

CURRICULUM VITAE
JOHN MAINA GITHAIGA (PhD)

Date of birth	February 4 th , 1962
Place of birth	Murang'a District
Nationality:	Kenyan
Marital status	Married
Postal address	
Official	University of Nairobi School of Biological Sciences College of Biological and Physical Sciences Chiromo Campus P.O. Box 30197 00100 Nairobi
Telephone	+254 020 4442316
Email	jmgithaiga@uonbi.ac.ke
Private	Dr John Githaiga P.O. Box 21274 00100, Nairobi
Cell	0722 821187
Email	mainagithaiga@gmail.com
Profession:	Ecologist, Environmental Scientist and Statistician
Current Position	Senior Lecturer and Consultant, University of Nairobi

EDUCATION

2006-2007	Postdoctoral Fellowship, Princeton University, New Jersey, USA
2004	Ph.D., (Ecology) University of Nairobi.
1992	M. Sc. Biology of Conservation, University of Nairobi
1987	B.Sc. Zoology and Botany (1 st Class Honors), University of Nairobi.

OTHER ACADEMIC AWARDS

1992	Peregrine Award for the Conservation of Birds of Prey.
1993	UNEP Certificate: Management and Restoration of Eutrophic Lakes and Reservoirs

KEY COMPETENCES

- Ecology and environmental sciences research
- ASAL and wetlands ecology and dynamics
- Rural and urban environments monitoring
- Project design, data collection protocols and methodologies for Scientific and Social Sciences studies
- Statistical data analysis in SPSS, SAS and Statistica
- Curriculum development in Environmental Studies
- Log frame design

POSTGRADUATE RESEARCH

- M.Sc. 1992** Grazing Speed: The experimental test of Model
Ph.D. 2003 Ecological Factors Determining utilization patterns and interlake movements of lesser flamingos (*Phoeniconaias minor* Geoffrey) in Kenyan alkaline lakes
Postdoctoral Landscape Water/Vegetation dynamics in arid areas of Laikipia Landscape, Kenya

PROFESSIONAL REGISTRATION

Lead Environmental Impact Assessment/Environmental Audit Expert, National Environmental Management Authority (NEMA) of Kenya

MEMBERSHIP IN PROFESSIONAL AND OTHER SOCIETIES:

- Member:** International Flamingo Specialist Group
Member: Kenya Wetlands Working Group
Chairman: Tsavo Ecosystem Conservation Organization Board of Trustees (**NGO**)
- Board of Governors**
- i) Gitige Secondary School,
 - ii) Koimbi Secondary School

NATIONAL TASK FORCES

- National Mountain Bongo Committee (**2010**)
- Member of the National Wetland Policy Committee (**2003**)
- Nairobi National Park Ecosystem Conservation Technical Committee (**2005**)
- Biodiversity for National Use (**BINU GEF Project**), Technical Team Leader (2004)
- Alkaline Lakes Conservation (**2003**)

WORK EXPERIENCE

- 2012 to date** Senior lecturer, School of Biological Sciences
1996 to 2012 Lecturer in the Department of Zoology (Currently School of Biological Sciences), University of Nairobi

ACADEMIC SPECIALIZATION

Undergraduate)

- Biology (Botany and Zoology), Ecology major

Post graduate

- Environment and Conservation Biology
- Wetland and riparian areas ecology
- Statistics
- Experimental designs, Data collection protocols and statistical multivariate statistical analysis
- Hydro-ecology

PART-TIME LECTURER

- KWSTI:** East African International Wetland Course: Wetland Monitoring and Evaluation (2003-2007)

School of Field Studies: Wildlife studies and landscape analysis (2009)

OTHER POSITIONS HELD PREVIOUSLY

- 1993- 1996** Tutorial Fellow, Department of Zoology
1992 Graduate Assistant, Department of Zoology, University of Nairobi.
1990- 1991 Lecturer, National Wildlife and Fisheries Training Institute,
 Naivasha (currently KWSTI)

