

KELLY SWING  
CURRICULUM VITAE  
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**CONTACT INFORMATION:**

Universidad San Francisco de Quito  
Tiputini Biodiversity Station  
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**CURRENT POSITIONS:**

Professor of Ecology and Environmental Sciences,  
USFQ, 1991-present

Founding Director of the Tiputini Biodiversity Station,  
USFQ, 1994–present

Adjunct Associate Professor of Biology,  
Director, Tropical Ecology Program,  
Boston University, 1995-present

Senior Research Fellow, Center for Tropical Research,  
UCLA Institute of the Environment, 2002-present

**EDUCATION:**

Ph.D. in Zoology, 1992, through the Museum of Natural Science of Louisiana  
State University, Baton Rouge, Louisiana, USA  
Dissertation: “Influences on the in-stream distribution of *Astyanax  
fasciatus* in a small river in Costa Rica”; directed by Dr. J. Michael  
Fitzsimons

M.S. in Zoology, 1985, Auburn University, Auburn, Alabama, USA  
Thesis: “Ichthyofaunal survey of Tumi Chucua, a lake in  
Amazonian Bolivia”; directed by Dr. John S. Ramsey

B.A. in Chemistry, Fall 1979, University of North Carolina at Wilmington, USA

B.S. in Marine Biology, Spring 1979, University of North Carolina at Wilmington

**AWARDS, CONSULTANCIES, APPOINTMENTS:**

Ichthyologist/Environmental Impact Consultant, Repsol/Ecuambiente, Amazonian Ecuador, November 2018-March 2019

Science and Environmental Educator, Olde Providence School, Charlotte, North Carolina. Regular internet interventions with a second-grade class in relation to tropical ecology, indigenous Amazonian peoples and environmental concerns. Academic years 2015-2017.

Environmental columnist, *Aula Magna*, a monthly university-based newspaper, 2009-2014

Invited Environmental speaker, University of Michigan, 18 October 2014

Ichthyologist/Environmental Impact Consultant, Repsol/Ecuambiente, Amazonian Ecuador, November 2012

Ichthyologist/Environmental Impact Consultant, Repsol/YPF/Ecuambiente, Amazonian Ecuador, 2007-2008

Ichthyologist/Environmental Impact Consultant, Repsol/YPF/Ecuambiente, Amazonian Ecuador, 2005-2006

Certificates of student appreciation, 2005 and 2006 Boston University

Grant MacEwan Environmental Chair, October 2005, invited special lecturer in Environmental Sciences at the Grant MacEwan College in Edmonton, Canada

Technical Advisory Group member, Yasuní National Park and Biosphere Reserve, Amazonian Ecuador, 2001-present

Member, Scientific/Environmental Assessment Committee, EnCan Ecuador, a subsidiary of Alberta Energy Corporation, 2003-2006

Board Member, EcoEcuador, an NGO involved in strategies for sustainable development (ecotourism) for the Kichwa Community of Añangu in association with the Napo Wildlife Center, 2002-2007.

Ichthyologist/Environmental Impact Consultant, Perez/ Companc – Daimi Service/Yawe, Amazonian Ecuador, 2001

Ichthyologist/Environmental Impact Consultant for the Comprehensive Environmental Assessment of Maxus Energy, Amazonian Ecuador, 1996-1997

Ichthyologist/Environmental Impact Consultant, Maxus Energy/Ecuambiente, Amazonian Ecuador, 1994-1995

IUCN Advisory Board for Ecuador, 1994-present

Advisor for the inventory/management plan for the national territory of the Indigenous Peoples of Pastaza (OPIP), Amazonian Ecuador, 1993-1994

Fulbright Fellow, 1991-1992, Ecuador

Consultant for surveys and management plan for the threatened Gopher Tortoise, southeastern U.S., 1988-1990

LSU Fugler Fellow in Tropical Vertebrate Biology, Costa Rica, 1988

### **TEACHING:**

Tropical Montane Ecology (ECL405) USFQ; Tropical Coastal Zone Ecology (ECL406) USFQ; Tropical Rainforest Ecology (ECL407) USFQ; Studies in Tropical Ecology (ECL408) USFQ; Biology of Fishes and Fisheries (BIO327) USFQ/GAIAS; Tropical Ecology (ECL401) USFQ; Ecología de Bosques Tropicales (ECL402) USFQ; Ictiología (BIO310) USFQ; Biología de los Invertebrados (BIO203) USFQ; Biología de los Vertebrados (BIO204); Zoología General (BIO205) USFQ; Comportamiento Animal (BIO202); Recursos del Ecuador (ECL100) USFQ; General Biology (BIO153) NSU; Vertebrate Zoology (BIO365) NSU; Comparative Anatomy (ZOO 2152L) LSU; Ichthyology (ZOOL 4145L) LSU; Ethology (ZOOL7118L) LSU; Human Biology (BIO106) AU; Mammalian Physiology I and II (ZOO560L-561L) AU; Human Physiology (BIO 251L) AU; Animal Biology (BIO103L) AU; Introductory Biology (BIO101L) AU

