

United States of America National Section

of

The Pan American Institute

of

Geography and History:

2013 ANNUAL REPORT

www.aag.org/cs/paigh

Introduction

Mark DeMulder, USNS PAIGH President

The United States of America National Section (USNS) of the Pan American Institute of Geography and History (PAIGH) is pleased to submit this report of the activities of the Section for the period of 30 September 2012 through 1 October 2013. Included are reports from the Geography, History, Cartography, and Geophysics Commission representatives within the USNS. Summaries of significant activities and meetings are included in each of the Commission reports. Also included in this report is the USNS roster.

Mr. Mark DeMulder and Ms. Jean Parcher continue to serve as the USNS President and Vice President, respectively. During this period, Mr. Angel Santiago of the National Geospatial-Intelligence Agency (NGA) completed his assignment as the Executive Secretary of the USNS and has been replaced by Ms. Allyson Johnson, of the U.S. Geological Survey, as the new Executive Secretary. Mr. Santiago has retired from government service and we wish him well in retirement. Dr. Patricia Solís of the Association of American Geographers (AAG) continues to serve as the Principal U.S. Representative to the Commission on Geography and a Coordinator for the Geography Research Committee. Mr. Jorge Bajo, of the State University of New York, Buffalo, has replaced, Dr. Chris Castro of the University of Arizona as the Principal U.S. Representative to the Commission on Geophysics. Dr. Castro continues to serve as a member of the U.S. National Section. Mr. John O. Gates of NGA has also completed his service as the USNS representative to the Commission on Cartography and retired and we wish well in retirement. Dr. Erik Langer continues to serve as the Principal U.S. Representative to the Commission on History.

The U.S. National Section delegation to the Directing Council Meeting held in Buenos Aires, Argentina, was led by Mr. DeMulder, President of the UN National Section and Vice President Parcher, as well as other members of the National Section. The spring meeting of the U.S. National Section was not held as a face-to-face meeting this year due to the sequestration action on the U.S. Federal budget and the subsequent mandatory reductions in travel expenses. The members of the National Section did meet by teleconference to discuss the U.S. project proposals and make decisions about which proposals to pursue. Additionally, the members of the U.S. National Section continue to participate in monthly teleconferences to discuss the ongoing business of the Section.

The U.S. National Section webpage aids in promoting the U.S. activities within PAIGH and facilitates communications both within our National Section and with the general public. The website is hosted by the Association of American Geographers. It can be found at http://www.aag.org/cs/paigh.

During the reporting period, Ambassador Carmen Lomellin, U.S. Permanent Representative to the OAS, arranged for payment of our assessed contribution to PAIGH in the amount of US\$323,900.00, fulfilling the U.S. annual quota of PAIGH's budget, set at 59.47%.

Cartography Commission

Jean Parcher, USNS Vice-President

This report was submitted by Jean Parcher (USNS Vice President) with submissions from Cartography Commission members. During 2013, the USNS Cartography Commission was led by John Gates, NGA. Upon his retirement, the USNS has been without a Cartography Commission representative.

The role of the U.S. National Section Cartography Commission is to promote the exchange of technical knowledge in Cartography, develop collaborative partnerships between member countries and between the PAIGH and other multi-national institutions.

During 2013 the U.S. National Section Cartography Commission advanced activities in the Institutional Strengthening Committee, Geographic Names Course, and the Central American Geospatial Data Integration project. Members also supported activities with the other Commission projects (Socio-Environmental Corridors in Southwestern Amazonia) and with their professional initiatives.

Technical Committees and Working Groups Institutional Strengthening and Technical Cooperation Committee (ISTC)

Paul R. Cooper, Chairman

The PAIGH Member State responsible for Institutional Strengthening and Technical Cooperation (ISTC) is the United States. ISTC promotes and increases the transfer of technologies, applications of those technologies, development and capacity building in the geosciences disciplines and GSDI in the Americas.

Technical Capacity Building - Gulf of Fonseca Project

The IHO and PAIGH convened the Gulf of Fonseca Hydrographic Survey and Nautical Charting Project meeting at the IHO Meso American Caribbean Hydrographic Commission



Meeting in Antigua. Guatemala, 20 November 2012. Attending the meeting were the GoF Member States: Honduras, Empresa Portuaria Nacional; El Salvador Instituto Geografico Nacional Centro Nacional de Registros; and Nicaragua, Instituto Nicaraguense de Estudios Territoriales. The meeting was also attended by United Kingdom Hydrographic Office, United States

National Geospatial Intelligence Agency, COCATRAM, Guatemala, International Hydrographic Organization, Pan American Institute of Geography and History, and representatives of Private Industry including CARIS, Kongsberg Marine, QPS, and Esri.

This kickoff meeting was convened to determine interest in developing a multi-national project to address the survey and charting requirements of the Gulf.

Appreciation is extended to the GSDI Association for providing grant funds to support travel of PAIGH, El Salvador, Honduras, and Nicaragua Representatives to this meeting.



Gulf of Fonseca Meeting Attendees



El presidente de Nicaragua, Daniel Ortega, se reunirá el martes 5 Dic con sus homólogos de Honduras y El Salvador para coordinar planes de desarrollo y buscar resolver controversias por el Golfo de Fonseca, que comparten los tres países en el Océano Pacífico, informó el gobierno. The Importance of this Project: In 2007/2008 the Presidents of El Salvador, Honduras, and Nicaragua declared the Gulf of Fonseca a Peace and Security Zone. In 2011, 17 Municipalities of the 3 countries met and declared the Gulf a Zone of Peace, Progress, and Development.