Current Responsibilities

- 2008 to Date** Chairman, Postgraduate Studies Committee, School of Biological Sciences,
 University of Nairobi
2011 to date Member, Inspection and supplies acceptance committee, SBS, University of
 Nairobi

CURRICULUM DEVELOPMENT

Undergraduate

- 2002** B.Sc. Biology: Content development of Statistics, Environment and Ecology Units in the
 syllabus
2004 Development of Open and Distance Education Biostatistics
2005 B. Sc. Environmental Conservation and Natural Resources Management Syllabus
 Components: Environmental Health, Statistics and Environmental Modeling,
 Ecosystem Approach to Natural Resources Modules

Postgraduate

- 2003`** Review of M.Sc. Biology of Conservation Syllabus
2006 Review of M.SC. Hydrobiology and Marine Biology Syllabus
2011 M.Sc. Meteorology, Climate Change
2006 to date: Panel Member for review of postgraduate programmes in School of Biological Sciences

RESEARCH EXPERIENCE

- 2006-2007** Water dynamics in Semi Arid Savannas of Northern Kenya
1994 to date Ecology of Kenyan Rift Valley alkaline lakes, conservation issues, and Flamingo
 pathology

Scope of scientific and research undertakings

Ecosystem level

- 2002** Baseline ecological data generation- Mwea National Reserve.
2002 Survey of Ewaso Ngiro South Floodplain.
2002 Water quality surveillance, Nairobi National Park.
2002 Survey of Invasive plant species in Lake Nakuru National Park, impacts on
 habitat/herbivore dynamics and their control
2000 Heavy metals concentrations survey in alkaline Rift valley lakes.
2001 Phycotoxins and Endotoxins prevalence in Rift valley and high altitude water bodies
1993 Land use patterns, Cultural practices and their effects on biodiversity in Kathama
 location, Mwala Division, Machakos District
1988-1989 Large herbivore foraging ecology, Wildlife Ranching and Research
1989 Thomson's Gazelle foraging strategies, University of California, San Diego, Research
 Project in Masai Mara National Reserve and Amboseli National Park
1987 Small mammal collection for biochemical taxonomy, Carnegie Museum Expedition to
 Kenya

Urban Areas

- 2011** Urban waste dumping impacts on scavenger bird species and their potential impacts on the aviation industry
- 2011** Impacts of rural urban settlement on Land use planning in the Naivasha Basin
- 2003** Naivasha town and its environs. Pollutants from agricultural, formal and informal areas of the town and its satellite
- 2004** Impacts of Industries, Institutions and Settlements on Nairobi National Park water resources and Ecosystem
- 1994–2001** Nakuru Town as a threat to Lake Nakuru National Park through waters emanating from industries, housing estates, transport system and sewage treatment ponds

PROFESSIONAL ASSIGNMENTS:

