

Supported Project Summaries

Royal
Geographical
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Advancing geography
and geographical learning

● 2008
● 2007

● 2006
● 2005

● 2008

Grants for Research and Scientific Expeditions and Independent Travel

Established Researchers

Award: Gilchrist Fieldwork Award

Principal Investigator: Dr Alun Hubbard, University of Wales Aberystwyth

Project Title: Monitoring and Modelling Basal Dynamics and Flow-Acceleration Across the Greenland Ice Sheet

Abstract: This project aims to critically assess, quantify and implement the 'dynamical processes related to ice flow not included in current models... (which) could increase the vulnerability of the ice sheets to warming, increasing future sea level rise.' (IPCC, Working Group 1 - Summary for Policymakers, 2007). The marine-calving outlet glaciers of the Greenland Ice-Sheet (GIS) have recently been accelerating, thinning and retreating at an alarming rate due to changes in ocean circulation and atmospheric temperature but also due to purported dynamic processes whereby surface originating meltwaters penetrate and lubricate the bed, accelerating flow. Despite much speculation, the true impact of this feedback remains undetermined and from observations and theoretical analysis it is thought to be limited to a ~50km marginal zone of the ice sheet. Our specific objectives at Russell Glacier will be to collect critical glaciological, geophysical, geodetic and meteorological observations up and across ~200km of transects including the centreline that will fully characterise the processes and feedbacks linking surface climate forcing and basal dynamical response. These data, when analysed in conjunction with macro-scale remotely-sensed data will provide a robust framework for modelling and predicting the non-linear dynamic response of the GIS to future warming scenarios.

Award: Peter Fleming Award

Principal Investigator: Dr Andrew Thomas, Manchester Metropolitan University

Co-Investigators: Dr Stephen Hoon (Manchester Metropolitan University), Dr Andrew Dougill (University of Leeds)

Project Title: CO₂ and N₂O emissions from soils along a Kalahari rainfall gradient

Abstract: Climate change in the Kalahari will alter rainfall patterns and increase temperatures. Enhanced evapotranspiration will prolong soil aridity and affect biochemical processes controlling N and C cycles. Cyanobacteria soil crusts drive many of these processes, yet understanding of their sensitivity to rainfall and disturbance is limited. This research quantifies CO₂ and N₂O emissions from crusted soils at sites of contrasting aridity. It also determines flux sensitivity to disturbance and moisture. The data will help improve understanding of the soil-atmosphere-land use feedbacks required to predict regional environmental and climatic changes. Sites are located along an aridity gradient which extends the transect used in previous IGBP studies into the more arid portions of SW Botswana. At each site the team will determine how fluxes are affected by rainfall events of varying magnitude and disturbances associated with grazing. This will provide an analogue for the potential effects of climate change on soil biochemical processes. The data will be used to generate a model that will predict gaseous

fluxes of CO₂ and N₂O from communal grazing areas on Kalahari Sands. The research will advance our understanding of the relationship between soil gaseous emissions, climate and grazing. This is important from a geographical perspective because ecological changes and ultimately the livelihood vulnerability of Kalahari pastoralists will be determined by these interactions in a future warmer, drier world.

Award: Ralph Brown Expedition Award

Principal Investigator: Dr Ruth Robinson, St Andrews University

Co-Investigators: Professor Michael Bird (St Andrews University), Dr Nay Win Oo (University of Pyay), Dr Sandur Khin (University of Pyay), Daw Swe Lhaing (Yangon University of Distance Education), U Aung Swe (Yangon University), U Tin Tun (University of Mawlamyine), Dr Richard Bates (University of Edinburgh), Dr Michael Singer (St Andrews University), Dr Susan Waldron (University of Glasgow), Associate Professor Higgitt (National University of Singapore), Associate Professor Xi Xi (National University of Singapore)

Project Title: Sources and Quantities of Sediment and Carbon in the Irrawaddy River System

Abstract:

The Irrawaddy River is a tropical river that runs entirely through Myanmar along its almost 2000km length, from the peaks of the eastern Himalayas to its delta that debouches into the Indian Ocean. This ongoing research includes measuring the seasonal fluxes of water, sediment and carbon at Pyay and Seiktha in order to establish modern annual material fluxes for the river. This project aims to document the quantity and characteristics of the sediment and water transported along the length of the Irrawaddy in order to link the flux of sediment and carbon to its source areas in the catchment.

Award: Thesiger-Oman International Research Fellowships (Physical Geography)

Principal Investigator: Dr Philip Hughes

Project Title: Pleistocene Climates of the Northwest Sahara Desert: Evidence from the Glacial Record in the Atlas Mountains, Morocco

Abstract: The Atlas Mountains of Morocco display evidence of extensive Pleistocene glaciation. Glaciation in these mountains has major implications for understanding moisture transfer between the North Atlantic Ocean and the Sahara Desert during Pleistocene cold stages. The glacial record of the High Atlas and Anti Atlas effectively reflects moisture supply to the north-western Sahara Desert and can provide an indication of shifts between arid and pluvial conditions. Extensive glacial geomorphological mapping and sample collection around the highest peaks of the High Atlas and Anti Atlas will provide new and novel data toward understanding the history and evolution of the largest desert region on Earth. The principal aim of this project is to establish the timing, palaeoclimatic significance and wider environmental impact of glacial conditions in the Atlas Mountains, Morocco. The main research questions of this project are: 1. What was the distribution, extent and timing of glaciation in the Atlas during different Pleistocene cold stages?; 2. What does the glacial record reveal in terms of precipitation gradients along a transect from the Atlantic slopes of the High Atlas to the Saharan slopes of the Anti Atlas?; 3. What does the glacial record from the High Atlas tell us about the transfer of moisture between the North Atlantic Ocean and the Sahara Desert during different Pleistocene cold stages?

Award: Thesiger-Oman International Research Fellowships (Human Geography)

Principal Investigator: Professor Andrew Smith

Co-Investigators: Khaldoon Al-Qudah (Yarmouk University), Jennifer Ramsay (Simon Fraser University), Caroline Durand (University of Lyon), Adolfo Muniz (University of California, San Diego)

Project Title: Agricultural Practices in the Desert Environs of Wadi Araba, Jordan: Exploring New, Sustainable Approaches to Modern Economic Development

Abstract: One response to a royal initiative to promote economic development in Wadi Araba, Jordan, has been to tap the region's depleting aquifer to expand agricultural farms in the arid zone. The ancient inhabitants of the region faced similar circumstances, but their responses varied. By utilizing different water harvesting technologies and mastering dry-farming techniques, the ancients supported a vast agricultural regime in the Araba. This project seeks to examine the remnants of their activities to determine whether ancient methods can inform present-day practices. The aims of this project are to analyze the economic and cultural landscape of the central Wadi Araba by documenting all evidence of ancient agricultural activity in relation to human settlement activity in the region

(especially in the Roman and Byzantine periods) and to assist others in determining whether modern applications of ancient techniques are viable. The project is a major component of the Bir Madhkur Project, an archaeological study of the central Araba and the role of the ancient site of Bir Madhkur as a regional, administrative hub. The objectives of the proposed project are: 1) based on analyses of aerial photographs to document the terraces, field walls, and other agricultural features in the region and to incorporate this data into the project's GIS; 2) to begin small-scale excavations of some of these features, in addition to rural farm-houses, to understand construction techniques and to identify production aims; and 3) to begin an ethnographic survey of Bedouin in the region to understand present socio-economic conditions and their on-going relationship with the desert landscape.

Early Career Researchers: Post PhD

Award: RGS-IBG Small Research Grants

Principal Investigator: Dr Samuel Randalls, University College London

Project Title: Saws, Sonar and Submersibles: Exploring the Underwater Logging Industry

Abstract: The practice of underwater logging is not new, but recent technological developments in the industry have opened up much deeper submarine exploration and commercial exploitation of submerged timber resources. Since these trees are claimed to be 'matter out of place' (Douglas, 2002), part of forests and woodlands flooded during dam construction, hence not part of 'usual' lake ecology, coupled with the reduced need to cut 'living trees', the underwater logs can attract premium, environmentally friendly prices. Underwater logging is an exemplar of new science and technology developments, in this case involving enhanced underwater visualization and submersible saws, spurring new commercial natures and resource geographies. The research will explore the historical development and contemporary status of the industry, examining the scientific, economic and environmental networks embraced within and changed by the industry. The empirical research will trace these through historical research and interviews with industry representatives, predominantly those based within British Columbia, Canada. The work will further extend understandings of the relationship between technologies, commerce and nature in emerging industries that have had little publicity or academic examination.