In December 2012 the Presidents of the three countries visited the Gulf to jointly reaffirm the needs to cooperate in the development in the Gulf. A Joint resolution of the three presidents regarding further development in the Gulf of Fonseca was signed December 2012 and is attached below.

The project will be done under the PAIGH/IHO MoU. There has not been a multi-national effort to address a full survey

and charting requirement in the Gulf since the 1980s. Hydrographic surveys have been conducted by each nation over the years with the latest being done La Union, El Salvador with assistance from the U.S. Navy. Honduras and Nicaragua have conducted some surveys

during the period since the last full survey operation has been carried out. Nicaragua has conducted surveys and produced paper charts of the Port of Corinto which were reviewed by the United Kingdom Hydrographic Office and credited for being very well done.

Demonstration of Capacity Building and Technical Cooperation: This project is demonstrating both capacity building and technical cooperation in two phases.

Phase 1: United States, United Kingdom, Gulf of Fonseca Member States, and CARIS have teamed together in a proposed program to produce paper and electronic nautical charts in the Gulf. Data collected previously in earlier projects by the USA and Gulf of Fonseca member states may be used to create Electronic Navigation Charts (ENC) by each member should they choose to do that. The USA is making vectorized chart data available to the Member States on request. CARIS is providing software to convert VPF format data to S57 format data to make ENC. UKHO has agreed to provide distribution of the completed ENC and resulting sales royalties to each Member State as it completes its charts. By this royalty program we envision a sustainable program with some cost recovery to the Gulf Member States through the sales of charts.

Phase 2: Will be a cooperative effort with Private Industry partners Kongsberg and CARIS, Gulf of Fonseca Member States, Guatemala, and IHO to conduct new hydrographic surveys in the Gulf which will lead to new and updated charts.

We expect the Member States to self-contribute significant value to the project. We believe that self-resourcing is a key component to sustainable capacity building.

Future Development of the Gulf of Fonseca Project:

- Electronic and conventional nautical cartography programs for El Salvador and Honduras;
- Ocontinue to develop Nicaraguan charting program. Nicaragua has self- resourced much of its hydrographic capability. Its accomplishment is notable in the production of 1 chart with 3 others in compilation. The charts are developed from their own survey data.

Other Activities:

Attendance at International Hydrographic Organization Regional Hydrographic Commission Meeting ISTC Chairman represented PAIGH at IHO Meso American Caribbean Hydrographic Commission Regional Hydrographic Commission meeting in Antigua, Guatemala Nov 2012.

PAIGH was invited to provide an organizational article to Geomares Publication which publishes Hydro International.

For more information, please contact:

For more information, contact Mr. Paul R. Cooper (paul.cooper@caris.com).

Geographic Names (Working Group)

Roger L. Payne, Chairman

The primary activities of the Working Group until 2012 have concentrated on offering the annual geographic names course and secondarily in support for establishing a digital, interrelated toponymic database and network for geographic names application and service throughout the Latin American Community. The Working Group also supports, advises, and provides consultation to the Latin American Division of the United Nations Group of Experts on Geographical Names (UNGEGN) as well as (to the extent possible) similar services to member States of PAIGH.

The José Joaquín Hungría Morell Geographic Names Course offered under the auspices of the Pan American Institute of Geography and History (PAIGH) was held in Panamá City, Panamá from 15 -19 July 2013. The Instituto Geográfico Nacional Tommy Guardia served as host and provided excellent training facilities and administrative support at the Institute.

The twenty-third course was comprised of 32 students all from the Instituto Geográfico Nacional Tommy Guardia. The course this year was altered considerably for a variety of reasons. Instead of the traditional two-week period the course was shortened to one week as a result of the well-established national toponymic program and standards in Panamá and at the Instituto Geográfico Nacional Tommy Guardia. The primary focus of this course was on design and development of a national automated system for the national geographic names program since the Instituto Geográfico Nacional Tommy Guardia (on behalf the national names authority) is developing an automated names database for this purpose and is in the initial stage of that development.



The field exercise was eliminated in this course presentation because the Instituto Geográfico Nacional Tommy Guardia (responsible for the national mapping program in Panamá and where the Secretariat of the national names program is housed) has an active, well-developed, and well-established program of field collection and verification although there was a meaningful exchange between the students and instructors regarding methodology and experience.

Work on the online version of the course began in late 2011with preliminary editing of the more than 500 PowerPoint slides of the course, and the recording of detailed lectures that heretofore did not exist for each module in written form. Progress has been made on developing the text of the detailed lectures. The teaching team, while experiencing some recent setbacks related to resources, assignments, etc. is still pursuing actively putting the course online. The timetable for implementation of the online course has been redefined with no immediate date established, but the work is in progress with implementation expected in the near future.

The Working Group on Geographical Names expects to have various forms of the training course made available. Specifically, an online version in future, and shortened onsite versions concentrating on specific country needs and requirements. The full version of the course can still be made available onsite if necessary and requested.

Thus far this year, we have had no action or activities with the Latin American Division of UNGEGN. The chairperson of that group is Ms. Susana Rodriguez Ramos at the Instituto Nacional de Estadística y Geografía (INEGI) in Mexico.

