes in Kuku Group Ranch, Kenya. Isobel Flake, Wheaton College

Assessment and Community Perceptions of Range Condition and Trends in the Amboseli Region, Kenya. Jennifer Okajima, University of Rochester.

Assessment and Community Perceptions on Range Conditions in Kuku Group Ranch, Loitokitok District, Kenya. Jessica Kafer, The College of New Jersey.

Impacts of Environmental and Anthropogenic Influences on Range Condition and Trends in Maasai Group Ranches of the Amboseli Region. Elizabeth E. Crabtree, Franklin and Marshall College.

Rangeland Condition Assessment and Community Perceptions of Rangeland Condition Trends in the Amboseli Region of Kenya. Michael Burke, College of Charleston.

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Field Assessment and Community Perceptions on Range Conditions in Kuku Group Ranch of the Amboseli Region, Kenya. Robert Golan, Miami University/Ohio.

Assessment and Community Perceptions on Range Condition Changes and Trends in Kuku Group Ranch, Kenya. Tori Hall, Mississippi State University.

The effects of human infrastructure on wildlife dispersal areas in Olgulului-Ololorashi Group Ranch near Amboseli, Kenya. Marian Howe, Vassar College.

The effects of human infrastructure on displacement of wildlife in Olgulului-Ololorashi Group Ranch dispersal areas, around Amboseli, Kenya. Amber Goguen, University of Massachusetts/Amherst.

The contraction of wildlife dispersal areas due to human infrastructure in the group ranches surrounding Amboseli, Kenya. Angela Darnell, Brigham Young University.

Wildlife displacement by human infrastructure and activities in Maasai group ranch dispersal areas surrounding Amboseli National Park, Kenya. Anne E. Guillen, University of San Diego.

The implications of human activity and infrastructure on wildlife dispersal areas and potential corridors surrounding Amboseli National Park, Kenya. Connor Patrick Jandreau, Colorado State University.

The implications of increasing human infrastructure on wildlife dispersal within group ranches surrounding Amboseli National Park, Kenya. David W. Kramer, Delaware Valley College.

The impacts of human activities on wildlife dispersal areas in group ranches surrounding Amboseli, Kenya. Dylan Beach, Denison University.

Analysis of Human Presence on Wildlife Dispersal in Olgulului-Ololorashi Group Ranch surrounding Amboseli, Kenya. Jason Baillio, College of the Holy Cross.

The effects of human infrastructure on displacement of wildlife in Olgulului-Ololorashi Group Ranch dispersal areas, around Amboseli, Kenya. Judy Buchanan, Olivet Nazarene University.

Contraction of wildlife dispersal areas by human infrastructure in Maasai group ranches around Amboseli National Park, Kenya. Kaitlyn M. Gaynor, Columbia University

The contraction of wildlife dispersal areas due to human infrastructure in the Maasai group ranches surrounding Amboseli National Park, Kenya. Kelsey Howe, Bowdoin College.

The Contraction of Wildlife Dispersal Areas by Human Infrastructure Surrounding Amboseli National Park, Kenya. Keriann E. Cabral, University of North Carolina/Chapel Hill.

(COSTA RICA – Spring 2009)

Effect of Roads on Tropical Dry Forest Structure and Birds. Amy Holmen, Colby College.

Bird Species Abundance and Richness of Road Disturbed Areas. Hannah Davis, University of Vermont.

The Effects of Roads on Forest Edge Structure and Understory Bird Species. Lea Rubin, Rochester Institute of Technology.

Examination of the relationship between the Frequency of Calls for Thicket Tinamous (*Crypturellus cinnamomeus*) and Banded Wrens (*Pheugopedius pleurostictus*) and traffic noise in Santa Rosa National Park in Costa Rica . Vinca Krajewski, Dickinson College.

How Loud? The Effects of Road Noise on Bird Density in Santa Rosa National Park. Brianna R. Cohoon, Fairfield University.