- 2013** Baseline survey for the LANCODO CDTF/DANIDA community project in Lake Naivasha Basin
- 2012** Mainstreaming sustainable land management in Agropastoral production systems of Kenya, **UNDP/GEF**
- 2012** Community training and production of training materials for climate change and adaptation, Lake Naivasha Basin, **WWF-KCO**
- 2012** EIA Ewaso Ng'iro South multipurpose dams feasibility study (Wildlife and Lake Natron components), **ENSDA**
- 2011/2012** EIA Aeronautical Survey for Jomo Kenyatta International Airport, **JICA/CCN/KCA**
- 2011/2012** Baseline Survey, Lake Naivasha Basin, **WWF-KCO**
- 2011** EIA Lead Expert Decommissioning of Dandora Dump site and Construction of Sanitary Landfill, **JICA/City Council of Nairobi**
- 2011** Community Projects Livelihoods and Environment/Climate Change Technical Guidance at Grassroots level, **Acacia Consultants Ltd (CDTF/DANIDA funded projects)**
- 2010-2011** Assessment of Wildlife Barriers in Mt Kenya Ecosystem, **MKEPP-KWS**
- 2010** Environmental Impact Assessment, McKinnon Electric Fence extension, **CDTF/CEF**
- 2010** State of the Environment, Lake Bogoria Catchment Basin, **WWF-EARPO**
- 2010** Masai Mara Environmental Profiling, **KWS**
- 2010** Environmental Management and Monitoring Plan for River Gilgil Wetlands
- 2009** EIA River Gilgil Wetland Rehabilitation, **Marula Estates Ltd**
- 2009** Baseline Survey for Aberdare Forest Rehabilitation, **Green Belt Movement (GBM)**
- 2008** Land use plan formulation for the Naivasha Landscape, **WWF-EARPO**
- 2008** Environmental impact assessment for SOPA Hotels and Lodges in Naishi area, Nakuru District
- 2007** Study on pesticides use in Eastern Rift Valley Lakes, **WW-EARPO**
- 2004** Lake Bogoria integrated catchment management plan- **WWF- EARPO**.
- 2004** Development and Implementation Monitoring Mechanisms for Pilot Sites (Lake Nakuru, Lake Naivasha, Ewaso Ng'iro South Flood Plain and Lake Ol Bolossat), **East African Regional Wetlands Programme, (EARWP)**
- 2004** Conservation status of lesser flamingos and their alkaline ecosystems habitats – **WWF-EARPO**
- 2004** Survey of ecotourism potential and business plan in Nakuru Area – **Kenya Wildlife Service**
- 2003** Survey of pollutant sources for in Lake Naivasha and its environs –**European Union, BCP/CDTF**

- 2003** Land use impacts on water quality in the Loitoktok area of Kajiado District-
LUCID/ILRI
- 2003** Skill and knowledge Assessment for key wetland users and managers at National and local levels in Kenya. **(EARWP)**
- 2003** Key ecological functions and values of selected wetlands in Kenya. **(EARWP)**
- 2002** Knowledge, Skills and Training Needs Assessment for Key Wetland users and Managers in Kenya, **KWS**.
- 2002** Site Identification Criterion and Site Profiles: L. Ol Bolossat and Ewaso Ngiro South Floodplain, **(EARWP)**
- 2002** Information Collation and exchange mechanisms for wetland conservation, East African Regional Wetlands Programme
- 2002** Inventory and Assessment of wetland invasive species in Kenya, East African Regional Wetlands Programme.
- 2000- 2002** Integrated Ecosystem and Conservation Area Management Plans
- Integrated Management Plan for Lake Nakuru Catchment.
 - Saiwa Swamp National Park Management Plan.
 - Lake Ol Bolossat Integrated Ecosystem Management Plan
- 2001** Survey of Invasive plants species, impacts on habitat/wildlife dynamics and their Control in Lake Nakuru National Park, May 2001
- 2000** GEF Rift Valley Lakes Project: The Impacts of Hydrological and Climatic Changes on Sustainable Biodiversity Utilization and Conservation the Saline Lakes
- 2000** Survey of Heavy Metals and contaminants in the Rift Valley Lakes, **KWS**
- 1998** January – April: Recent Wildlife Population Trends in Kenya for Kenya Wildlife Service (**KWS**)
- 1997** Conservation priorities and monitoring programmes for wetlands in Central Rift Kenya, **KWS/Netherlands Wetlands Project**.