Please direct questions to the Chairman or Vice Chairman at <u>rpayne@usgs.gov</u> or 757.903.4204 (cell – 703.309.9765); troopg@nga.mil

3rd Central American Data Integration Workshop

Cart 06 2013, Geo 07 2013, Geof 05 2013 Jean Parcher, USNS Vice-President

The third Central American Data Integration and Technical Capacity Workshop was held in Sonsonate, El Salvador from April 21 to April 27th, 2013 with administration and logistical support from El Salvador's Centro Nacional De Registros, Instituto Geográfica y Catastro Nacional. Participants from the National Geography Institutes of all seven Central American countries, Mexico, and the United States convened to complete the final harmonized seamless digital map of Central America for public viewing in the GeoSUR webportal (see agenda in appendix 1 and list of participants in appendix 2).

In continuation of the progress made at the first two Central American Data Integration workshops, most of the participants had attended the previous two workshops. With additional funding from CAF, we were able to fund a second person from Honduras and Nicaragua, and a third person from El Salvador. In order to provide strategic guidance for drainage basin and watershed boundary harmonization, a new participant from INEGI participated in the workshop to provide technical guidance.

This workshop had three main focus areas:

- 1) Final review of the integrated data products, including symbology, data integration, and theme representation.
- 2) Metadata documentation for all seven themes
- 3) Initiation of the harmonization of the drainage basins

Final Seamless Digital Map of Central America, scale 1:250,000

The final digital product consists of four themes of eight seamless layers of information for Central America and Northern Mexico.

- 1) Transportation road network
- 2) Hydrography
 - a. Rivers
 - b. Waterbodies
- 3) Populated areas
 - a. Urban areas
 - b. Rural areas
- 4) Administrated Boundaries
 - a. 1st level
 - b. 2nd level
- 5) Drainage basins (still in review)

1) During the first two workshops, the process for geospatial data integration, feature representation for symbology, and generalization of features had already been approved by the participants. For this third workshop, the participants from each of the National Geography Institutes arrived with updated geospatial data, of which needed to be reintegrated with their neighboring countries. As the data was examined at various scales for the viewer, a major issue that needed to be agreed upon and modified for the seamless map dealt with how to portray the administrative boundaries when they coincided with an International boundary and/or river boundary. This not only dealt with the vertical integration between different layers, but also with the portrayal of administrative boundaries that aligned with each of the country's international boundaries, but that did not portray the official international boundary. In order to avoid any issues with questions about sovereignty for international boundary disputes, the following note will be issued in the metadata for the 1st level administration boundaries:

Note for Boundaries:

"Los límites internacionales aquí representados son oficiales para cada país y no comprometen las soberanías nacionales de los países del área; son de carácter ilustrativo".

2) Metadata was created for each of the 7 layers of data using ISO standard 19115 LAMP (Latin American Metadata Profile) profile. Representatives from Panama, Costa Rica, El Salvador, and Belize formed the metadata working group. It was decided that specific language for project summary, institutional contacts, data sources, and applications of the data would all be standard for each set of metadata. The metadata files represent the harmonization of the data and provide information of where to obtain the original data source for each country, including links to the original metadata. These metadata files provide critical information for the users of the data. For example, here is the summary of the product, including a generalized list of uses of the data:

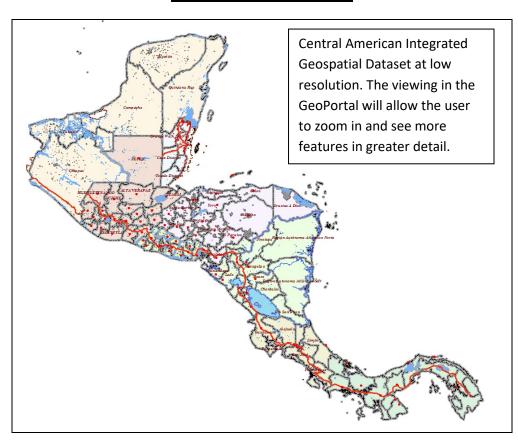
"These datasets were created through a series of participatory workshops comprised of National Geography Institutes as listed in the credits. The Geographers from each country in Central America and Mexico provided their official data and collaboratively worked with their neighboring countries to integrate the base cartographic into a seamless geospatial dataset. The seamless Central America digital map is applicable for medium resolution analysis such as regional transportation networks, hydrologic river networks, analysis of risk to populated areas during a regional disaster, and watershed analysis."

