

Tupper 4pm seminar

Tuesday, July 14, 4pm seminar speaker will be Ran Nathan Hebrew University of Jerusalem

A unifying movement ecology framework applied to the study of the airborne movements of seeds, birds and bats

Paleo-Talk

Wednesday, July 15, Paleo-talk speaker will be Fumie Iizuka, STRI fellow

Inferring clay source, manufacturing technique, and firing temperatures of Monagrillo ware (ca. 4,500-3,200 B.P.), the earliest ceramics of Central America

Bambi seminar

Thursday, July 16, Bambi seminar speaker on BCI will be Bas Haring, professor of Public Understanding of Science, University of Leiden
Title to be announced

Arrivals

Eben Kirksey, University of California - Santa Cruz, and Etienne Benson, Harvard University, to study the tropical forest as a boundary object, on BCI.

Robert Thacker, University of Alabama at Birmingham, to participate in the PorToL Workshop: DNA and RNA extraction for the Porifera tree of life, at Bocas del Toro and Naos.

Niamh Redmond, SI's National Museum of Natural History, to participate in the PorToL Workshop: DNA and RNA extraction for the Porifera tree of life, at Bocas del Toro and Naos.



Smithsonian Tropical Research Institute, Panamá

www.stri.org

July 10, 2009

CTFS book on the trees of one of Thailand's wildlife sanctuaries

The National Parks, Wildlife and Plant Conservation Department of Thailand has just published the book *Forest trees of Huai Kha Khaeng Wildlife Sanctuary, Thailand: Data from the 50-hectare Forest Dynamic Plot* (2009), authored by Sarayudh Bunyavejchewin, James V. LaFrankie, Patrick J. Baker, Stuart J. Davies and Peter S. Ashton, researchers for STRI's Center for Tropical Forest Science (CTFS).

The Huai Kha Khaeng Wildlife Sanctuary is one of Thailand's iconic conservation reserves. Located in western Thailand, the Huai Kha Khaeng WS and its neighbor, the Thung Yai-Naresuan Wildlife Sanctuary, form the core of Thailand's Western Forest Complex, the largest area of protected wilderness in continental Southeast Asia. These World Heritage Sites support a landscape mosaic of deciduous and evergreen forests that harbor a remarkable diversity of plants and animals. Tigers, elephants, clouded leopards, gaur, and banteng all roam the forests of Huai Kha Khaeng and the Western Forest Complex—some of the finest examples of seasonal tropical forests in continental Southeast Asia.

Over the past 18 years research scientists from the Thai Royal Forest Department, the Thai National Parks, Wildlife and Plant Conservation Department, STRI's Center for Tropical Forest Science (CTFS) and Harvard University have been studying the species-rich seasonal dry evergreen forest at the Huai Kha Khaeng Wildlife Sanctuary.

This book presents, in unprecedented detail, a description of the structure, composition and dynamics of one of Thailand's most diverse forest types. Future generations of botanists, ecologists, foresters, and conservationists will be able to use this book as a reference point to assess potential future impacts on these forests and to guide the management of this wonderful natural heritage.

El Departamento de Conservación, Vida Silvestre y Parques Nacionales de Tailandia acaba de publicar el libro *Forest trees of Huai Kha Khaeng Wildlife Sanctuary, Thailand: Data from the 50-hectare Forest Dynamic Plot* (2009) [Árboles de los bosques del Santuario de Vida Silvestre de

Forest Trees
of Huai Kha Khaeng
Wildlife Sanctuary, Thailand

*Data from the 50-Hectare
Forest Dynamics Plot*

Sarayudh Bunyavejchewin
James V. LaFrankie
Patrick J. Baker
Stuart J. Davies
Peter S. Ashton

Huai Kha Khaeng, Tailandia] cuyos autores son Sarayudh Bunyavejchewin, James V. LaFrankie, Patrick J. Baker, Stuart J. Davies y Peter S. Ashton, investigadores del Centro de Ciencias Forestales del Tropic de STRI (CTFS).

El Santuario de Vida Silvestre de Huai Kha Khaeng es una de las reservas icónicas para la conservación en Tailandia. Localizado al oeste de Tailandia, este santuario y su vecino, el Santuario de Vida Silvestre de Thung Yai-Naresuan, forman la médula del complejo de bosques occidentales de Tailandia, el área más extensa de vida silvestre protegida en el suroeste continental de Asia. Estos dos sitios de Patrimonio Mundial mantienen el mosaico de paisajes de bosques

More arrivals

Jose Lopez, Andia Chaves-Fonnegra and Ewelina Rubin, Nova Southeastern University, to participate in the PorToL Workshop: DNA and RNA extraction for the Porifera tree of life, at Bocas del Toro and Naos.