Principal Investigator: Dr Katie Szkornik, Keele University

Project Title: Holocene Sea-Level Change in the Dyfi Estuary, West Wales, UK

Abstract: This project aims to establish the first proxy record of relative sea-level change in the Dyfi estuary, west Wales, UK for the middle to late Holocene time period (i.e. the last 5 – 8,000 years). Sediment cores from the salt marshes surrounding the Dyfi estuary will be subjected to radiocarbon and lead-210 dating and litho- and biostratigraphical analyses (diatoms, foraminifera, pollen) to reconstruct environmental changes through time and establish a middle to late Holocene relative sea-level history for the estuary. The resulting relative sea-level data will be used to provide constraints on glacio-isostatic adjustment models. These models currently predict a middle Holocene sea-level highstand in the area around 4,000 years before present which, thus far, has not been supported by field data.

Principal Investigator: Sallie Burrough, University of Oxford

Project Title: Palaeolithic Mega-Lakes and Early Human Occupation of the Kalahari, Southern Africa

Abstract: A distinct series of beach ridges marking the former shorelines of large inter-connected lacustrine basins in the Kalahari can be clearly identified from Landsat imagery and SRTM data. These basins, which form the terminal sump of the Okavango system in northern Botswana, are now almost completely dry. During the late Quaternary they were intermittently occupied by large stable lake bodies and are thought to have periodically filled to a point of coalescence inundating an area that, at its largest extent, encompassed 66,000km². A systematic Optically Stimulated Luminescence Dating programme has established a chronology of mega-lake high stands during the last 300ka providing a rare, directly dated, long terrestrial record of positive hydrological excursions within the southern hemisphere. In the west of the basin, the floor of palaeo-mega-lake Makgadikgadi is characterised by 'drowned' barchan landforms of unknown age presumably emplaced during lake drying phases. Associated with both the shorelines and the topographic high points an astonishingly rich Palaeolithic artefact record is emerging out of the deflating lake floor sediments including some of the largest handaxes ever found. This investigation proposes to try to understand the spatial and temporal relationship between the Palaeolithic and

environmental record using both existing data from shoreline sediments and new data generated from the basin floor and its landforms.

Principal Investigator: Dr Clare Herrick, King's College London

Project Title: Consumed by Risk: Building the Qualitative and Comparative Links between Obesity and Alcohol Research in Health Geography

Abstract: This project aims to carve out a new conceptual and empirical research agenda within health geography from two previously distinct domains of interest - obesity and alcohol - in order to develop a future major grant proposal. It thus has four related objectives: 1.) To ascertain current knowledge bases and gaps concerning the relationship between alcohol consumption trends, demographic, environmental and socio-economic factors and the risk of obesity. 2.) To situate these research findings within their diffuse UK policy contexts, governmental and non-governmental agendas. 3.) To pinpoint key stakeholders from a range of domains in London working across the alcohol risk reduction and obesity agendas for preliminary interview. 4.) From these initial interviews, to identify specific case study sites within London as a basis for exploring the various discursive and pragmatic pathways through and around which the obesity and alcohol public health agendas coalesce, how these frame, categorise and conceptualise 'risk' as behaviour, biology and environment and the implications of this for health governance more broadly and conceptual approaches to health geography more specifically. Recipient of the first Jasmin Leila Award.

Principal Investigator: Dr Sean Carter, Exeter University

Project Title: Photojournalism and the Early Cold War: Popular Geopolitics and the Picture Post, 1945-1953

Abstract: This project seeks to extend research within the field of popular geopolitics in two key ways; first, through its focus on photojournalism, and in particular, the development of photojournalism within weekly news magazine (Time and Life, for example); second, through looking at a period of time which has been largely overlooked within popular geopolitics, the early Cold War. It does this through an analysis of the most popular British news magazine of the period, Picture Post. Picture Post, first published in 1938, reached a circulation peak of more than 1.4 million sales per week in 1949, and was a key chronicler of social and political life throughout the early years of the Cold War. This case study will be used to answer a series of broader questions concerning photojournalism, the Cold War, and popular geopolitics, as well as helping to shape future grant applications for further research in these areas.

Principal Investigator: Dr Gavin Brown, University of Leicester

Project Title: The Place of Aspiration: Emotional Geographies of Young People's Ambitions for Adult Life

Abstract: The educational and career aspirations of young working class people have become a matter for government intervention in recent years. In a post-industrial period where traditional working class employment and training paths are no longer an option, a growing number of policy interventions have been developed to ensure that all young people can achieve 'economic well-being'. Very often these initiatives, which encourage widening participation in further and higher education, are framed in terms of raising the 'aspirations' of those young people at risk of not engaging with education, employment or training. This research will employ a combination of research methods, including discourse analysis of relevant policy documents; interviews with teachers, widening participation practitioners, and policy-makers; and focus groups with a variety of young people from 'widening participation' backgrounds in London and Leicester. Utilizing data gathered through these methods, this research will analyse how aspiration and ambition are expressed as spatial practices located in place (and often expressed through leaving behind certain places). The research also seeks to explore the emotional impact of interventions aimed at 'raising aspirations'; as well as the positive and negative emotions implicated in young people's attempts to articulate and enact their ambitions for adult life.

Principal Investigator: Dr Leah Gibbs, Glasgow University

Project Title: Environmental Knowledge Production and Water Governance in the Global South

Abstract: Contemporary environmental change presents a suite of new challenges for environmental governance (the set of principles and institutions that guide relationships between humans and nature). Water and water-based livelihoods are particularly vulnerable. Increasingly, water is managed across jurisdictions, bringing into play a

range of potentially competing interests. Yet environmental governance is dominated by narrow management thinking that prioritises efficiency over diversity, failing to recognise diverse environmental knowledge, leading to marginalisation of peoples and communities. This project will investigate the extent to which diverse environmental knowledge, including 'indigenous' and other 'local' knowledge, is acknowledged and accommodated in water governance in Tanzania, and the methods employed to elicit knowledge. The research will contribute to current debates on the politics and practice of environmental knowledge production in the global south, and the production of knowledge about nature within academic discourse. This project will investigate these vital natural resource issues, and establish a base for further research in Tanzania as part of a larger project about environmental knowledge production in the global south and global north.

Principal Investigator: Dr Charlotte Lemanski, University College London

Project Title: The Voices of the Poor in Urban Governance: Overlapping Spaces of Community-Level Political Participation in South Africa

Abstract: The project will analyse the ability of poor residents to have their voice heard in urban governance, through formal institutional (representative and participatory democracy) and informal community (e.g. mass protest, community forums) channels, in the city of Cape Town, South Africa. Through an analysis of decision-making processes, political opportunities, and actual practices of participation in urban governance, poor urban residents' relationship to their elected representative, administrations and political parties will be questioned, with a focus on formal and informal mechanisms for accountability. In particular, research will analyse the competing and overlapping claims on community participation between formal ward committees, established by the city of Cape Town in all residential areas over the past five years, and more informal 'civic' committees that have a long history in South Africa's low-income communities. The relationships and communication channels of these two participatory associations are the primary focus of research: for example, relationships between ward committees and civic associations, as well as each body's downward communication with local residents and upwards relationships with local political elected representatives. In each aspect, the extent of competition or cooperation between ward committees and civic associations in terms of community participation and representation will be analysed.

Principal Investigator: Dr Richard Hornsey, University of the West of England

Project Title: The Bureaucratisation of Everyday Movement in 1930s London

Abstract: This short research project seeks to trace how everyday urban movement became an object of bureaucratic management in 1930s London, and to explore how this altered the cultural perception of the mobile individual in relation to the wider metropolitan system. Using a range of archives, it will trace the rhetorics that surrounded new attempts to choreograph the metropolis, as well as charting the various public responses as people found their daily movements increasingly subjected to alien forms of control. In particular, this project will examine two forms of spatial management that emerged at this time: the co-ordination of commuting through the consolidation of the London Passenger Transport Board (formed in 1933); and the introduction of new traffic and pedestrian management devices (such as automated traffic lights, one-way streets and Belisha beacons) under Herbert Alker Tripp, Assistant Commissioner of the Metropolitan Police. These measures must be understood in relation to London's wider transition to monopoly capitalism, which required that individual movement also became the object of bureaucratic administration. In many ways, the legacy of this shift still governs our experience of the metropolis today.