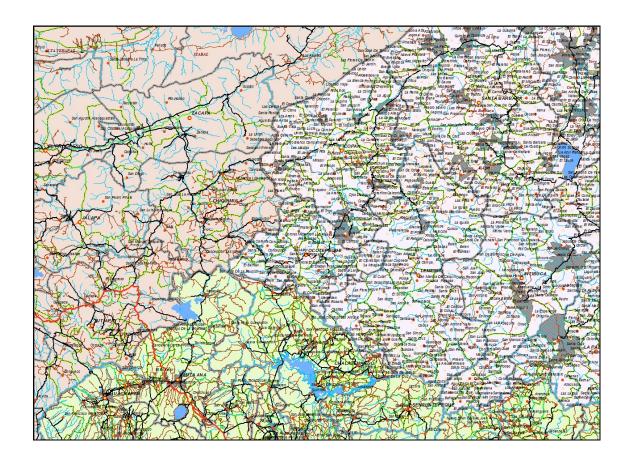
- 3) Rogelio Mondragon from INEGI provided an overview of the importance of developing an official layer of hydrologic basin areas based on topography and stream networks. Mr. Mondragon explained the importance of building a Central American watershed boundary dataset that is based on determining the aerial extent of surface water drainage to a point, accounting for all land and surface areas, determined solely upon science-based hydrologic principles, not favoring any administrative boundaries or special projects nor particular program or agency. Next he showed the variety of applications that can greatly benefit from building a network of streams and waterbodies that model the direction of flow to form a network. This network can trace the water downstream or upstream of a specific location. The linear referencing system of the flow network of streams provides the ability to maintain a rich set of attributes attached to the stream segments, such as water quality, fish habitat, flood height levels, and discharge rates. Since the Central American Data Geospatial Data Integration already has harmonized the stream network between the countries, and each country has provided their topographic contours and an initial watershed basins, it was decided that moving ahead to build a network of streams and watershed boundaries for the region would be the next step in developing based data to help the countries of Central America to reduce their vulnerability and risks to natural hazards. The Instituto Geográfico y Catastro Nacional - Centro Nacional de Registros of El Salvador, with support from INEGI, drafted a Solicitud de Proyectos Panamericanos de Cooperacion Tecnica 2014 for a fourth workshop to complete the watershed boundaries dataset and begin work on a networked hydrography dataset for Central America.
- 4) For the final completion of the first geospatially harmonized map of Central America, the Instituto Geográfico y Catastro Nacional Centro Nacional de Registros of El Salvador volunteered to perform the final steps of converting the digital data to a fully symbolized and viewable map services for display in the GeoSUR portal.
- 5) Marcela Norori, Direccion Nacional de Catastro y Geografia, of Honduras agreed to be the Principal Editor for the final paper to be published in the next issue of the Revista Cartografia. An outline of the paper was prepared and each country accepted responsibility for writing the various parts of the paper.



Attendees at the 3rd Central America Data Integration Workshop

Preliminary Results





View of the integrated road network, hydrography, administrative boundaries, and populated places for Guatemala, El Salvador, and Honduras

Hydrography (Technical Committee)

Nothing to report.

Aeronautic Charting (Technical Committee)

Nothing to report.

Geospatial Data Infrastructure

Nothing to report.

Capacity Building and Data Integration Workshop

Nothing to report.

Geography Commission

Dr. Patricia Solís, Representative

This past year, the U.S. Geography Commission advanced activities around the three-fold committee structure of PAIGH (research, education and institutional strengthening). The role of the U.S. Geography Commission is to help foster collaboration among geographers of the Americas through its member activities and its participation in PAIGH programs. The geography commission provides the technical infrastructure for the U.S. National section website and maintains updates so that these pages are current. The geography commission tab of the website is facilitating communication and visibility of these priorities: www.aag.org/cs/paigh/geography_commission

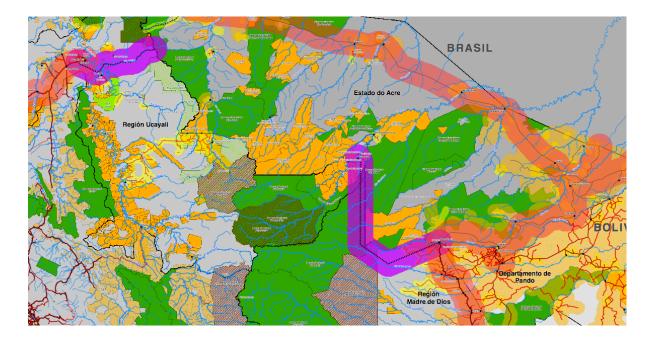
The U.S. Geography Commission Activities over the past year include those which:

1) Highlight the value of geographic research and practice for achieving the PAIGH strategic agenda

Dr. David Salisbury, Associate Professor of Geography at the University of Richmond, facilitated a mapping workshop in June of 2013 to expand and update a Geographic Information System database to mitigate transboundary environmental challenges in the Brazilian, Bolivian, and Peruvian Amazon. The one week workshop, Socio-Environmental Corridors in Southwestern Amazonia, funded by the Pan-American Institute of Geography and History, and Blue Moon Fund, brought together 24 professionals from 17 institutions and four countries at the headquarters of the Comissão Pro-Indio Acre, in Rio Branco, Brazil. Participants formed the Southwestern Amazonian Transboundary Geography Working Group and produced five transboundary maps illustrating challenges and opportunities to reconciling conservation and development in the Amazon borderland states of Acre, Brazil, Pando, Bolivia, and Ucayali, Peru. These maps can be seen at http://blog.richmond.edu/dsalisbury/maps/, and consisted of a map of a transboundary corridor of biocultural diversity, a map of transboundary transportation infrastructure, a map of transboundary watersheds, a map of protected areas and indigenous territories, and a map of cartographic challenges.

The working group also signed a declaration to create a transboundary network of geographic technology professionals, hold annual meetings to update and improve the transboundary database, and create opportunities to distribute cartographic products to better inform decision makers and residents in the Southwestern Amazon's borderlands. The ability to comprehensively share transboundary data across Amazonian boundaries at the state and local scale is of critical importance, and the workshop and results mark a major advance for the governments, institutions, and universities involved.

This work was supported by a research grant from PAIGH. A final report has been filed with the Institute.



Dr. Salisbury also is Project Director for the University of Richmond based U.S. AID-Higher Education for Development project, Building Conservation Capacity in a Changing Amazonia, focused on the Peruvian borderland region of Ucayali, and the Universidad Nacional de Ucayali in particular. As part of this initiative, he facilitated a workshop on Climate Change and Environmental Risk focused on the six different indigenous groups inhabiting the Yurua district of Ucayali, Peru. This year the project is training 10 Universidad Nacional de Ucayali thesis students, while this summer eight University of Richmond students conducted research or pursued internships in the Southwestern Amazon.