Ehsan Kayal and Dennis Lavrov, Iowa State University, to participate in the PorToL Workshop: DNA and RNA extraction for the Porifera tree of life, at Bocas del Toro and Naos.

April Hill and Elizabeth Danka, University of Richmond, to participate in the PorToL Workshop: DNA and RNA extraction for the Porifera tree of life, at Bocas del Toro and Naos.

Sara Dale, Lancaster University, to study soil nutrient dynamics, at Tupper.

Molly Goodier, Eckerd College, to study the ecology and migrations of marine turtles of Bocas del Toro, at the Bocas Station.

Steven Vollmer, Elizabeth Hemond, Silvia Libro and Carmel Norman, Northeastern University, to study the ecological genetics of reef building corals on both sides of the Isthmus, at Bocas.

Christopher Carson, University of Pittsburgh, to carry out the project "Rodents as conditional mutualists of trees: When are agoutis effective seed dispersers?" on BCI.

Nina Wurzburger, Princeton University, to study nutrient augmentation, on BCI.

caducifolios y siempre verdes que son hogar de una gran diversidad de plantas y animales. Tigres, elefantes, panteras nebulosas, gaúres, toros de Balí, todos habitan libremente en los bosques de Huai Kha Khaeng y el Complejo de Bosques del Oeste—algunos de los mejores ejemplos de bosques estacionales en el suroeste de Asia continental.

Durante los últimos 18 años, científicos del Departamento de Bosques de Thai Royal, los Parques Nacionales de Thai, el Departamento de Conservación Vegetal, el Centro de Ciencias Forestales del Trópico de STRI y la Universidad de Harvard han

Eberhard receives Distinguished Teaching Award

STRI staff scientist William G. Eberhard will receive this year's the Animal Behavior Society Distinguished Teaching Award. Although the decision each year is always very difficult, the committee was extremely impressed by his record of sustained excellence in the teaching of animal behavior and the major impact he has had on animal behavior education in Latin America. Eberhard teaches at the University of Costa Rica.

Both Eberhard's colleagues and students submitted materials showing how strongly they felt about this much-deserved award. One of the members of the award committee commented that "The letters for Dr. Eberhard made me want to take a class from him, or at least just walk through a tropical forest with him! He seems to have an impressive and creative approach to teaching, as well as

estudiado la riqueza estacional de especies del bosque seco siempre verde en el Santuario de Vida Silvestre de Kha Khaeng.

Este libro presenta, con un detalle sin precedentes, una descripción de la estructura, composición y dinámica de uno de los tipos de bosques más diversos de Tailandia. Las futuras generaciones de botánicos, ecólogos, ingenieros forestales y conservacionistas podrán usar este libro como un punto de referencia para apreciar la magnitud de impactos potenciales sobre estos bosques, así como una guía de manejo para este maravilloso patrimonio natural.



sustained excellence in and love for education." And on a similar note, "He has clearly attained the status of a legend. I love the descriptions of how he takes students out into the field and gets them to pose hypotheses on the spur of the moment." Perhaps most importantly, members cited the sheer number of students he has inspired, and that he has long filled a real need for quality teaching in Latin America (Central and South America).

El científico de STRI, William G. Eberhard recibirá el premio de este año de Educación Distinguida de la Sociedad de Comportamiento Animal de los Estados Unidos. A pesar de que

Departures

Fernando Pascal and Aquiles Navarro to Washington DC on official business at SI.

Steve Paton, to Washington DC, to participate in the Encyclopedia of Life Fellows Workshop: and to meet with SI personnel.

Javier Mateo-Vega, to New Haven, to attend meetings with ELTI principal investigator Mark Ashton, and other colleagues.

Carlos Jaramillo, to Santafé de Bogotá and Bucaramanga, to collect and observe fossils at Guaduas, and Regadera geological formations.

Director Eldredge Bermingham and acting deputy director William T. Wcislo, on a short vacation.

Fernando Santos-Granero, to Mexico DF, to lecture at the 53rd Congreso Internacional de Americanistas.

New biologists

Our congratulations to Alfredo Lanuza, in charge of the environmental education program at Galeta, and nature guide Ursula Vargas, for obtaining their bachelor's degree in Biology from the University of Panama, with the thesis: Diversidad y abundancia de escarabajos saproxilicos según el estado de descomposición de la madera y la temporada en el Área Recreativa Lago Gatún (2009). [Diversity and abundance of saproxilic beetles according to the season and stage of wood decomposition at Gatun Lake Recreational Area].