\*The first four courses have been taught for Boston University during 48 semesters; Biology of Fishes is taught for USFQ/GAIAS; AU implies that instruction occurred at Auburn University in Alabama (1980-85), NSU implies Northern State University in South Dakota (1991), LSU implies Louisiana State University (1986-1990) and USFQ implies Universidad San Francisco de Quito, Ecuador (1990-present); L in the course code implies that laboratories were taught primarily; titles in English represent courses taught in English while titles in Spanish represent courses taught in Spanish.

### **SELECTED WRITING AND RESEARCH:**

Swing K. *In press*. La Industria Petrolera en el Contexto del Ambiente en el Ecuador (translates to: Environmental Context of the Oil Industry in Ecuador) 40-page chapter in a book due to be published by Ecuador's Catholic University (PUCE).

Swing K. *In press*. Usos tradicionales de la íctiofauna en Amazonia. (Capítulo para un libro sobre la etnozootología a ser publicado por la PUCE).

Swing K. 2020. *In press*. Risks for the environment, biodiversity and the planet. And humankind. MATSES 23pp.

Lizana Lizana V, Mosquera D, Diaz E, Swing K. 2020. *In press*. Scavenging behaviour of the Short-eared Dog (*Atelocynus microtis*) in Ecuadorian lowland rainforest. Studies on Neotropical Fauna and Environment.

Guerra J, Ineson K and K Swing 2019. Range extension and natural history observations for the Smoky Bat (*Amorphochilus schnablii*). Mastozoologia Neotropical. 7pp.

Swing K. 2019. The globalized thought process in relation to natural resources. Annals of the Brazilian Academy of Sciences. 9pp.

Encalada AC, Guayasamin JM, Sampedro C, Guevara MA, Schrekinger J, Suárez E, Lessman J, Swing K and Mena C. 2019. Los ríos Andino-Amazónicos del Ecuador.

Swing K and Buenaño M. 2019. Monitoreo Biológico Yasuní. Tomo 5, Peces. Ecuambiente Consulting Group. 204pp.

Blake JG, Mosquera D, Loiselle, Swing K and D Romo. 2017. Long-term variation in abundance of terrestrial mammals and birds in eastern Ecuador as measured by photographic rates and occupancy estimates. J. Mamm. 98(4):1168-1178.

Swing K. 2017. ¿Qué es y qué hace la Estación de Biodiversidad Tiputini? Capítulo 1, pp. 17-26 *en* Los Secretos del Yasuní: Avances en investigación en la Estación de Biodiversidad Tiputini, Universidad San Francisco de Quito. Editorial USFQ, Quito, Ecuador. 345pp.

Swing K. 2017. Nuevos descubrimientos, un simple ejemplo. Capítulo 5, pp. 55-56 *en* Los Secretos del Yasuní. Editorial USFQ, Quito, Ecuador. 345pp.

Blake JG, Mosquera D, Loiselle BA, Guerra JF, Romo D y Swing K. 2017. La utilización de cámaras trampa para documentar la ocurrencia y distribución de grandes mamíferos y aves en la Estación de Biodiversidad Tiputini. Capítulo 6, pp. 57-72 *en* Los Secretos del Yasuní. Editorial USFQ, Quito, Ecuador. 345pp.

Swing K. 2017. Observaciones preliminares sobre la ictiofauna amazónica del Ecuador. Capítulo 13, pp. 169-180 *en* Los Secretos del Yasuní. Editorial USFQ, Quito, Ecuador. 345pp.

Swing K. 2017. Comentario sobre los artrópodos del Yasuní. Capítulo 15, pp. 197-206 *en* Los Secretos del Yasuní. Editorial USFQ, Quito, Ecuador. 345pp.

Swing K. 2017. Los chinches saltarines, miembros de la familia Membracidae, como ejemplo de los retos para entender la biodiversidad de la Amazonía. Capítulo 16, pp. 207-210 *en* Los Secretos del Yasuní. Editorial USFQ, Quito, Ecuador. 345pp.