Principal Investigator: Dr Andrea Nightingale, University of Edinburgh

Project Title: Landscapes of Democracy: The Cultural Politics of Governance in Rural Nepal

Abstract: Nepal's political system is in rapid transition following the end of the Maoist People's War and overthrow of the King in 2006. There is an urgent need for research on how democratic governance is understood and performed. In some respects political and civil institutions are representative and inclusive (particularly those related to land and resource use), while in other spheres governance continues to be dominated by key families and relationships. It is vital to explore how these contradictory processes are playing out in localities and the extent to which they are shaping the new federal state. This research seeks to take advantage of this unprecedented historic moment to develop a working collaboration with colleagues in Nepal and to begin preliminary field

will create an audio documentary of this world, exploring the relationship between the theatrical atmosphere of the ring, and the individual narratives of those behind the acts, enabling the exploration not only of the circus, but also of Mexico itself. Circuses across the world are being subjected to rapid insitutionalisation, threatening the way of life associated with the smaller family shows, composed of acts which have been passed down between generations as heirlooms. This project aims to create an aural record of such a world which will be invaluable.

Award: Land Rover 'Go beyond' Bursary

Principal Investigator: Team Latitude

Project Title: 50° North

Abstract: The journey starts close to Britain's most southerly point in Cornwall, then continues across Europe via Frankfurt, Prague, Krakow, Kiev and Volgograd. Then across Kazakhstan from the Caspian Depression to the Altai mountains before crossing Mongolia and eastern Siberia. Shipping the vehicle from Japan to Vancouver, they cross Canada to Newfoundland. Passing through a range of climate zones, Team Latitude will meet and interview workers and their families. On their return, they will compile a report bringing to life a chain of people around the world on this shared latitude.

Award: Geographical Fieldwork Grants

Project: The Phoenician ship expedition (PLANNED)

Abstract: The aim of this project is to recreate a historical voyage undertaken circa 600BC, following the design and reconstruction of a large Phoenician/ Mediterranean vessel informed by details from 2 ancient shipwrecks (Jules Verne 7 and M'agan Michael). Once constructed the expedition will test the performance of the ship using experimental archaeology and will conclude by sailing the ship to the UK and exhibiting the vessel in one of the countries leading museums.

Project: Hydrogeomorphological response of alpine rivers to meltwater flood pulses (PLANNED)

Abstract: The overall aim of this project is to quantify alpine floodplain geomorphological and hydrological processes throughout an annual 'flood-pulse' expansion (summer) and contraction (winter) cycle in the Austrian Alps. This will be achieved through spatial and temporal measurements of floodplain topography, hydrology/hydraulics and water temperature dynamics.

Project: Polar Adventure 2009

Abstract: Anthony Jinman made a ki traverse of the Baffin Island between Qik and Pang, a journey of around 200kms in one of the coldest winters of recent years. This project contributed to the International Polar Year by working with UK and Baffin Island schools and Inuit communities at Qik and Pang to raise awareness of issues around climate change. The expedition also raises money for the charity, British Schools Exploration Society (BSES) and its 75th anniversary.

Project: Mountain Climate and Glaciers on Kilimanjaro, Tanzania.

Abstract: The overall aim of this project is to measure and analyse factors influencing glacial retreat on the summit of Kilimanjaro. Specific objectives are to examine upslope moisture transport, cloud development and the mountain thermal circulation through microclimate measurements and to survey retreat on the Northern Icefield to compare with previous surveys by a team member in 2004 and 2006.

Project: Jalagua 2008

Abstract: Jalagua is a caving and cave diving expedition. The project aims to continue exploration of Sistema Jalagua, a 1,060m deep cave system in the Picos de Europa (Picos de Cornion) in Spain. It has three exploration objectives: 1) to dive up to three sumps in the hope of finding new dry passage beyond; 2) to bolt up a waterfall that has previously blocked exploration in one particular direction at the bottom of the cave; 3) to carry out dye-trace experiments to increase our knowledge of hydrological connections between various known underground streamways.

Project: Exercise Jurassic Shark 2 Mexico 2008

processes leading to changes in forest structure and composition along an environmental gradient; 6) Conduct supplementary projects assessing related aspects of the forest communities relevant to conservation and wildlife management within Brystrinsky Nature Park.

Project: Mapping bird conservation: impacts of harvesting on Tanzanian forest avifauna.

Abstract: Coastal Tanzania is an avian biodiversity hotspot of global importance, but potentially threatened by harvesting of the East African Blackwood (Mpingo). The aims of this project are to gain insight into the effects of mpingo harvesting on birds, conduct baseline surveys to establish the distribution and abundance of species present, develop new techniques for rapidly mapping the distribution and abundance of birds and develop a baseline methodology for monitoring. At numerous random locations throughout the forest network, data on bird species abundance will be collected using snap-shot point-counts and harvesting quantified using a series of proxy measures based on habitat structure.

Project: university of Glasgow Gambia Nyassang 2008 expedition.

Abstract: Gambia 2008 is a two-month expedition to rural Gambia which aims to facilitate a variety of zoological studies, along with community-based projects such as a summer school for local children. The team also hopes to set up evening lessons for adults, helping to improve English reading and writing, along with basic numeracy. They are also planning to set up a crèche for the children whose mothers work on the paddy fields during the day. The expedition will strengthen the links the three previous Glasgow University Gambia Expeditions have made between the UK and rural Africa.

Project: Edinburgh University Expedition to Gabon 2008

Abstract: In June of this year a team of five undergraduate Biologists and Ecologists from the University of Edinburgh completed an expedition to the heart of Western Equatorial Africa. Here, a conservation research project was carried out to assess the impact of a globally prominent and devastating invasive species of fire ant, *Wasmannia auropunctata* on reptile and amphibian communities.

Project: Monitoring flow- acceleration across a Greenland ice sheet outlet glacier.

Abstract: The project aims to critically assess the dynamic meltwater - flow acceleration feedbacks that are purported to lead to the rapid response and potential catastrophic down draw of the Greenland Ice Sheet (GIS) under projected climate warming. This will be achieved through an integrated field-and-remote sensing campaign focused on a land-terminating outlet glacier of the GIS which is isolated from complicating marine-effects and which is truly representative of the majority of the GIS margin.

Project: Crete 2008: The promised land

Abstract: This projects aims to undertake an exploration of the White Mountains of Crete in the hope of discovering an entrance into a master cave system which is predicted to lie beneath this mountain range. The team will camp in the mountains for 2 weeks to explore and document all speleological features found. This will include surveying and photographing each individual cave and producing geological maps of the subterranean geological system of the entire valley.

Project: Sam Mbollet 2008 Expedition

Abstract: This project intends to visit a rural part of Africa to offer assistance in the local community. This expedition will seek to utilise basic principles of science, engineering and education that are poorly provided by both NGOs and The Gambian Government. The project members will work with GLOVE (Gambian Longevity thrOUGH Village Enhancement), a Gambian charity to develop intelligent farming techniques, improvements to sanitation and increases to basic literacy and numeracy.

Project: Mapping and interpreting geological structures within the Borgarf Jordur area, eastern Iceland.

of reef substrate monitoring; 2) precision of invertebrate and reef health monitoring; 3) survey replication requirements; and 4) standard operating procedures. A total of 32 survey dives were made at 6 sites.