New publications

Boyero, Luz, Ramirez, Alonso, Dudgeon, David, and Pearson, Richard G. 2009. "Are tropical streams really different?" *Journal of the North American Benthological Society* 28(2): 397-403.

Bunyavejchewin, Sarayudh, LaFrankie, Jr., James V., Baker, Patrick J., Davies, Stuart James, and Ashton, Peter S. 2009. *Forest trees of Huai Kha Khaeng Wildlife Sanctuary, Thailand: Data from the 50-hectare Forest Dynamic Plot*. Bangkok, Thailand: The National Parks, Wildlife and Plant Conservation Department.

Bruna, Emilio M., Fiske, Ian J., and Trager, Mathew D. 2009. "Habitat fragmentation and plant populations: Is what we know demographically irrelevant?" *Journal of Vegetation Science* 20(3): 569-576.

Dechmann, Dina K.N. and Safi, Kamran. 2009. "Comparative studies of brain evolution: A critical insight from the Chiroptera." *Biological Reviews* 84(1): 161-172.

Marin, Ivan and Anker, Arthur. 2009. "On the presence of the pontoniine shrimp, *Tuleariocaris holthuisi* Hipeau-Jacquotte, 1965 (Decapoda, Pontoniinae) on the Pacific coast of Panama." *Crustaceana* 82(4): 505-508.

Melo, Maria C., Salazar, Camilo, Jiggins, Chris D., and Linares, Mauricio. 2009. "Assortative mating preferences among hybrids offers a route to hybrid speciation." *Evolution* 63(6): 1660-1665.

Pearson, Richard G. and Boyero, Luz. 2009. "Gradients in regional diversity of freshwater taxa." *Journal of the North American Benthological Society* 28(2): 504-514.

todos los años la decisión es siempre difícil, en esta ocasión, los miembros del comité de selección estuvieron extremadamente impresionados por la excelencia en la enseñanza que ha mantenido Eberhard como profesor de comportamiento animal y el gran impacto que ha causado en la educación sobre comportamiento animal en América Latina. Eberhard enseña en la Universidad de Costa Rica.

Tanto los colegas como los estudiantes de Eberhard enviaron documentación demostrando su gran apoyo a este premio tan merecido. Uno de los miembros del comité a cargo de la selección comentó que "Las cartas a favor del Dr.

Eberhard hacen que quiera tomar una clase con él, o, ¡por lo menos caminar con él a través de un bosque tropical! Parece que Eberhard ha usado una forma de enseñar creativa a la vez que impresionante, además de una excelencia sostenida y amor por la educación. En una nota similar, "Claramente, ha obtenido el estatus de una leyenda. Adoro las descripciones de cómo lleva a los estudiantes al campo y los anima a proponer hipótesis sorpresivamente." Aún más importante, los miembros del comité citaron el gran número de estudiantes que Eberhard ha inspirado, y que ha llenado por largo tiempo la necesidad real por una educación de calidad en América Latina (Centro y Suramérica).

Join us to plant trees!

Remember that tomorrow, we all have a date with planting trees. Transportation will be available. Call Jeanette Egger.

Recuerden que mañana, todos tenemos una cita para plantar árboles. Habrá transporte disponible. Llame a Jeanette Egger para una reservación.

More publications

Robertson, Jeanne M. and Zamudio, Kelly R. 2009. "Genetic diversification, vicariance, and selection in a polytypic frog." *Journal of Heredity* Online.

Seid, Marc A. and Brown, Brian V. 2009. "A new host association of Comptosia solenopsidis (Diptera: Phoridae) with the ant Pheidole dentata (Hymenoptera: Formicidae) and behavioral observations." *Florida Entomologist* 92(2): 309-313.

Yule, Catherine M., Leong, Mun Yi, Liew, Kong Cheng, Ratnarajah, Lavenia, Schmidt, Katrin, Wong, Hooi Ming, Pearson, Richard G., and Boyero, Luz. 2009. "Shredders in Malaysia: Abundance and richness are higher in cool upland tropical streams." *Journal of the North American Benthological Society* 28(2): 404-415.

STRI in the news

"Panama Canal Project opens a tropical window" by Natalie Angier. 2009. The New York Times: July 6.