Effects of Roads and Traffic on Habitat Structure in a Tropical Dry Forest. Aaron Seth Vaslow, Lehigh University.

The far-reaching effects of road and traffic disturbance on bird vocalization frequencies. Gina Gill, New York University.

The Effect of Road Disturbance on Bird Species Diversity in Santa Rosa National Park, Costa Rica. Landis Holman, University of Vermont .

Comparison of highway traffic noise transmission through evergreen and deciduous dry forest structures. Lilah Toland, University of Puget Sound.

Organic Coffee Compared to Conventional Coffee for Environmental Services for Water Conservation. Alyssa Inman, University of Illinois/Urbana-Champaign

Comparison of Aboveground Carbon Storage in Organic and Conventional Coffee Farms in Atenas, Costa Rica. Chamae Munroe, Trinity College/Connecticut.

Organic versus conventional: An examination of coffee plantations and environmental services. Chris Wagner, Allegheny College.

Soil Carbon Sequestration on Sustainable vs. Conventional Coffee Farms. Brian Gaulzetti, Boston College.

Agrochemicals Use in Relation to Biodiversity in Costa Rica's Coffee Farms. Carolyn Chu, Santa Clara University.

Links between shade-coffee management systems and habitat quality for associated biodiversity. Tessa Sanchez, Boston University.

Evaluation of biomass and carbon content of leaf litter on four coffee farms. Kalyn Campbell, Dickinson College.

Energy use in coffee production in Atenas, Costa Rica. Edward Miller, Boston University

Evaluating conservation of soil between organic and conventional coffee farms. Patrick Boleman, University of North Carolina/Chapel Hill.

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The Supply and Demand of Lodging in the Communities Surrounding Volcán Poás National Park. Annabelle Berklund, Whitman College.

Picking up Poás: Moving Forward in the Earthquake Devastated Region of Costa Rica. Norberto Rivera, University of Illinois/Urbana-Champaign.

The Importance of Sustainable Development Practices in Ecotourism Dominated Communities. Brent Boyko, University of North Carolina/Chapel Hill.

Marketing Research in Poás Volcano National Park's Surrounding Communities. Cassie Lynch, University of Wisconsin/Madison.

The Eruption of Tourism in Volcán Poás: An Analysis on the Socio-Economic Affects of Tourism in the Communities Surrounding Volcán Poás National Park. Hilla Benzaken, Clark University/Massachusetts.

Incorporating Sustainable Business Practices into a Tourism Development Plan for the Poás Region. Jane Zhou, Wellesley College.

Tourism Industry in Volcan Poas National Park area, the Local Businesses, and Local Products. Lauren Weinstein, Bucknell University.

Business collaboration and expansion plans for the future in communities around Volcan Poás National Park. Madeline Soule, Tufts University.

(AUSTRALIA – Spring 2009)

Fight in Flight: *Microchiroptera* of the Wet Tropics in Far North Queensland, Australia and Their Ectoparasitic Infestations. Elizabeth Cunningham, Elizabethtown College.

Effect of *Rhabdias pseudosphaerocephala* infection on the health and size of *Bufo marinus* in the Wet Tropics. Robert V. Pollan, Hamline University.

Microbat Habitat Preference in the Wet Tropics. Melissa Showalter, Cedar Crest College.

A study of fungal abundance and diversity in different successions of rainforest: what's really going on beneath the leaf litter? Nathaniel Coppock, Guilford College.

Leeches Suck: Parameters for sampling land leech abundance in two habitats in Tropical North Queensland. Sandra Wayman, Allegheny College.

The Influence of Predator Escape Tactics on Habitat Selection by Lumholtz's Tree-Kangaroo. Sara Jackrel, The College of New Jersey.

Temporal Niche Partitioning in Forest Dwelling Microbats (*Microchiroptera*) of Northern Queensland. Nathan E. Sell, Trinity College/Connecticut.