Project: Swiss alps glacial research expedition 2007

Abstract: The main objective of this expedition is to conduct research into a wide variety of aspects of valley glacier behaviours and the associated hydrological system, with smaller projects involved in avalanche mapping and dendrochronology. The research will be produced in a dissertation format, with the individual research projects complimenting one another and furthering our knowledge of the alpine mountain environment

● 2007

Grants for Research and Scientific Expeditions and Independent Travel

Established Researchers

Award: Peter Fleming Award

Principal Investigator: Dr Peter Langdon, University of Southampton

Co-Investigators: Stephen Brooks (Natural History Museum), Dr Ian Croudace (National Oceanographic Centre, University of Southampton), Dr Stephen Harrison (University of Exeter), Prof. Melanie Leng (NERC Isotope Geoscience Laboratory & University of Nottingham)

Project Title: Testing the Potential of Temperature and Precipitation Proxies from Recent Lake Archives in Patagonia

Abstract: This project had the main objective of developing high-resolution, multi-proxy, multi-lake reconstructions of climatic (and in particular hydroclimatological) variability over the last 500 years from Patagonia. The project tested the sensitivity of two proxies of climate change in this region, chironomids (non-biting midges) and stable isotopes, against instrumental and known past fluctuations in glacier extent, in order to assess their potential for reconstructing accurately climate change over longer (millennial scale) time periods. Fieldwork was based in the Rio Chacabuco region as this valley offered a range of lake types at altitudes from c.300-1000 metres, allowing the team to test the sensitivity of the different lacustrine systems. The study lakes were all of small-medium sized, medium depth (i.e. without significant periods of summer stratification) and were open systems. A total of 16 sediment sequences were recovered from six different sites. One short core from each site was brought back intact for analyses on the ItraX core scanner for geochemical profiles while the others were subsampled in the field. These core sediment lengths should provide enough material to cover the last ~500 years. Analysis of the samples in UK laboratories is ongoing.

Award: Ralph Brown Expedition Award

Principal Investigator: Dr Eduard Reinhardt, McMaster University, Canada

Co-Investigators: Dr. Patricia A. Beddows (McMaster University)

Project Title: Thecamoebians and Foraminifera as a Palaeoenvironmental Tool in the Subterranean Flooded Cave Systems of the Yucatan Peninsula, Mexico

Abstract: The submerged caves along the Yucatan coastline of Quintana Roo, Mexico form a net-work of passages and sink holes (cenotes) that have evolved over Quaternary sea-level cycles and have come under increased pressure due to encroaching urbanization. There are no rivers in this region, and the groundwater and cave systems are the only natural source of potable water. The aim of this research was to document the distribution of thecamoebians and foraminifera in the cave environment and to determine whether they can be used as an environmental proxy to: a) better understand cave evolution and b) reconstruct groundwater response to climatic variations (e.g. droughts and the collapse of Classic Maya Civilization) and anthropogenic impacts (e.g.

groundwater extraction). Such an environmental proxy would be a valuable tool for many diverse disciplines in cave science.

Award: Thesiger-Oman International Research Fellowships (Physical Geography)

Principal Investigator: Dr Mark Powell, University of Leicester

Co-Investigators: Prof. Ian Reid (Loughborough University), Prof. John Laronne (Ben Gurion University), Dr George Heritage (Salford University)

Project Title: Channel Morphology and Sedimentology in Upland Dryland Environments, Negrev, Israel: Characteristics and Controls

Abstract: This project aimed to characterise the morphological and sedimentological characteristics of upland gravel beds in the Negrev Desert, Israel and also to seek genetic explanations for the distinct channel morphologies identified. The study adopted the framework of Montgomery and Buffington (1997) and can be viewed as a test of that model in a dryland environment. There were 4 specific objectives: 1. To identify, classify and map the occurrence of distinctive channel morphologies in upland rivers in the Northern Negrev Desert; 2. To characterise the diagnostic morphological and sedimentological features of each channel type; 3. To compare and contrast channel types with those characteristic of humid-temperate environments; and 4. To test the observations against the genetic framework of Montgomery and Buffington (1997).

Award: Thesiger-Oman International Research Fellowships (Human Geography)

Principal Investigator: Dr William Rowe, Louisiana State University

Project Title: An Analysis of the Economic and Environmental Resurgence of the Historic Region of Herat, Afghanistan and its Desert Environs after Twenty-Five Years of Conflict

Abstract: This project aimed to analyze the economic and environmental geographic situation of an isolated desert river valley. The objectives were to see how different levels of local society at the city, village, and nomadic levels have fared after twenty-five years of conflict and occupation and how they are emerging into a (relatively) more peaceful existence within the larger framework of Afghanistan and post-Soviet Central Asia and the Middle East. The research followed a general cultural/political ecological framework with emphases on historical archival work and on site work taking into consideration local adaptations and changes to meet the new reality of post-Taliban Afghanistan and Western institutions that have a new relevance for the area under study.

Early Career Researchers: Post PhD

Award: RGS-IBG Small Research Grants

Principal Investigator: Dr Peter Kraftl, University of Northampton

Project Title: Time for Bed': The Geographies of Children's Sleep

Abstract: This project had four primary objectives: 1.) To consider the potential for 'geographies of sleep', building on nascent theoretical and empirical research in cognate disciplines; 2.) To begin to explore the spaces and places where children's sleep occurs; 3.) To investigate the ways in which children's sleep is managed, organised and disciplined, and the implications thereof for children's geographies; and, 4.) To begin to formulate appropriate

Principal Investigator: Dr Peter Hopkins, University of Newcastle upon Tyne

Project Title: Young Sikh Men in Scotland: Spatial Practices, Contested Identities and Everyday Geographies

Abstract: This project aimed to generate new understanding of the identities and experiences of young Sikh men in Scotland. The three primary objectives were: 1.) To explore the frameworks of young Sikh men's everyday lives; 2.) To examine the ways in which young Sikh men construct and contest their identities and; 3.) To investigate the young men's experiences following events such as 9/11 and 7/7 and the influence these have had on their everyday experiences, spatial practices and articulation of their identities. The project hoped to contribute to policy debates about racism, social exclusion and social cohesion in Scotland, and also to broader theoretical debates about masculinity, identity and ethnicity.

Principal Investigator: Dr Patricia Noxolo, Coventry University

Project Title: Development Volunteering as Postcolonial Practice

Washington D.C. where Federal antipathy to social policy is particularly acutely felt; and, 3.) To gather information and establish research contacts in order to facilitate a subsequent research proposal to the ESRC on workfare resistance in the Mid-Atlantic states.

Principal Investigator: Dr Caroline Upton, University of Leicester

Project Title: Mining and Resistance: New Struggles on Mongolia's Pastoral Commons

Abstract: This project had 3 primary objectives: 1. To explore and document the nature and emergence of new social movements and NGOs amongst herders on Mongolia's pastoral commons, in response to the increasing impacts of mining on land and water resources; 2. To analyse whether and in what ways pre-existing formalised herders' groups (associated with international projects concerned with tenure reform and sustainable livelihoods) are linked to the emergence and efficacy of resistance; and, 3. To examine the role of herders' groups in regulating mining activities amongst their own members.

Principal Investigator: Dr Simon James Cook, Liverpool John Moores University

Project Title: The Recognition of Glacial Debris Entrainment Processes Within Proglacial Landforms and Sediments

Abstract: This project aimed to assess the extent to which different debris entrainment processes can be identified within proglacial landforms and sediments at glaciers with terminal overdeepenings. The research was conducted in Svinafellsjökull, southeast Iceland. The project had four primary objectives: 1. To characterise the physical properties of different basal ice facies; 2. To map the distribution of different basal ice facies and the geomorphology of the proglacial areas; 3. To characterise the sedimentological properties of basal ice facies whose origin has already been attributed to specific subglacial processes; and, 4. To characterise the sedimentological properties of proglacial sediments and compare with those of the basal ice.

Award: EPSRC Geographical Research Grants

Principal Investigator: Dr Richard Taylor, University College London

Project Title: Hydrological Implications of Deglaciation of

Abstract: Tropical icefields in the Rwenzori Mountains of East Africa have been shrinking at a mean rate of ~ 0.6 km² per decade over the last century and are predicted to disappear within the next two decades. The hydrological implications of observed glacial recession remain, however. Through the measurement of glacial melt water discharges and river flow, and application of stable isotope tracers (d^2H , $d^{18}O$) of water movement during the rainy season, this study builds upon previous research during the dry season to determine both the impact of glacial recession on alpine river flow and the origin of precipitation falling in the Rwenzori Mountains. The latter objective will help to resolve the uncertain relation between climate changes indicated by recent deglaciation in the Rwenzori Mountains and other ice fields in the East African Highlands. Via the direct involvement of local collaborators in the execution of the field research and discussion of its findings, the study also aimed to enhance local capacity to assess the impact of climate change on water resources and disseminate the determined impacts of climate change on livelihoods directly to stakeholders.