"Discovering diversity in the tropics," by the University of California, San Diego. 2009. *Medical News Today*: July 10, at: <http://www.medicalnewstoday.com/articles/157092.php>

"Protecting Las Perlas environment" by David Young. 2009. La Estrella: Panama Star, July 10 at: <http://www.laestrella.com.pa/mensual/2009/07/10/contenido/120473.asp>

Do not miss checking a new web site to go public on Wednesday, July 15: www.smithsonianscience.org <<http://www.smithsonianscience.org>>



El Instituto Smithsonian de Investigaciones Tropicales,
El Centro Latino Smithsonian

y
El Museo del Canal Interoceánico de Panamá

Tienen el placer de invitarle(s) a las actividades
alusivas al programa

"Panamá en el Smithsonian"

Conferencia de Prensa

Martes, 14 de julio de 2009
10:00 a.m.

Conferencias Magistrales

Richard Cooke: Historia y contribuciones de los indígenas de Panamá a las artes, herencia y cultura

Stanley Heckadon-Moreno: El Smithsonian en Panamá, 1910-2009

Líder Sucre: La historia que contará el Museo de la Biodiversidad

Miércoles, 15 de julio de 2009

5:30 p.m.



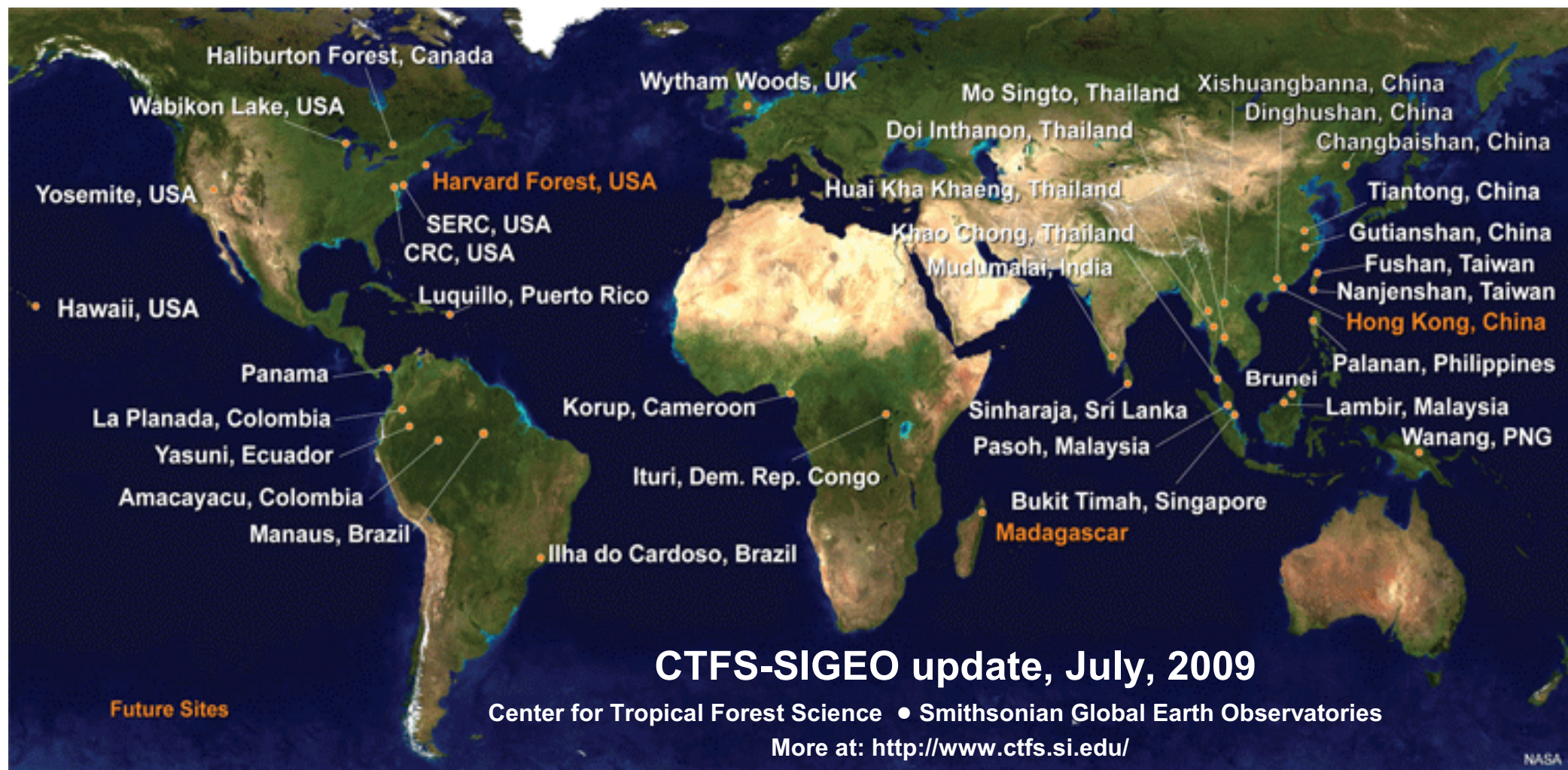
Ambos eventos se llevarán a cabo en el Auditorio del Centro de Conferencias Earl S. Tupper
Corregimiento de Ancón, Ciudad de Panamá • Información: 212-8000 ext. 0