2) Foster cooperation among national and international geography organizations and public agencies across the Americas

The results of several years of meetings and roundtable discussions led to a joint proposal for the establishment of a number of collaborative activities in the region, submitted to the U.S. National Science Foundation's Research Coordination Network: Science and Education for Environmental Sustainability Track. The proposal, entitled "Sustainability Initiative from a Geographic Network with Interdisciplinary Frameworks of Inquiry and Communication in the Americas" was submitted by the Association of American Geographers (AAG) and the National Communication Association (NCA), with the Encuentro de Geógrafos de América Latina (EGAL), International Geographical Union (IGU), Federación Latinoamericana de Facultades de Comunicación Social (FELAFACS), Pan American Institute for Geography and History (PAIGH) and the Unión Geográfica de América Latina (UGAL). Funds were requested to consolidate and build upon an existing set of institutional relationships, resources, research platforms and user networks of leading international scientific and academic organizations in the Americas to advance research on key themes including climate change and hazards. After last year's disqualification on technical grounds, the groups revised and resubmitted a related proposal, which was subsequently declined. Nevertheless, the collaboration and interest in jointly advancing a sort of network of networks remains, and future plans are yet to be defined.

The 2013 Geography in the Americas session was organized as a panel, entitled "Geography in the Americas: Making the Most of Student Exchanges for Research and Study Abroad" held on April 11 in the Westin Hotel during the AAG Annual Meeting in Los Angeles. Secretary-General Santiago Borrero graciously served as an invited discussant to the panel which was co-sponsored by the Association of American Geographers, the Latin America Specialty Group, the Graduate Student Affinity Group, and the PanAmerican Institute of Geography and History U.S. Education Committee. Geography Commission members Solís and Salisbury were organizers and served as chairs. Panelists included: Betty Smith - Eastern Illinois University and Geography Commission member; Alicia Tyson - University of Denver; Catherine Jampel - Penn State; Gregory Knapp - University Of Texas - Austin; Humberto Reyes Hernandez - Universidad Autonoma San Luis Potosi; Brittany Davis - University of Arizona; Alfonso Fernandez -The Ohio State University; and Tom Narins - Student. The session explored a number of important questions, including: How can I take advantage of the opportunities for studying geography abroad in another country in the Americas? What do I need to know about how to design and conduct geographic research in another country in the Americas? Where do I find resources to help me get there and help me succeed? How should I prepare to get the most out of my study abroad experience? How can I successfully adjust to a different educational system and learning context? What institutions in the United States and Latin America offer exchange programs for geographers?



A summary of the outcomes of this session is posted online at www.aag.org/americas.

The University Consortium for Geographic Information Science (UCGIS) Board of Directors announced that PAIGH USNS Geography Commission Member Dr. Diana Sinton has been appointed as the Interim Executive Director of UCGIS, beginning July 1st, 2013. UCGIS is a nonprofit association of 70 U.S. universities with multidisciplinary graduate education and advanced research programs in geospatial and geographic information science. Dr. Sinton is well known within the GIS community. Diana's broad and applied research and educational interests include the roles of geospatial technologies and spatial literacy in teaching and learning, the use of social and cultural data within GIS applications, and humanitarian mapping projects. Diana is the creative lead and executive director of TeachGIS.org, a global community of GIS educators. She is a member of ESRI's Education Advisory Board, and on the editorial board of the Journal of Geography in Higher Education. Her publications include The People's Guide to Spatial Thinking (NCGE forthcoming) and Understanding Place: GIS and Mapping across the Curriculum (ESRI Press, 2007). Diana has degrees from Middlebury College (BA) and Oregon State University (MS, PhD).

Dr. Smith was recognized with a Service Award in appreciation for outstanding leadership, collaboration, contributions and support to Midwest Association for Latin American Studies, bestowed in Louisville, October 2012. Also an amateur winemaker and professor of the geography of viticulture, Dr. Smith also recently received three medals for her red wines, including an Argentinian Malbec-Bonarda among nearly 400 local wines at the 2013 Illinois State Fair Wine Competition.

Dr. Solís was designated National Researcher II by the Panamanian Ministry of Science, Technology, and Innovation. She was also honored by her alma mater, Kansas State University as a 2013 Alumni Fellow.

3) Promote the coordination and publication of Pan American studies in geography

The members of the U.S. Geography Commission are active and successful in pursuing research and studies in geography. Beyond many individual accomplishments in published research (media and academic journals) and conference participation (presentations, posters) that are not reported comprehensively here, we point out a list of key relevant accomplishments by the members of the commission that collectively advance the goals of PAIGH regarding Pan American studies in geography as well as demonstrate the caliber of individuals comprising the USNS membership.