Principal Investigator: Dr Andrew Tatem, University of Oxford

Project Title: The Present and Future Role of Worldwide Airline Transport Network on Exotic Biota

Abstract: Recent increases in the rates of economically damaging biological invasion and the spread of infectious diseases have been linked to the continued expansion of the worldwide airline transport network (WAN). Historically, natural barriers and great distance restricted such movement, but the WAN has reduced such effects, leaving climatic conditions as a principal constraint to the spread of those organisms whose life cycles are sensitive to the weather. This research analyzed the changing global structure of the WAN in terms of climatic similarity and passenger/freight flows, to illuminate further the present and future risks of deliberate or accidental movements of climatically sensitive organisms around the World. By using gridded data on present and predicted future global climatic conditions, in combination with contemporary and predicted data on WAN architecture and flows, the changing spatial risks of exotic biota dispersal by air transport was examined. The research aimed to identify, for the years 2006-2030, (i) those scheduled routes that link the most spatially distant but climatically

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similar airports, (ii) the climatically best-connected airports and (iii) clusters of airports with similar climatic features. The way in which present and future traffic volumes alter these findings will also be examined for 2006-2011.

Principal Investigator: Dr Scott Orford, Cardiff University

Project Title: Modelling Residential Living Space for Individual Properties using Digital Infrastructure Data and Remote Sensing Data: A Cardiff Pilot Study

Abstract: Planning is a key element to the success of sustainable urban environments and successful planning relies upon access to good quality information. In strategic and spatial planning, this information is often derived from models and simulations or urban systems, such as the housing market and hence there is a real need (and demand) for well-founded, data rich environments in which to develop and test such models. With respect to the housing market, models for British cities are hindered by a lack of detailed information at the level of the individual property. A key problem is the lack of data on living space, as this is the single most important structural attribute in determining house price. However, emerging digital data sets, such as OS mastermap, have the potential to provide these fine-scale data and enhance existing data sources. The aim of this project was to develop methodologies for deriving property attribute data, and specifically modelled estimates of living space, from these data sources within a GIS framework for the subsequent use in housing market models and simulations.

Principal Investigator: Dr Neil Macdonald, University of Wales Aberystwyth

Project Title: Flood Response in Europe Following the Eruptions of Tambora (1815) and Laki Fissure (1783) Volcanoes

Abstract: Documentary accounts from the winters of 1783/4 and 1815/6 show extensive records of flooding throughout Europe. To date little consideration has been given to the spatial and temporal distribution of these floods in relation to the eruptions of the Laki (1783) and Tambora (1815) volcanoes. This research project addressed this issue by reconstructing the spatial distribution of flooding that affected Europe following these eruptions. Historical flood chronologies were used to temporally contextualise the magnitude of the flood events and to determine their variation from the underlying flood frequency distribution.

Early Career Researchers: Postgraduates

Award: Slawson Awards

Principal Investigator: Roy Huijsmans (Durham University)

Project Title: Local Childhoods in a Global World: Changing Place, Social Position, and Meaning of Work Practices Among Lao Children

Abstract: The project proposed to investigate the labour migration of children and youths in Lao PDR. There are three primary areas of study, each with its own research question: 1.) Work: What kinds of work do Lao children (12-18) do? Where do they go to do this work? 2.) Level of variation and social relations: How is the 'what' and 'where' of work among children distributed across households within the study village? How do norms of gender and seniority dictate the 'what' and 'where' of children's work? To what extent, and how, do children through the 'what' and 'where' of work negotiate with, resist, or comply with gender and seniority norms? What are the new social settings and relations children engage with through the spatial dimensions of work, and how are working children socially positioned in this? How do children experience and deal with the vulnerabilities and opportunities offered by spatially diverse work practices? 3.) Policy: How do children's experiences of, and motivations for, spatially diverse work practices relate to the underlying ideas of the policies addressing the phenomenon of children working beyond their local communities?

Principal Investigator: Richard Paley (University of Cambridge)

Project Title: Factors Influencing Effectiveness of Protected Area Management Institutions and Organisations in Cambodia

parameters set using field data. The method had the advantage that it provided general insights into the changing spatially-distributed nature of sediment production, delivery and yield; and could also be used practically to guide the prioritization of investment in sediment control measures, by assisting in the targeting of sites which deliver sediment efficiently to the outlet, rather than those with obvious erosion but a lack of connectivity.

Award: Henrietta Hutton Research Award

Principal Investigator: Katherine Fitzpatrick, University of Sussex

Project Title: Investigation of environmental tolerances of key food resources of the critically endangered Andean Brown-Headed Spider Monkey

Abstract: The tropical Andes qualify as one of the world's exceptional hotspots. Flagship species, such as the critically endangered frugivorous brown-headed spider monkey (*Ateles fusciceps*), endemic to the study area, are representative of these areas and provide a focal point for the conservation effort. In recent times the distribution of *Ateles fusciceps* has been dramatically reduced due to habitat loss. The aim of this project was to investigate the relationships between meteorological and soil conditions and primate food resources. The main objective was to identify essential meteorological and soil thresholds for the presence and absence of key fruit tree species used as a resource by *Ateles fusciceps*.

Principal Investigator: Lindsay Banin, University of Leeds

Project Title: Cross-continental comparison of tropical forest structures and dynamics

Abstract: The key aims of this project were to assess (1) if different tropical forests have different above-ground wood production rates (an important component of net primary productivity); and (2) whether these differences are caused by environmental resources such as nutrient limitations, biogeography (species assemblage as a result of historical processes) or both. The project undertook above-ground productivity and soil nutrient availability studies using standardised methodology in two geographically separated tropical forest regions which are climatically very similar but have no species in common: North West Amazon and North Borneo.

Award: Monica Cole Research Grant

Principal Investigator: Natasha Barlow, Durham University

Project Title: Isostasy, Eustasy and Tectonics in Southern Alaska

Abstract: The main goal of this research was to unravel the complex history of relative sea level (RSL) fluctuation in Southern Alaska during the last 1000 years, particularly researching the special variations of crustal response to glacier loading. This project arose as a consequence of observations of anomalous RSL fluctuation understood to be a result of the earthquake deformation cycle. This observation was tentatively correlated as being a result of the isostatic loading and unloading of local glaciers during a period of cooling known as the Little Ice Age. Researched focused on relative sea level (RSL) reconstruction using biostratigraphy and geophysical modelling. Field sites visited were Hope, Bird Point, Ocean View, Girdwood and Knik Arm. Due to the financial restrictions of requiring a helicopter or boat to access Chickaloon Bay, it was not feasible as a study site.

Award: British Airways Travel Bursaries

Principal Investigator: Flavie Vial, University of Glasgow

Project Title: Quantifying the impact of livestock grazing on vegetation and rodents in Bale Mountain National Park, Ethiopia

Abstract: The Bale Mountains contain the largest extent of Afro-alpine habitat in Africa including the continent's most extensive pocket of Afro-alpine grassland, which is essential habitat for the rarest canid species, the Ethiopian wolf. Over the last 20 years pasture depletion at lower altitudes has resulted in the park itself being used to graze increasingly high numbers of livestock, posing a threat to the persistence of the Ethiopian wolf population. Overgrazing also poses another ecological threat to the area. Bale Mountains National Park is the source of water for five major rivers on which an estimated 12 million people depend. This project aims to establish critical links between vegetation condition, livestock grazing pressures and rodent diversity in the park through field investigations and through the construction of exclosures in which livestock grazing is excluded. Establishing exclosures is an investment that will exceed the duration of the project and will provide the park with important

and nutrition among the San and documenting their knowledge and use of edible and medicinal wild plants of the region.

Award: Journey of a Lifetime Award

Principal Investigator: David Waldman

Project Title: From Mountain Tribe to Olympic Gold: Why Kenyans are the World's Best Runners

Abstract: David Waldman travelled to the Rift Valley of Kenya to meet the Nandi, a mountainous tribe of cattle herders who, since 1968, have been responsible for Kenya's most famous export, the greatest endurance runners on the planet. David lived and trained with the Nandi in an attempt to better understand the reasons for the success of Nandi runners.

Award: Geographical Fieldwork Grants

Project: Oxford University Oriental Institute expedition to Tibet

Abstract: This expedition aims to record the ritual and musical practices of pilgrims travelling to the remote Mount Kailash region, in the far West of Tibet. The expedition will record a number of previously un-documented groups to create an archive of material that will be made available to researchers in Tibet, China, London and Oxford as well as on a dedicated website.