Rodríguez M y Swing K. 2017. Reflexiones de un guía naturalista. Capítulo 19, pp. 271-274 *en* Los Secretos del Yasuní. Editorial USFQ, Quito, Ecuador. 345pp.

Swing K. 2016. "The vocabulary of nature", Foreword, pp. vii-ix *in* Mathematical advances towards sustainable environmental systems, eds. JN Furze, K Swing, AK Gupta, R McClatchey, DC Reynolds. Springer, Switzerland.

Raafat SM, Swing K. 2016. "Context and perspectives", introductory chapter, pp. 1-8 *in* Mathematical advances towards sustainable environmental systems, eds. JN Furze, K Swing, AK Gupta, R McClatchey, DC Reynolds. Springer, Switzerland.

Swing K. 2016. "Introduction to biodiversity", pp. 89-108 *in* Mathematical advances towards sustainable environmental systems, eds. JN Furze, K Swing, AK Gupta, R McClatchey, DC Reynolds. Springer, Switzerland.

Swing K. 2016. "Challenges to conservation", pp. 109-128 *in* Mathematical advances towards sustainable environmental systems, eds. JN Furze, K Swing, AK Gupta, R McClatchey, DC Reynolds. Springer, Switzerland.

Mosquera D, Blake JG, Swing K, Romo D. 2016. Ocelot (*Leopardus pardalis*) density in eastern Ecuador based on capture-recapture analyses of camera trap data. Neotropical Biodiversity 2:1, 51-58.

Blake JG, Mosquera D, Loiselle BA, Swing K, Guerra JF, Romo D. 2015. Spatial and temporal activity patterns of ocelots *Leopardus pardalis* in lowland forest of eastern Ecuador. J Mammalogy

Staton SJR, Woodward A, Castillo JA, Swing K, Hayes MA. 2014. Ground level environmental protein concentrations in various Ecuadorian environments: Potential uses of aerosolized protein for ecological research. Ecological Indicators 48(2014): 389-395.

Swing K. 2014. Evolution in Relation to Environmental Impacts and Extreme Species Loss, Chapter 5, pages 77-86 *in* Why does evolution matter? The importance of understanding evolution, Gabriel Trueba, ed. Cambridge Scholars Publishing. ISBN (10): 1-4438-6518-4, ISBN (13): 978-1-4438-6518-0

Swing K, Denking J, Carvajal V, Encalada A, Silva X, Coloma LA, Guerra JF, Campos Yáñez F, Zak V, Riera P, Rivadeneira JF and Valdebenito H. 2014. Las colecciones científicas: percepciones y verdades sobre su valor y necesidad. Bitácora Académica 1:1-46.

- Oxford P, Bish R and K Swing. 2014. Yasuní, Tiputini y la Red de la Vida. Mariscal, Quito, Ecuador. 264pp.
- Blake J, Mosquera D, Guerra J, Loiselle, Romo D. and K Swing. 2014. Yasuní – a hotspot for jaguars *Panthera onca* (Carnivora: Felidae)? Camera-traps and jaguar activity at Tiputini Biodiversity Station, Ecuador. Rev. Biol. Trop. 62(2):689-698.
- Mallon J, Swing K, Mosquera D. 2013. Neotropical vulture scavenging succession at a capybara carcass in eastern Ecuador. Ornith. Neotrop. 24:475-480
- Swing K. 2013. Yasuní oil plans call for vigilance. Nature, Correspondence. 501:316.
- Swing K. 2013. Inertia is speeding fish-stock declines. Nature, Correspondence. 494:314.
- Swing K. Blog for *National Geographic* website, posted 27 December 2012. <http://newswatch.nationalgeographic.com/2012/12/26/science-in-yasuni-sheds-light-on-impacts-of-oil-development-in-amazon/>
- Blake JG, Mosquera D, Loiselle BA, Swing K, Guerra J and Romo D. 2012. Temporal Activity Patterns of Terrestrial Mammals. Ecotropica 18:137-146.
- Oxford P, Bish R and K Swing. 2012. Yasuní, Tiputini and the Web of Life. Mariscal, Quito, Ecuador. 264pp.
- Swing K, Davidov V and B Schwartz. 2012. Oil developmental on traditional lands of indigenous peoples; coinciding perceptions on two continents. Journal of Developing Societies 28(2):257-280.
- Swing K and L Sempértegui. 2012. Problems enforcing Ecuador ecology law. Nature, Correspondence 491:40.
- Swing K. 2012. Preliminary observations on the natural history of representative treehoppers (Hemiptera, Auchenorrhyncha, Cicadomorpha: Membracidae and Aetalionidae) in the Yasuní Biosphere Reserve, including first reports of 13 genera for Ecuador and the Province of Orellana. Avances en Ciencias e Ingenierías. 4(2): B17-30.
- Tirira DG, Burneo SF, Swing K, Guerra J and D Valle. 2012. Comments on the distribution of *Amorphochilus schnablii* Peters, 1877 (Chiroptera, Furipteridae) in Ecuador *in* Investigación y conservación sobre murciélagos en el Ecuador, PUCE, Publ. Esp. Mam. del Ecuador 9:209-216.