Sticks and stones will break your bones, but cane toads (*Bufo marinus*) will eat them anyway. Andrea Bruno, The University of Vermont.

Feces and scratch mark distribution of Lumholtz's Tree Kangaroo (*Dendrolagus lumholtzi*). Elizabeth Bergen, University of North Carolina at Chapel Hill.

Bufo marinus: A Hop Skip and a Jump Into the Forest. Wellsley J. Costello, University of Tampa.

The Effect of *Bufo marinus* on Leaf Litter Invertebrate Species. Erin Ridley, Coe College.

Tree Preference and Microhabitat Selection of the Lumholtz Tree-kangaroo (*Dendrolagus lumholtzi*). Spenser Meeks, Whitman College.

Defining Activity levels and habitat use of *Dendrolagus lumholtzi* on the fragmented Landscape of the Atherton Tablelands in Far North Queensland, Australia. Michael Goetz, University of Illinois/Urbana-Champaign.

Wood density of buttresses in *Argyrodendron* species: assessing relationships to buttress size and reexamining ideas of buttress function. Christina J. Walsh, University of Illinois/Urbana-Champaign.

Are leaf functional traits correlated with cyclone resistance to defoliation of trees in endangered rainforest in far north Queensland? Callin Switzer, Gonzaga University.

Predicting *Mabi liana* species susceptibility to global climate change based on drought resistance traits. Kaitlin Kyi, Swarthmore College.

Di-Vine-ing Drought: Fire Related Plant Traits in Australian 'Mabi' Rainforests. Cass Selbo, University of Virginia.

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Predicting cyclone damage to *Mabi* forest based on the buttress arrangement of *Argyrodendron* species. Elyse Williamson, Hamilton College.

Using wood density and specific leaf area to predict drought resistance in tree species of Australian 'Mabi' rainforests. Aaron Block, Colby College.

The epic fight for epiphytes: Epiphyte functional traits and their relationship to drought resistance. Sam Stuart, Saint Michael's College.

Assessing *Mabi* fragment susceptibility to cyclone damage using plant functional traits and landscape factors. Peter Goodwin, Bates College.

How precipitation patterns affect drought functional group composition of *Mabi* 5b rainforest. Quinn Biros, Dickinson College.

The Impact of Forest Cover on the Water Quality of Three Creek Catchments on the Atherton Tablelands, Far North Queensland, Australia. Kerri Oddenino, Dickinson College

Assessment of the Effects of Riparian Re-growth on Water quality of Peterson Creek. Samantha Scully, University of Wisconsin/Madison

Investigating macro-invertebrate communities in the upper Barron River catchment on the Atherton Tablelands, Queensland, Australia – Jason Carmignani, Clark University/Massachusetts

Assessing the carbon footprint of selected seasonal produce at various food venues on or near the Atherton Tablelands in Far North Queensland, Australia – Laura Wood, University of Maine/Orono

Local Produce Purchasing Habits: A Case Study of the Progressive Population of the Atherton Tablelands – Rachel Toenjes, St. Catherine University

A question of cost: To buy or not to buy? A price comparison between produce vendors on the Atherton Tablelands – Nichole Haake, University of Virginia

Evaluating food purchasing: A case study of the School for Field Studies, Atherton Tablelands, Queensland – Brittany Price, Trinity College/Connecticut

Sustainable Agriculture in Far North Queensland: Are Current Incentive Programs Facilitating Farmer Adoption of Best Management Practices? – Madeline Pinsonneault, The Ohio State University

(TURKS & CAICOS – SPRING 2009)

Hurricane Ike Damage to Coral Reefs of South Caicos: Effect of Reef Depth on the Resistance to Damage. **Error! Reference source not found.**, Iowa State University

Hurricane Ike's Impact on Coral Growth Forms, Coral Colony Sizes, and Species around South Caicos, Turks and Caicos Islands, Jennifer Payne, Lenoir-Rhyne College

Differential Damages Sustained from Hurricane Ike on Varying Growth Forms of Coral off the Coast of South Caicos, Turks and Caicos Islands, Caitlyn Kenny, Salve Regina University

Differences in the effects of Hurricane Ike on leeward and windward reefs off South Caicos, Turks and Caicos Islands. Christopher J. Watson, Gonzaga University

Considering depth for hurricane induced Scleractinian damage and implications on active restoration. Michael A Caballero, University of Wisconsin/Madison.