Project: University of Glasgow Sumaco Project

Abstract: This expedition was a year long multidisciplinary project which aimed to increase knowledge of baseline biodiversity and forest use in the Sumaco Forest Reserve, Ecuador. Three interlinked projects were carried out by the team members working closely with community members, and they examined fish communities, the links between conservation and poverty alleviation, and primate abundance and diversity in the Sumaco Forest Reserve.

Project: Artic voice expedition 2007-08

Abstract: The principle objective of this expedition was to collect audio recordings of Inuit hunters and elders discussing their concerns over the future of their culture and environment, particularly in relation to climate change. The project also developed links between schools in the Arctic with schools in the UK. The journey was carried out by kayak, a craft originating from the Inuit culture. This journey represented phase one of a four phase project.

Project: Project Anadabolava: UEA expedition to southern Madagascar

Abstract: The aim of this expedition is to conduct a multidisciplinary assessment of the Anadabolava Forest. Vegetation and lemur surveys will be carried out in the most pristine areas of the forest. The team will also carry out an anthropological survey using participant observation and semi-structured interviews in order to understand the pattern of resource use by the local Antandroy people.

Project: Endurance Kayak 66 South

Abstract: Members of the HM Endurance Kayak Club planned to paddle around James Ross Island raising money for four charities. During the expedition they provided information to compile a school pack which is supported by Portsmouth County Council and Portsmouth Football Club. However due to ice concentrations to the south and west of James Ross Island a full circumnavigation was not possible within the eight days available to them, they did circumnavigate Vega Island.

Project: Reconstructing the flow of the River Nile

Abstract: The objective of this fieldwork was to collect *Juniperus procera* Endl. tree-ring samples and historical sources for reconstructing Nile River discharge. Fieldwork was conducted in and north of Gonder and in the vicinity of the town of Akesta, 80 km southwest of Dese and permission was granted to collect stem discs from Doba forest.

Project: Deciphering the Inca landscape, environments and symbolism in the Peruvian Andes.

the structure of the vegetation assemblages were obtained from a transect-line survey; 2) distribution of the vegetation assemblages were mapped by a wide-area survey using GPS and high resolution optical imagery; 3) permanent marker sites were established in areas of pine ridge and palmetto, for long-term monitoring of the growth and change in the ecosystem; 4) the most distinctive shrubs and plants were photographed in situ and duplicate 'voucher' specimens were collected for identification.

Award: Peter Fleming Award

Principal Investigator: Dr Charlie Bristow, Birkbeck College, University of London

Co-Investigators: Dr Nick Drake (King's College London), Dr Simon Armitage (Oxford University)

Project Title: Paleolake Megachad Shoreline Chronology: Evidence for Humid Periods in the Sahara.

Abstract: The project aimed to determine the age of palaeolake shorelines in the southern Sahara. The shorelines around the lake contain a record of late Pleistocene and Holocene climate change because they record changes in precipitation and evapotranspiration.

Award: Peter Fleming Award

Principal Investigator: Dr Jos Barlow, University of East Anglia

Co-Investigators: Toby Alan Gardner (UEA), Dr Reinaldo Barbosa (Instituto Nacional de Pesquisas da Amazonia), Dr William Overal (Goeldi Museum), Dr Luiz Carlos Ruiz Pessenda (University of San Paulo)

Project Title: Biodiversity and Ecosystem Response to Forest Fires in Amazonian Forests

Abstract: The project aimed to research the longer-term effects of the current fire dynamic in tropical rainforests, providing information about biodiversity, climate-change and the long-term sustainability of the world's tropical forests. Fieldwork sites were conducted in Para (representing core Amazonian forest) and Roraima (representing transitional forest).

Award: Ralph Brown Expedition Award

Principal Investigator: Iwona Conlan, University of Melbourne, Australia

Co-Investigators: Dr Bounthanh Bounvilay (National University of Laos), Phoumyenh Khounthikourmanne, Prof Ian Rutherford (University of Melbourne), Prof Brian Finlayson (University of Melbourne), Dr James Grove (Dept of Civil Engineering).

Project Title: The Geomorphology of Pools along the Lower-Mekong River in Southeast Asia and the Transboundary Impacts of River Basin Development.

Abstract: This research project investigated the geomorphic processes and hydrological conditions responsible for the maintenance of large pools on the lower-Mekong River. Pools on the currently unregulated Mekong form an important dry-season habitat for numerous fish species and are at risk of filling in with sediment if large scale hydropower development proceeds on the upper-Mekong in China.

Award: Thesiger-Oman International Research Fellowships (Physical Geography)

Principal Investigator: Dr Conall MacNiocaill, University of Oxford

Co-Investigators: James Hollingsworth (Cambridge), Dr Richard Walker (Oxford), Ali Eshraghi (Geological Survey of Iran)

Project Title: Mountain Building in North Eastern Iran

Abstract: This project aimed to determine the history and topographic evolution of the desert region of NE Iran in response to the uplift of the region at the northernmost part of the Arabian-Eurasia continental collision. The project was performed in collaboration with the Geological Survey of Iran. The project planned to deliver important constraints on how the region accommodates the shortening on active faults. In particular, the team investigated the rates and duration of mountain building, and the impacts the mountains have had on the physical environment. The project combined observations on the geomorphology with palaeomagnetic analysis of rocks from NE Iran. The results are important for geographic and geological studies of Iran, and will provide important constraints on the hazard posed to local populations by active faults.



Early Career Researchers: Post PhD

Award: RGS- IBG Small Research Grants

Principal Investigator: Dr Mitchell Rose, University of Hull

Project Title: Monumental Vistas: Exploring the Landscape of the Giza Plateau

Abstract: This project was a phenomenological study of the Giza plateau in Egypt, the site of the three largest pyramids and the Sphinx. Specifically the project explored two questions: 1. How the Giza landscape provides resources for Egyptians to imagine 'who they are'; and 2. How those imaginations work to cultivate the landscape's ongoing existence as a place. The aim was to describe how Egyptian identity takes shape 'in the world', that is, how Egyptians come to a sense of self in and through the landscape and how the landscape's presence is secured through that process.

Principal Investigator: Dr Muki Haklay, University College London

Project Title: Bottom Up Mapping: Development of Software Toolkit to Enable the Creation of Free and Collaborative Geospatial Data Collection

Abstract: "OpenStreetMap" is a bottom-up, Collaborative Commons-based project to develop free digital mapping information of the world. It is currently restricted to technically-savvy participants able to deal with the technical difficulties of acquiring and integrating geospatial information. The objectives of the research were to develop and test software which enables lay members of the public to participate and populate the map for use by themselves and anyone worldwide.

Principal Investigator: Dr Katie Walsh, University of London

Project Title: Britishness in the Gulf: Race, Intimacy and Belonging

Abstract: The main aims of this research were to: 1. Advance the geographical understanding of the significance of race and intimacy in the constitution of British expatriate belonging; 2. Collect qualitative material in four Gulf cities that will assist in the logical planning, theoretical design and implementation of more extensive future research in the region; 3. Identify and interview key 'gatekeepers' to the British expatriate 'community' and collect informal ethnographic material through these contacts; 4. Identify key types of cross-cultural relationships and their spatialisation in order to develop representative sampling methods for future research; and, 5. Establish new institutional networks in the region.

Principal Investigator: Dr Matthew Jones, University of Nottingham

Project Title: Holocene Hydrological Variability in the Badia of Jordan

Abstract: This project aimed to establish the first detailed proxy records of hydrological change in the Jordanian Badia, particularly through the Holocene, i.e. the last 11,500 years, a time period which is of interest both anthropogenically and climatically. A continuous sedimentary archive of environmental change exists within the lake basins across Jordan. Using physical, chemical and biological indicators, analysed from the lake sediments, along with a number of dating techniques, the project aimed to understand lake level variability, climatic variation, and therefore water availability through time.

Principal Investigator: Dr Stephen Legg, University of Nottingham

Project Title: From Anti-Colonialism to De-Colonialism: Spaces of Nationalism in Delhi, 1930-1960

Abstract: The objectives of this research were to analyse recently released material from the Delhi CID relating to the colonial period that compliments Legg's existing research. Legg states that it gives an unprecedented insight into the minutiae of various social movements, whether anti-colonial, socialist or communalist, as well as into the management of crime in the city. The information was combined with work in the Law Courts and translations of Urdu documents in the National Archive. The second objective was to catalogue the available sources for analysing Delhi immediately after independence, so as to allow the formation of detailed spaces of colonialism research proposal.