Dr. Andrew Sluyter has been honored as an ACLS Digital Innovation Fellow **BLACK RANCHING FRONTIERS** for the 2012/13 academic year. The ACLS Digital Innovation Fellowship program supports digitally based research projects in all disciplines of the humanities and humanities-related social sciences to help advance digital humanistic scholarship by broadening understanding of its nature and exemplifying the robust infrastructure necessary for creating further such works. His efforts have been documented on the blog at http://aclsproject.blogspot.com. The program is generously funded by The Andrew W. Mellon Foundation. Dr. Sluyter's research focused on Internet-Based Geographic Information System (GIS) of Nineteenth-Century Atlantic Commodity Networks. http://www.acls.org/research/digital.aspx?id=798. He also recently published *Black Ranching Frontiers*, Yale University Press, 2012. https://sites.google.com/site/andrewsluyter/home/books/black-ranching-frontiers in 2013, Dr. Roger Sayre and co-authors launched the publication A New Map of Standardized Terrestrial Ecosystems of Africa. Readers can learn more about an extraordinary set of new African maps published by the AAG as a full-color special supplement to the African Geographical Review. A New Map of Standardized Terrestrial Ecosystems of Africa is the result of the efforts of a team of African and U.S. scientists, who have created a completely updated set of maps. This special full-color booklet showcases their work in a series of beautiful new continental maps. The authors represent 37 experts from 18 countries that collaborated to produce the maps and ecosystems classification contained herein. Every author made a significant intellectual, data, and/or analytical support contribution to the work, in addition to participating in the development and review of the document. The invited African ecosystem scientists and vegetation geographers were knowledgeable about the types and distributions of vegetation in their countries and frequently across larger regions, and shared maps and data on the locations of ecosystems. Their dedication to this work, which they perceived as a welcome attempt to unify thinking about African

ecosystems and vegetation across the entire continent, was moving, and is much appreciated. The data sets used to produce the maps are freely available online from USGS.

Dr. Ángel David Cruz Báez, hosted and Co-Directed the VIth Race Ethnicity and Place Conference held October 2012 in San Juan, Puerto Rico. The hosting at the University of Puerto Rico marks the first time that the conference was held elsewhere than the continental United States. The conference fosters dialogue on a range of issues related to the racial and ethnic transformation of places. It encourages interdisciplinary perspectives, philosophical and methodological diversity, and professional and student perspectives on such issues. The events, which take place in different cities every other year since 2002, incorporate a regional focus when appropriate, as was done this time in Puerto Rico, while maintaining national and international perspectives on race, ethnicity and place issues. More than 500 attendees presented and participated in the event.

Dr. Betty Smith has co-organized with colleague Dr. Joel Outtes, Universidade Federal do Rio Grande, Brazil a series of sessions at mutliple conferences focused on *Cities and Urban Regions in the Americas*. These include at the Midwest Association for Latin American Studies Conference Program, (October 2012), Louisville, KY. Fort Worth, Texas; Los Angeles, Association of American Geographers, April 2013; Urban Affairs Association Conference, forthcoming March 2014; and Tampa, Florida, Association of American Geographers Conference, forthcoming April 2014.

A handful of highly relevant research publications by members include:

- Salisbury, David S., Castro Sánchez Moreno, Mariano, Dávalos Torres, Luís, Guimaraes Vásquez, Robert, Saito Diaz, José, Tipula Tipula, Pedro, Treneman Young, Andrés, Arana Courrejolles, Carlos, and the Grupo de Monitoreo de Megaproyectos Región Ucayali. 2013. "Border integrations: The fusion of political ecology and land-change science to inform and contest transboundary integration in Amazonia." Pgs. 129-149 in *Land Change Science and Political Ecology: Synergies and Divergences*, Eds. Brannstrom, C. and J. M. Vadjunec. London: Earthscan.
- Smith, Betty. 2012. "Geography in the Americas: Student Research and Service in the Context of Study Abroad" *Midwest Association for Latin American Studies*
- Cortes-Quezada, X., Muñiz-Solari, O. 2013. Chilean Young Students Visioning their Future for 2020. Chapter 3. In Margaret Robertson and Sirpa Tani (eds.). *Young People. Cross-cultural Views and Futures*. ACER-Australian Council for Educational Research.
- Quiroz-Posada, R., Muñiz-Solari, O. 2013. Young Students Visioning their Future as Citizens of Colombia. Chapter 4. In Margaret Robertson and Sirpa Tani (eds.). *Young People. Cross-cultural Views and Futures*. ACER-Australian Council for Educational Research.
- Ray, Waverly; Osvaldo Muñiz-Solari; Phil Klein; and Michael Solem. Effective Online Practices for International Learning Collaborations. *Review of International Geographical Education Online. RIGEO.* 2012, 2(1): 25-42. http://rigeo.org/vol-2-no-2.html

- Keeling, David J. 2013. A Picture is Worth 1,000 Words: Urban Regeneration in a Global City. *FOCUS on Geography* 56(2): (in press).
- Keeling, David J. 2013. Transport Research Challenges in Latin America. *Journal of Transport Geography* (in press).
- Keeling, David J. 2013. A Picture is Worth 1000 Words: Changing Accessibility in Mendoza, Argentina. *FOCUS on Geography* 56(1): 45-46.
- Keeling, David J. 2012. Medellín: A City Reborn? Co-authored with Drs Holli Drummond and John Dizgun. *FOCUS on Geography* 55(4): 146-154 (Special Bowman Issue).
- Keeling, David J. 2012. Annotated Latin American websites IV. *Journal of Latin American Geography* 11(2): 195-197.

4) Conduct or encourage joint research, development, and training in geography and related fields that benefit the Pan American community

The members of the U.S. Geography Commission remain active and successful in pursuing educational and training activities in geography through courses in universities, study abroad field courses, international visits and workshops, and others. We highlight that: Dr. Osvaldo Muñiz participated with colleagues at the AAG Annual Meeting on a featured panel session for Collaborative Online International Learning: Reflections on Pedagogy and Practice. He was instrumental in the conducting of Center for Global Geography Education workshops that manage collaborative online international learning projects.