Swing K and J Guerra. 2012. Opportunistic consumption of placenta in the endemic Rice Rat (Cricetidae, *Aegiolomys galapagoensis bauri*) on the island of Sante Fe, Galapagos. *Avances en Ciencias e Ingenierías*. 4(2): B3-4.

Swing K. 2012. Extreme ectoparasitic behavior of Hood mockingbirds (*Nesomimus macdonaldi*) on marine iguanas (*Amblyrhynchus cristatus*) on the island of Española, Galapagos. *Avances en Ciencias e Ingenierías*. 4(2): B5-6.

Swing K and J Guerra. 2012. Dietary habits of the Hairy Big-eared Bat (Phyllostomidae, *Micronycteris hirsuta*) based on insect remains at a roost site. *Avances en Ciencias e Ingenierías*. 4(2): B1-2.

Swing K. 2012. Periodontal abcess in a wild Amazon tapir, *Tapirus terrestris*. *Avances en Ciencias e Ingenierías*. 4(2): B54-55.

Swing K. 2012. Observations of courtship in *Megaceras jasoni* (Coleoptera, Scarabaeidae), the rhinoceros beetle or great horned scarab. *Avances en Ciencias e Ingenierías*. 4(1): B1-2.

Swing K. 2012. Observations on the distribution and density of the rare and poorly known flower urchin, *Toxopneustes roseus*, (Phylum Echinodermata, Class Echinoidea, Family Toxopneustidae) in Ecuador. *Avances en Ciencias e Ingenierías*. 4(1): B3-4.

Swing K. 2011. Endangered cultures need protection too. *Nature, Correspondence* 476:283.

Swing K. 2011. Day of Reckoning for Ecuador's Biodiversity. *Nature, World View* 469:267.

Swing K. 2011. Fight for Yasuní far from finished. *Science, Commentary* 331:29.

Blake JG, Mosquera D, Guerra J, Loiselle BA, Romo D and K Swing. 2011. Mineral Licks as Diversity Hotspots in Lowland Forest of Eastern Ecuador. *Diversity* 3:217-234.

Janes D, Swing K and LM Cataldo. 2011. From Cambridge to the Amazon in a few simple steps. *The American Biology Teacher*, 73(7):401-406.

Bass M, Finer M, Jenkins CN, Kreft H, Cisneros-Heredia DF, McCracken SF, Pitman NCA, English PH, Swing CK, Villa G, Di Fiore A, Voigt CC and TH Kunz. 2010. Global conservation significance of Ecuador's Yasuní National Park. *PLoS ONE* 5(1):1-22.

<http://www.plosone.org/article/info:doi/10.1371/journal.pone.0008767>

Swing K. 2010. ¿Estamos acabando con los tiburones? *Polemika* 5:110-119.