The effect of coral reef location on the extent of hurricane-induced damages. Annamare Pasqualone, Vassar College.

Status Of Caicos Bank Finfish Populations And Suggestions For Demersal Reef Species Management In South Caicos, Turks And Caicos Islands. Marina C. Heberer, University of San Diego

Current Landings Status of Nassau Grouper (*Epinephelus striatus*) on South Caicos, Turks & Caicos Islands, BWI and Using Education to Increase Fishermen Compliance to Proposed Sustainable Management. Cody Roldan, DePauw University/Indiana

Impacts of Fishing Methods, Localization of Effort, and Targeted Species on the Management of the Snapper-Grouper Complex Fishery in the Turks & Caicos Islands. Natasha Resendes, Smith College.

Production of a habitat map for the East Harbour Conch & Lobster Reserve (EHCLR). Anne Marie Drolet, Guilford College.

Production of a habitat map for the East Harbour Conch & Lobster Reserve (EHCLR). Conrad Gowell, University of Puget Sound.

Production of a habitat map for the East Harbour Conch & Lobster Reserve (EHCLR). Toby Harbison, College of William and Mary.

Production of a habitat map for the East Harbour Conch & Lobster Reserve (EHCLR). Amanda Johnston, Wells College.

A comparison of popular fish survey protocols and their capacity to estimate of relative levels fish species diversity. Catherine Caruso, Wellesley College.

A comparison of popular fish survey protocols and their capacity to estimate of relative levels fish species diversity. Andrew Fertig, Brown University.

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A comparison of popular fish survey protocols and their capacity to estimate of relative levels fish species diversity. Ellen George, University of Puget Sound.

A comparison of popular fish survey protocols and their capacity to estimate of relative levels fish species diversity. Amanda Lawrence, Florida State University.

A comparison of popular fish survey protocols and their capacity to estimate of relative levels fish species diversity. Barbara Lawson, Virginia Polytechnic Institute and State University.

A comparison of popular fish survey protocols and their capacity to estimate of relative levels fish species diversity. Curtis Lentz, Dickinson College.

A comparison of popular fish survey protocols and their capacity to estimate of relative levels fish species diversity. Garrett Long, Whitman College.

A comparison of popular fish survey protocols and their capacity to estimate of relative levels fish species diversity. Dane Lonsdale, Dickinson College.

A comparison of popular fish survey protocols and their capacity to estimate of relative levels fish species diversity. Carolyn Raider, Skidmore College.

A comparison of popular fish survey protocols and their capacity to estimate of relative levels fish species diversity. Lee Richter, Brown University.

A comparison of popular fish survey protocols and their capacity to estimate of relative levels fish species diversity. Heather Welch, Whitman College.

The Effective Development and Implementation of an Environmental Education Program in Turks and Caicos Primary Schools. Adam Cockell, Amherst College.

Integrating an Environmental Education Program in the Iris Stubbs Primary School on South Caicos, Turks and Caicos Islands. Ella Heckman, Guilford College.

An Environmental Education Curriculum on the Turks and Caicos Islands. Jessica Hendrix, University of Minnesota/Morris.

Overcoming Smallness: Improper Allocation of Limited Resources and Island Nepotism in Management of a Small Commercial Fishery. Christopher MacMillan, Gonzaga University.

Effects of Institutional Structures on Perspectives and Behavior in Marine Resources Management for the Turks and Caicos Islands. James Meinert, Grinnell College.

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