Dr. Betty Smith has developed a new course entitled "Spaceship Earth: The State of the Planet" which takes advantage of new online teaching strategies and is conducted as a hybrid course, partly face-to-face and partly online.

Dr. Solís finalized work on the My Community, Our Earth: Global Connections and Exchange Program, funded by the U.S. State Department with the goal to enhance mutual understanding between youth in the United States and their counterparts overseas and to empower youth and their teachers to increase environmental, geographic, technological and cultural literacy. This was achieved through facilitation of real-time and offline exchanges and collaboration around youth-led mapping projects on the themes of Environment, especially Climate Change and the Green Economy, Food Security and Vulnerability to Hazards. Over a 20-month period, Dr. Solís and her team trained 279 teachers in 34 U.S. States, Puerto Rico, Bolivia, Ghana, Nicaragua, and the Philippines, to use social networking, online mapping and the digital library of resources, particularly new collaborative activity lesson templates she developed specifically for this project, on the four key themes. School-to-college Geography Alliances in Alabama, Colorado, Michigan, Puerto Rico, Texas and Washington were engaged to feature educational pathways, which receive additional support by the National Geographic Society Education Foundation.

Diversity Ambassadors reached out to more than eighty-five hundred students in underserved schools in Florida, Texas, Oklahoma, Maryland, Washington, DC and Georgia to participate in exchanges and to encourage international and science careers among a population of youth estimated to include 85% from racial and ethnic minority groups and First Nations. A total of 513 new youth-led projects were conducted through this initiative, which have been uploaded to a social communications-enabled geoportal that permits sharing across all sites. A Digital Video Conference and



poster session with 45 submissions was held in April 2013 to connect all countries via live feed to conference attendees in Los Angeles. 100% of teachers responding to final evaluations say the program improved their students' knowledge and critical thinking about the themes. The U.S. embassies cultural and scientific affairs staff in all four countries were engaged with the work at their sites. The State Department has recommended follow-on funding for continued engagement and the conduct of three Youth TechCamps next year in Panama, Bolivia, and South Africa.

5) Participate in the transfer of technology and data, particularly geographic technologies and geospatial data infrastructure, through the various scientific and technical programs of PAIGH, the U.S. National Section, and the Pan American Geography Commission

Results from the collaboration between the Association of American Geographers (AAG), the Pan American Geography Commission of the Pan American Institute for Geography and History (PAIGH/IPGH) and the International Geographical Union (IGU) to consolidate information about geography programs and institutions in the Western Hemisphere are available to the public. We invited geographers to submit information about geography education, organizations related to geographic studies and research and also general information about geographers across the American continent, with the purpose of carrying out a general census about the state of geography in the Americas. We included the information in a digital directory that resides on ArcGIS Online at www.aag.org/americasmap.



The data collected through this effort are available to geographers across the continent to stimulate and facilitate activities as researchers, educators or planners, whether at public or

private organizations. This database is continually updated when new information is provided.

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Map Credits: Astrid Ng, additional support: Dr. Patricia Solís, Samar Ibrahim, Sarah Siegel, Megan Overbey (AAG staff).

This report is neither comprehensive nor exhaustive of the activities conducted by the commission members, but it is representative of the nature of involvement and contributions that the USNS Geography Commission makes to PAIGH direct activities, goals, and strategic priorities. Looking forward to the coming year, the U.S. Geography Commission will continue to pursue appropriate activities within these priority areas in ways that add value to and support both the U.S. National Section work and the direction of PAIGH in Mexico in terms of geographic research, geographic education, and the strengthening of institutions of geography in academic, public, and private sectors.

History Commission

Erick Langer, Representative

Despite various outside constraints, the History Commission was able to continue working on significant projects, in particular the "Historia de las Americas"/"History of the Americas" project.

Because of the budget cutbacks because of the "sequestration" legislation passed in 2012 by Congress, the annual meeting of the U.S. section of PAIGH was canceled. For the past years, the History Commission members had a vigorous presence in this meeting, but this year this was not possible.

Notwithstanding, during the 44th Meeting of the Directing Council, held in Buenos Aires, Argentina, held from November 11-15, 2012 the History Commission held a two day workshop on the "Historia de las Americas" project (Nov. 11-12). The workshop was funded by a PAIGH grant that provided for travel costs and other expenses for the workshop.

The workshop, led by U.S. History Commission representative Dr. Erick D. Langer, focused on organizing the History Commission volunteers from the United States, members of the History Commission from other countries, and invited scholars, to create an outline of the book and distribute the writing of the individual chapters to scholars. All members of the U.S. section of the

History Commission participated, including Dr. Evan Ward, Dr. Brad Coleman, and Dr. James Siekmeier. In total, 20 historians participated in the workshop, with a good representation from across the hemisphere.

The participants decided that the book will remain one volume, below 400 pages. The book will be divided into five chronological sections, with five chapters per period, based on a thematic approach. The exception will be for the pre-Columbian period, which will have only one lengthy chapter. Each chapter will not exceed 30 pages each in manuscript. Participants discussed how to cover the entire hemisphere in each chapter and also access the literature in English, Spanish, Portuguese and French. Another issue was to make sure to include the Caribbean and also Canada, which will mean recruiting historians of those regions. In addition, the issue of multidisciplinarity was discussed. Participants are working on recruiting cartographers, geographers, and other disciplinary members of PAIGH to contribute to the project. Each scholar Dr. Langer will be the editor of the book and will coordinate the chapters, to make sure that they all have a standard format and that there is little repetition.