The Center for Tropical Forest Science/ Smithsonian Global Earth Observatories (CTFS/SIGEO) has grown into a forest network of 34 forest dynamic plots in 20 countries, since the establishment of the first plot on Barro Colorado Island in 1982.

The CTFS/SIGEO is a global network of forest research plots and scientists committed to the study of tropical and temperate forest function and diversity. The multi-institutional network comprises more than thirty forest research plots across the Americas, Africa, Asia, and Europe, with a strong focus on tropical regions. CTFS/SIGEO monitors the growth and survival of approximately 3.5 million trees and 7,500 species. Since 2007 several new plots have been established thanks to the support of the HSBC Climate Partnership.

El Centro de Ciencias Forestales del Trópico de STRI/Observatorios Globales de la Tierra (CTFS/SIGEO) se ha convertido en una red de 34 parcelas de dinámica de bosques en 20 países, desde el establecimiento de la primera parcela en Barro Colorado en 1982.

El CTFS/SIGEO es una red global de parcelas de bosques y científicos comprometidos al estudio de la función y diversidad de los bosques tropicales y templados. Esta red multi-institucional está conformada por más de treinta parcelas de estudio a través de las Américas, Africa, Asia y Europa, con un fuerte enfoque en las regiones tropicales. CTFS/SIGEO monitorea el crecimiento y supervivencia de cerca de 3.5 millones de árboles de 7,500 especies diferentes. Desde 2007, varias parcelas se han establecido gracias al apoyo del HSBC Climate Partnership.



America:

1. Haliburton Forest, Canada; 13-ha; 2007
2. Wabikon Lake Forest, USA; 25-ha; 2008
3. Yosemite National Park, USA; 25-ha; 2009
4. Smithsonian Environmental Research Center, USA; 16-ha; 2008
5. CRC: Smithsonian Conservation & Research Center, USA; 25.6-ha; 2008
6. Luquillo, Puerto Rico; 16-ha; 1990
7. Laupahoehoe, Hawaii Island (Big Island), Oceania USA; 4-ha; 2008; Palamanui, Hawaii Island (Big Island) Oceania, USA; 4-ha; 2007

8. Barro Colorado Island, Panama; 50-ha; 1982; Sherman, Panama; 6-ha; Last Census: 1999; Cocoli, Panama; 4-ha; Last Census: 1998

9. La Planada, Colombia; 25-ha; 1996
10. Amacayacu, Colombia; 25-ha; 2007
11. Yasuni, Ecuador; 50-ha; 1995
12. Manaus, Brazil; 25-ha; 2005

Europe:

13. Wytham Woods, UK; 18-ha; 2008

Africa:

14. Korup, Cameroon; 50-ha; 1996

15. Ituri, Dem. Rep. of Congo; 10 ha x 4 (two in Lenda and two in Edoro); 1994

Asia:

16. Mo Singto, Thailand; 30.5 ha, 2003
17. Doi Inthanon, Thailand; 15-ha; 1997
18. Huai Kha Khaeng, Thailand; 50-ha; 1992
19. Khao Chong, Thailand; 24-ha; 2000
20. Mudumalai, India; 50-ha; 1988
21. Sinharaja, Sri Lanka; 25-ha; 1993
22. Pasoh, Peninsular Malaysia; 50-ha; 1986
23. Bukit Timah, Singapore; 2-ha; 1993

24. Xishuangbanna, China; 20-ha; 2007
25. Dinghushan, China; 20-ha; 2005
26. Changbaishan, China; 25-ha; 2004
27. Tiantong, China; Initiated census 2009
28. Gutianshan, China; 24-ha; 2005
29. Fushan, Taiwan; 25-ha; 2002
30. Nanjenshan, Taiwan; 3-ha; 1989
31. Palanan, Philippines; 16-ha; 1994
32. Brunei, Initiated census, 2009
33. Lambir, Malaysia; 52-ha; 2000
34. Wanang, Papua New Guinea, Initiated census, 2009.