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Abstract: This doctoral research focuses on significant issues concerning environmental conservation, culture and human development in rural southern Africa. It is innovative in terms of its focus on the growing use of GIS for development and natural resource management in Namibia. Using participatory mapping and GIS as tools, local indigenous knowledge about natural resources can be tapped for the purposes of environmental planning, decision-making and monitoring by local communities, environmental NGOs and state agencies.

Award: Hong Kong Research Grant

Principal Investigator: John Gates (University of Oxford)

Project Title: Groundwater Recharge and Palaeohydrology of the Badain Jaran Region, Chinese Inner Mongolia

Abstract: As a result of numerous tracer-based hydrological studies over the past 30 years, it has become known that the groundwaters of many arid zones worldwide are paleowaters, recharged during wetter climates prior to the Holocene. In such areas the resources are effectively non-renewable, and should be managed accordingly. In the Badain Jaran Desert in Chinese Inner Mongolia, shallow groundwater underlies the whole of the region, and even emerges as spring fed lakes in many interdune areas. Though the sources for the water have not been established, the perceived abundance of groundwater has led to recent proposals that it be allocated for the growing agricultural and industrial needs of nearby Gansu Province.

Utilizing a range of chemical and isotopic tools, this project aimed to determine the recharge sources, rates and mean residence times for shallow groundwater in the Badain Jaran. This information is immediately relevant to water resource management, greatly improving the understanding of groundwater resources in this area. Moreover, the study area provided an excellent opportunity for novel palaeohydrologic research, since this cold desert environment is in contrast to conditions in previous palaeo-recharge studies, and the region's climatic fluctuations over the past 10,000 years have been fairly well established through other lines of evidence. Stable isotope data from a preliminary field visit in 2005 gave early indications that the groundwaters of the shallow Quaternary aquifer are of Pleistocene origin and may be in hydraulic connection with the Hexi Corridor and Qilian Mountain Range.

During the 2006 field session lasting approximately 5 weeks, samples were taken from 19 wells, 6 lakes, 2 rainfall events (both rainfall and runoff sampled in each) and 2 unsaturated zone profiles. Analyses are ongoing and include major ions, trace elements, stable isotopes, tritium, radiocarbon, ¹³C and noble gases.

Principal Investigator: Jennifer Hsu (University of Cambridge)

Project Title: The Effects of Internal Labour Migration on the Relationship Between Civil Society and the Government of the People's Republic of China

Abstract: This research aimed to explore the impact of internal labour migration on the relationship between civil society organisations (CSOs) and the People's Republic of China (PRC) government, particularly in Beijing and Shanghai. A total of 39 interviews were conducted in Beijing and Shanghai with migrant CSOs and relevant institutions. Initial results indicate that Shanghai migrant CSOs had more established relationships with governmental bodies when compared to Beijing. At this juncture, migrant CSOs in Beijing and Shanghai are undertaking much needed services for migrant workers and their cooperation with government bodies is likely to further their reach to migrant workers.

Award: Henrietta Hutton Research Grants

Principal Investigator: Caitlin O'Neill, University College London

Project Title: Social exclusion in Cambodia: an investigation into how Khmer women with impairments negotiate socially-constructed notions of 'disability'

Abstract: As a result of its recent history, Cambodia has a disproportionate number of citizens living with disabilities. In Cambodia, as in most societies, those with disabilities are marginalised. This project studied how Cambodian women with disabilities cope, how they are labelled, and how their disability affects their chances in life.



Project: Trinidad 2006 Glasgow Exploration Society

Abstract: The 2006 expedition was the thirteenth expedition to Trinidad organised by Glasgow University's exploration society. The aim was to undertake research that will help conserve Trinidad's amphibian species. To achieve this, the team researched aspects of anuran reproductive biology.

Project: Environmental Change Turkey

Abstract: This project aimed to reconstruct the record of climate, vegetation and landscape change in Northern Turkey by using a range of proxy indicators from peat, lake and cave speleothem (calcite) deposits. The project involved peat and lake core sediments, stalactites/stalagmite sampling and geomorphological GIS mapping.

Project: Tree Diversity and Fauna Diversity, Ecuador

Abstract: The expedition aimed to improve understanding of spatial patterns of biodiversity over tropical forests within the high dynamical biodiversity "hotspot" of the Western Amazon using state-of-the-art techniques of remote sensing and geographical information systems.

Project: Twins Gardens Ethiopia Expedition 2006

Abstract: The team aimed to investigate the local knowledge and management of natural resources (forest glades and honey gathering) by Arsi-Oromo communities within the Garenna forest and to test their scientific relevance, providing qualitative and quantitative data to the authorities in a participatory conservation scheme context.

Project: Vascular Epiphyte diversity within the La Chonta forestry concession, Bolivia.

Abstract: The aim of this study was to assess the diversity of the vascular epiphyte communities in both undisturbed and logged natural habitats within the La Chonta reserve, as well as examining the impacts of logging on the epiphyte communities present.

Project: New Zealand Leiopelma hochstetter Expedition

Abstract: An investigation into the status of the endemic frog population, *Leiopelma hochstetter*, in managed and non-managed areas of native forest within Hunua Regional Park, North Island, New Zealand.

Project: Aberdeen Canopy Expedition Borneo

Abstract: The expedition consisted of two complimentary projects investigating the distribution of infection of epiphytes within the canopy systems of mature Dipterocarp rain forest. Working from a local field centre the team identified project sites, installed artificial epiphytes, sampled live epiphytes and surveyed transects.

Project: Tomsk Taiga 2006

Abstract: The overall aim of this project was to provide data for improved protection and utilization of the taiga forest near Tomsk, Siberia, in order to help conserve biodiversity and to raise awareness of the social, economic and environmental value of the forest. The overall aim was to consider how community management and FSC certification could work in the context of social structures and activities.

Project: Glasgow Zambia Expedition 2006

Abstract: The team contributed to the ongoing Darwin Initiative-funded scientific and social projects based in the Kasanka National Park, Zambia, which supports a highly varied biodiversity, including the rare wetland antelope *Sitatunga*. The primary objective is to carry out a bio-geographical habitat survey of freshwater and wetland systems of the Park, in order to identify major support functions which underpin this biodiversity. The aim of this research project is to provide baseline data to promote further research into this project.

Project: Monsoon Dynamics on the Tibetan Plateau

Abstract: This project aimed to investigate the changes in summer monsoon rainfall over the Quaternary through a detailed geochemical study of Lacustrine sediments from a large lake on the central Tibetan Plateau. The purpose of this expedition was to retrieve core material from Dagze Co Lake, map previous high stands, as well as conduct a survey of nearby water bodies to determine basic chemical properties and isotopic composition.

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detailed glacier-climate relationships. Combined with the detailed field mapping and sedimentological and geochronological analyses, this project aimed to enable a reconstruction of Mediterranean glacial climates unrivalled by any published work undertaken in this region.

Award: Ralph Brown Expedition Award

Principal Investigator: Dr Colin Breen, Centre for Marine and Coastal Research, University of Ulster

Project Title: An Integrated Marine Survey of the Bagamoyo / Zanzibar Channel, Tanzania.

Abstract: This project involved a multi-disciplinary marine survey of the coastal zone, waters and seabed of the channel between Zanzibar and Bagamoyo on the Tanzanian coast. A research partnership between the University of Ulster in Northern Ireland and a number of agencies within Tanzania and Zanzibar was established. The research was the first of its kind in this area and contributed significantly to understanding of landscape development, marine biodiversity and cultural heritage in the study area.

Award: Thesiger-Oman International Research Fellowships (Physical Geography)

Principal Investigator: Professor David S G Thomas, University of Oxford

Co-Investigators: Professor Andrew Goudie (University of Oxford), Dr Adrian Parker (Oxford Brookes University), Dr Asma Al-Farraj (UAE University).

Project Title: Arabian Quaternary Climate Changes

Abstract: The aim of the project was to significantly advance knowledge of the late Quaternary dynamics of Aeolian and hydrological systems in the desert environments of south-eastern Arabia, focusing upon the temporal interplay under fluctuating atmospheric circulation dynamics. The research investigated key sedimentary proxies in the UAE and Oman, utilising traditional and new field sampling techniques and robust laboratory procedures to further understanding of climate change in south-eastern Arabia, particularly monsoon dynamics in the late glacial period to present.