The goal is to publish this work in Spanish, English and Portuguese. Dr. Langer has been in discussions with Oxford University Press, which has offices throughout the hemisphere and publishes in all of these languages. As of this report, Dr. Langer is assigning chapters and negotiating the funding for translation to the other languages.

Geophysics Commission

Jorge V. Bajo, Representative

This year the U.S. Geophysics Commission welcomed Dr. Lyndsay Ball from the USGS as its newest member. Dr. Ball has expertise in hydrology, which will add to the diversity of expertise within the commission. She has already expressed interest in participating in projects and collaborating with other PAIGH members. The commission also went through a change in leadership. Dr. Castro had to step down from his position as the main representative due to personal reasons, and Jorge V. Bajo Sanchez was selected as his replacement. Dr. Castro is still an active and valuable member of the commission. The Geophysics Commission has also been involved with two ongoing PAIGH projects and one submitted for consideration this year upcoming year. Also, Dr. Mendoza and Dr. Castro, members of the Geophysics Commission, and Jean Parcher, Vice-President of the PAIGH USNS, have been working in revamping the Scholarship Program in Geophysics that has been running for a few years already with the support of PAIGH.

These projects continue to expand the breadth of PAIGH---sponsored geophysics related research into key areas emphasized at the previous PAIGH general assemblies and Consejos Directivos, such as hazard risk. Participating partner countries include El Salvador and Mexico. Outreach activities have been undertaken to expand the awareness of PAIGH among researchers and academia to increase the involvement with the organization.

My goals for the commission within the next year are to: 1) continue the work that Dr. Castro started to increase the visibility of PAIGH within the geophysics community within the United States, by developing a PAIGH geophysics web---portal within VHub.org, a Collaborative volcano research and risk mitigation that has a multidisciplinary and international community with strong ties to North America, Central America and South America; 2) Investigate the possibility of a PAIGH---sponsored oriented session at regional and national meeting and conferences such as the AAG and the Middle States Division of the AAG; 3) Continue to search and populate the commission with active members in all relevant areas, in order to solicit more PAIGH projects in geophysics; and 4) Continue to maintain and enhance cooperation with existing participating partner countries, in particular El Salvador.

U.S. Geophysics Commission Activities for the past year include:

PAIGH approved and submitted project to study the Santa Ana Volcano in El Salvador In 2012, PAIGH approved funding for a project titled — Estudios Preliminar sobre diferencias etnofisiograficas y mapas de perspectivas de peligros volcánicos de las comunidades de alrededor del Volcán de Santa Ana. This project is being done in collaboration with the Direccion General del Observatorio Ambiental (DGOA) the former Servicio Nacional de Estudios Territoriales (SNET) of El Salvador. The principal investigators (PI) of this grant are Doctoral Candidate Jorge V. Bajo from SUNY at Buffalo, Dr. Bettina Martinez-Hackert from SUNY College at Buffalo and Ing. Cecilia Polio Lopez from DGOA. This project has benefited from the partnership created through other projects that were submitted and approved by PAIGH by the above mention PI and members of the DGOA in El Salvador. These projects continue to be and provide a strong bond between the U.S. researchers and the DGOA. As a proof of the growth of this relationship, this past year a new project was submitted and approved by PAIGH in which new researchers and Mexico were included to continue to work with hazard risk assessment issues in the Santa Ana Volcano in El Salvador.



Figure 1 Ing. Gutierrez standing in front of an erosive scar for scale in the area Buenos Aires, El Salvador where the PAIGH sponsor project is taking place.



Figure 2 Identifying risk zones in the Buenos Aires, El Salvador region. Photo of the road connecting Buenos Aires with other towns.

These projects have allowed Dr. Martinez---Hackert and Jorge V. Bajo to mentor undergraduate students in related projects and these students have and will present their work in regional, national and international meetings, such as the AGU, AAG, Cities on Volcanoes, the Student Research and Creativity as well as through the Small Grants program and the Undergraduate Summer Research Fellowship, all through SUNY College at Buffalo. Parts of this project have been presented at the Cities on Volcanoes 2012 Colima, at the PASI Workshop on Applying Computational Models to Real---Case Scenarios for Volcanic Hazard Assessment that took place in Colima, Mexico in 2013

and where Dr. Martinez---Hackert was a coPI and where Jorge V. Bajo Sanchez was an integral part of the process.



Figure 3 Jorge V. Bajo Sanchez presenting the PAIGH sponsor project at the PASI workshop 2013 in Colima, Mexico.

The same team of researchers submitted another project title: **Estudio eológico de Depósitos de Flujos y Oleadas Piroclásticos, Caída de Tefra, Lahares, Flujos de Escombros en la Zona Occidental del Volcán de Santa Ana (Ilamatepec)** in collaboration with DGOA and UNAM. The team met in Colima, Mexico on January 2013 to start planning the field work and division of responsibilities. This is the most ambitious project submitted by this group so far, since included three universities, one government agency and three countries.



Figure 4 In front Dr. Marcus Bursik, left Dr. Martinez---Hackert and Ing. Escobar in the inner crater of Santa Ana Volcano looking at deposits and collecting samples.

As the main representative for the U.S. Geophysics Commission this past year I decided to start conducting small workshops within in SUNY at Buffalo and SUNY College at Buffalo to get more people involved in PAIGH and to submit projects. I have also started to talk to other members of the academia in University of South Florida and Michigan Technological University about PAIGH and the possibility to propose projects or courses in the upcoming years.

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