- Swing K. 2010. Range extensión for the barrel shrimp *Gnathophyllum panamense* (Malacostraca: Decapoda: Pleocyemata: Caridea: Gnathophyllidae) along the Ecuadorian coast. *Avances en Ciencias e Ingenierías*. 2(3):B1-2.
- Swing, CK. 2008. Evaluación expost de las comunidades ícticas en relación a los impactos ambientales en el área de influencia de las operaciones petroleras Repsol/YPF en el Bloque 16. Ecuambiente Consulting Group 1-48.
- Swing, CK. 2008. Determinación de la extensión de los impactos ambientales de un derrame de crudo en la zona de la plataforma Amo A en el Bloque 16, Parque Nacional Yasuní y asesoría para su manejo y remediación – componente íctico. Ecuambiente Consulting Group 1-9.
- Woodward, CL, Berry, PE, Maas-van der Kamer, H and CK Swing. 2007. *Tiputinia foetida*, a new mycoheterotrophic genus of Thismiaceae from Amazonian Ecuador, and a likely case of deceit pollination. *Taxon* 56(1):157-162
- Swing, CK and P Bearez. 2006. First record of an elephant fish (Chondrichthyes, Holocephali) in Ecuadorian waters during an ENSO event. *Rev. Biol. Mar. Ocean.* 41(1):107-109
- Swing, CK. 2005-2006. Ecological evaluation of the fish populations associated with Repsol/YPF petroleum operations in Ecuador's Yasuni National Park – the first decade. Submitted to Repsol/YPF through Ecuambiente Consulting Group. 1-13.
- Swing, CK. 2004. Environmental assessment of seismic surveys in Block 14, submitted to EnCan (subsidiary of Alberta Energy Corporation), Ecuador.
- Swing, CK. 2001. Environmental impacts of the Perez/Companc operation on ichthyofaunal communities in Block 31. Submitted to the Ecuadorian Ministry of the Environment.
- Swing, CK et al. 2000. Zoning and management plan for the Kichwa community of El Eden, Amazonian Ecuador. Submitted to the El Eden Community and to the Ecuadorian Ministry of the Environment.
- Swing, CK et al. 1999. Management Plan for the Tiputini Biodiversity Station. Submitted to the Ecuadorian Ministry of the Environment.
- Environmental Sciences Team USFQ/PUCE. 1997. Environmental assessment of the overall impact and management of the Maxus oil operation in the Yasuní Biosphere Reserve.
- Swing, CK. 1994-95. Ecological evaluation of the fish populations associated with Maxus petroleum operations in Ecuador's Yasuní National Park. Parts I-IV.



Wester, EE and CK Swing. 1992. Biological assessment of the effects of continued/proposed military training activities on the federally threatened Gopher Tortoise, *Gopherus polyphemus*, on selected lands at Camp Shelby, Mississippi. 188 pp.

Swing, CK and JS Ramsey. 1989. A field key to fish families reported from South American freshwaters. Una clave para las familias de peces reportadas de aguas dulces sudamericanas. Occ. Pap. LSU Mus. Nat. Sci. 64:1-73.

Swing, CK. 1988. Preferencias de hábitat de los peces del Lago Tumi Chucua. Ecología en Bolivia 10:17-21.

Swing, CK and Suh J. In Prep. Probabilities of nesting success in *Podocnemis* turtles and implications for management and conservation in eastern Ecuador.

Swing, CK. In Prep. Habitat preference and implications for isolation and the evolution of the diversity of the Amazonian ichthyofauna.

#### **AREAS OF SPECIALIZATION:**

Teaching/exposing students to a broad spectrum of possibilities of study and investigation in biology and ecology with emphasis on tropical biodiversity, ethology and synecology.

Focal areas include environmental assessment and tropical conservation, with emphasis on ichthyofauna and aquatic ecosystems.

Environmental impacts of the oil industry.

#### **RESEARCH AND PERSONAL INTERESTS:**

Development of sustainable management plans for indigenous communities of Amazonian Ecuador. Already established for several and in the works for others.

Ecology of Neotropical freshwater fishes including influences on their present distribution and their evolutionary history.

Distribution of caimans along the Tiputini River; interspecific habitat partitioning and vulnerability to poaching.

Conservation of biodiversity including studies of endangered species, development of management plans and environmentally compatible legislation.

Behavior and natural history of *Rhaebo guttatus*, an unusual Amazonian toad.

Long-term impacts of artisanal harvest on shark populations in Ecuador.

Amazonian entomofauna, especially Auchenorrhyncha; diversity, behavior, habitat preference.

Nature and environmental education.

Nature photography for education and ecotourism.

### **PERSONAL:**

Born: 9 August 1957                      Age: 62  
 Parents: R L Swing and Jeanette Durham Swing  
 Civil Status: married to Luisa Sempértegui, with one son, Daniel, age 19  
 State of Health: excellent   Height: 5'10" (180cm)   Weight: 165lb (76kg)  
 Hometown: Greensboro, NC  
 Residence: Quito, Ecuador    Citizenship: U.S.A.

### **REFERENCES:**

Dr. Christopher Schneider  
 Professor of Biology  
 Boston University  
 5 Cummington Mall  
 Boston, MA 02215

Dr. Lawrence C. Wit  
 Auburn University  
 Auburn, AL 36830

Dr. Carlos Montúfar  
 Chancellor  
 Univ. San Francisco de Quito  
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 593(2)297-1704

Dr. Terry Erwin  
 Department of Entomology  
 Smithsonian Institution  
 Wash., D.C.

Dr. John Blake  
 Department of Biology  
 University of Florida  
 Gainesville, FL

Dr. Robyn Burnham  
Departments of Geology and Botany  
University of Michigan  
Ann Arbor, MI