Award: Thesiger-Oman International Research Fellowships (Human Geography)

Principal Investigator: Dr Heba Abdel Aziz, Alexandria University, Egypt.

Co-Investigators: Ahmed Ali M.al-Mikhaini, Majlis a'Shura (Lower House of the Omani parliament)

Project Title: Reconstructing Omani Nomadic Landscape

Abstract: This research assesses the impact of tourism on the nomadic lifestyle existing in the eastern province of Oman. The province has witnessed a significant increase in tourist numbers recently, thus it is expected there will be higher demand on the cultural and natural assets of the region represented by the indigenous nomadic communities and their habitats. This research assesses the impact of tourism on the nomadic lifestyle existing in the eastern province of Oman. The province has witnessed a significant increase in tourist numbers recently thus it is expected there will be higher demand on the cultural and natural assets of the region represented by the indigenous nomadic communities and their habitats

Early Career Researchers: Post PhD

Award: RGS- IBG Small Research Grants

Principal Investigator: Dr John Byrom, Manchester Metropolitan University

Project Title: Retailing in Geographically Marginal Locations

Abstract: This study undertook research into retail provision in remote British Overseas Territories, specifically the Falkland Islands to determine how geographical marginalisation affects logistical and supply issues. The project aimed to determine how retail provision could be improved for these territories for the benefit of the local population

Principal Investigator: Dr Jude Hill, University of Exeter

Project Title: The Matter of Life and Death: Historical Geographies of Material Culture, Medicine and Belief

Abstract: This project involves the study of British amulets and charms, as used, studied and collected at the beginning of the twentieth century. These objects had intense personal meanings for their owners and also

and small mammal species distribution and habitat characteristics; to investigate dietary preferences of carnivore species; to collect small mammal morphological data and genetic samples for systematic studies; to provide skills training to project participants

Project: Reconstructing habitat change in the Nariva Swamp, Trinidad

Abstract: The team aims to identify key changes and consequences in the physical and ecological character of the swamp along with human impacts from settlements. They also wish to record how the Nariva Swamp has changed, by interpreting past Landsat images over 15 years, based on the training of classification methods. This potentially could produce a major new and improved use of remote sensing data in vegetation mapping world-wide. Finally, the team aim to construct a management plan to save the extremely endangered Antillean manatee population.

Project: The Amadis Project- A voyage of coral reef conservation and education

Abstract: The Pacific Leg aimed to collect coral reef data in the South Pacific region to supplement global databases and local resource management programmes. Twenty four reef sites were surveyed, generally observing healthy coral systems in French Polynesia and hard corals dominant in most areas. In the Cook Islands, however, crown-of-thorn predation impact was recorded, particularly on the west reef of Aitutaki, showing a high proportion of recently killed coral colonies. Unidentified mortality causes were observed, and the infected colonies photographed and sent to UNEP-WCMC experts for identification

Project: Wolves in Russia

Abstract: This project was a study into wolf-human interactions. In addition to traditional methods, such as footprint identification and the location of den areas by pack howling, the team also used GPS units and its accompanying software to create a digital map of wolf movements. Across rural Russia, wolves and humans live in close proximity to each other and predation on livestock and dogs occurs frequently. In order to determine the ratio between wolf visits and attempted or actual kills the team worked in two adjacent territories and monitored the frequency of wolf visits to 2 key villages.

Project: OUCC Asopladeru la Texa Expedition

Abstract: The team continued exploration in an ongoing annual caving expedition to cave systems in the Picos de Europa in Northern Spain. The team found significant extensions (750m of new passage) and new depths (from 794m to 888m) in the Aspoladeru la Texa cave system and entered previously unexplored cave sections. Hints at an extension to the Pozo Chicago cave were discovered and the team plans to return to the area in 2006 to continue investigation and exploration.

Project: The Philippines Coral Awareness and Research Expedition

Abstract: The research expedition of coral awareness was conducted in Cebu, Philippines. DUCARE (2005) aimed to improve and sustain the management of critical endangered reef and island habitat with recognized high global biodiversity, whilst increasing monitoring/management of existing Marine Protected Areas (MPAs). A particular focus was to increase local awareness and involvement in protection and promotion of MPAs and the identification of red list species location.

Project: The Woolly Monkey Environmental Education Programme

Abstract: Following on from previous RGS-IBG supported project, the Environmental Education Programme aimed to; raise awareness among local communities about wildlife and the interconnectedness between the environment and human activity; provide professional assistance to support local people on the biological limitations of resources use, encouraging sustainable economic alternatives while fully respecting their socio-economic realities; and to encourage positive attitudes offering free education about local wildlife exposure to the environment.

20,000 BP or earlier, but the most accepted dates are around 12,500 BP. However, Gonzalez and Huddart have recently found new evidence, in the form of human footprints, preserved in volcanic ash in the Valsequillo basin, suggesting that Mexico may have been inhabited as early as 25,000 BP. This project aims to reconstruct the environmental history of the Valsequillo basin during the period of first human colonisation.

Project: The University of Aberdeen Ghana Expedition

Abstract: The team aimed to develop better understanding of selected symbiotic relationships and impacts of disturbance at various forest reserves. They investigated the relationship between an ant (*Crematogaster*) and plant (*Psidium* subcordata). They developed a further understanding of the impact of soil disturbance on the germination of tropical forest plants; examining whether there is a loss in genetic diversity for the timber species, *Entandrophragma utile* due to logging and investigated genetic linkage and diversity between *Albizia adianthifolia* and its rhizobia strains at a dry and wet site.

Project: Ngozumpa Glacier Cave Research Project

Abstract: The team pioneered the exploration and systematic scientific exploration of five glacier caves using speleological techniques, focusing on the Ngozumpa Glacier, Khumbu Himal, Nepal. The caves had a variety of morphologies and ranged in altitude between 4900m and 5300m. All the caves exhibited very strong structural control, following debris-filled crevasse-traces. The caves act as lines of high hydraulic conductivity through otherwise impermeable glacier ice, and are analogous to joints in limestone karst.

Project: Project Knuckles 2005

Abstract: The team built on the work of Project Knuckles 2004 and provided up-to-date status reports on globally threatened reptile species. The project included species distribution mapping, studies of species unique to the Knuckles range, habitat mapping and monitoring, threat assessment to all life stages of species (eggs, hatchlings, adults) and finally, the team also involved and educate local NGO's and conduct awareness programmes for villagers and schools.

Project: The Lone Wolf **Project:** An Expedition to the Simien Mountains

Abstract: This expedition investigated the status of the Ethiopian wolf, *Canis simiense*, around the Simien Mountains National Park in northern Ethiopia. Previous research on the species had focused on the Bale Mountains of southern Ethiopia. The team performed habitat quality assessments, small mammal trapping investigations, large mammal transects and wolf monitoring to collect data. They also conducted interviews and informal meetings with local people to understand their needs and opinions in order to better constructively help conservation in Ethiopia.

Project: Nullarbor Speleogenesis Expedition 2005

Abstract: The aim was to establish the true extent of the karst and cave development in the interior of the Nullarbor Plain, the largest continuous karst area on Earth. The team used existing geophysical and novel micro-meteorological methodology allowing rapid determination of unexplored cave volume in the previously un-mapped remote interior of the Nullarbor Plain.

Project: Durham University Zangskar Expedition

Abstract: The expedition undertook a study of the village of Kumi in the Zangskar region of the Himalaya, NW India, with specific regards to the current shortage of water emanating from snowfield melt and the subsequent relocation of the village agriculture to a new site. The objectives were to: establish previous fluctuations in the river's discharge by looking at the depositional history of the area; compare the irrigation methods employed in 'Old Kumi' and 'New Kumi'; perform a demographic study of Kumi and the surrounding area; and examine the effect of tourism and the building of the new road on the region.



Project: Biodiversity of Mahogany in Peru

Abstract: This project formed part of ongoing research conducted by the Royal Botanic Gardens, Kew and the Forestry Department at the Universidad Nacional Agraria in La Molina, Peru aimed at clarifying the taxonomy, evolutionary relationships and ecology of the genus *Cedrela* in tropical America. Specimens of rare or poorly known *Cedrela* were successfully collected from three geographically separate areas of Peru, resulting in the discovery of an undescribed species and the recognition of a species previously known only from northern Argentina.

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