SEMINARS/ WORKSHOPS AND PAPERS PRESENTED

- 1993** Research Priorities for Lake Nakuru National Park
- 1993** Wetland Biodiversity and Conservation in East Africa, Kunste Hotel, Nakuru, November 1993
- 1995** The use of research for management **KWS** Workshop, Kunste Hotel Nakuru
- 1997** IUCN Workshop at Lake Bogoria Hotel: Conservation of Lesser Flamingos in East Africa and Beyond
- 1998** National induction workshop, GEF Rift Valley Lakes Project
- 2000** Final National GEF Consolidation Workshop and Project Development, Lake Bogoria Hotel
- 2001** Ecological Linkages in the Nakuru Eco-region, National Environmental Management Act, Fact Finding Mission Nakuru
- 2002** 2001: Lake Bogoria Community Based Wetland Project, Stakeholders Workshop,
- 2001** Workshop on strategic plan for environment and development, Kunste Hotel, Nakuru
- 2003** Ecological monitoring of Lake Nakuru and its Environs. **JIKA**.

COLLABORATIVE RESEARCH

Stanford University (Current): Effects of hippopotamus on watershed ecosystems in the Ewaso North Nyiro Watershed
Princeton University (2007-2008): Water dynamics in an Arid Grassland Ecosystem, Mplala Research Centre, Laikipia
Kenya Wildlife Service (KWS) 2010: Masai Mara Ecosystem Scenarios,
Kenya Wildlife Service (KWS) 2011: Effectiveness of wildlife barriers in Mt. Kenya forest ecosystem (**MKE**)

PUBLICATIONS

- 2003** **Githaiga, J. M** and Muchiru, A. N. (2004). Survey of water quality changes with land use type in the Loitoktok area, Kajiado District, Kenya. LUCID working paper series, Number 35.
- 2004** Muthama, N.J and **J. Githaiga**. Towards using seasonal rainfall forecasts for the
2005 management of human wildlife conflicts in Kenya. *International Journal of Biochemiphysics*, Vol. 15 No 1&2, 36-45
- 2008** Mworira, J.K., J.I. Kinyamario, **Githaiga, J.M.** Influence of cultivation, settlements and water sources on wildlife distribution and habitat selection in south-east Kajiado, Kenya. *Environmental Conservation*: 35 (1)
- 2008** Sangilu, S., **J. M. Githaiga**, S. Mohammed. Resource utilization by large herbivores in Athi Kapiti Plains. *African Journal of Ecology*: **46**: 43-51
- 2008** Flora N. Namu, **John M. Githaiga**, Esther N.Kioko, Paul N. Ndegwa, Christoph L. Häuser Butterfly species composition and abundance in an old, middle-aged, and young secondary forests, in: Kühne L. (Ed.), Butterflies and moths diversity of the Kakamega forest (Kenya), Brandenburgische Universitätsdruckerei und Verlagsgesellschaft, Germany, pp. 47-61

POSTGRADUATE STUDENT SUPERVISION:

- Ph.Ds** i) **Oliver Nasirwa** (Ongoing): Avian Ecology in the draw down zone of Lake Nakuru
- ii) **Joseph Kirathe** (Ongoing): Landscape connectivity and Grevy's Zebra distribution and movements in the Laikipia Ecosystem.
- iii) **Duncan M. Kimuyu** (Ongoing): Synergies between Livestock Husbandry and Wildlife Conservation in Anthropogenic Savanna Ecosystems

Master of Science Students Supervised and examined

- Ng'ang'a Judy Wanjiru (2003):** Impacts of land use types on the biological components of selected wetland types in Thika District, Kenya
- Caroline Kerubo Bosire (2005):** Spatial Dynamics of Human Livestock and Wildlife Interactions in Kajiado Central Division, Kajiado District, Kenya.
- Kirika, J.M (2005).** Forest fragmentation and impacts on frugivore bird species in Kakamega forest
- Bwong, B. Akoth (2005):** Bioacoustics and morphology of the ridged frog species,

Ptychadenia (Amphibia: Raniidae), from Kakamega Forest, Western Kenya.

Flora Namu (2005): Effects of forest disturbance on butterfly diversity in Kakamega National Forest Reserve.

Susan Sangiru (2005), Forage resource dynamics and large herbivore migration in the Kitengela Conservation area and migration corridor

Mbau Judith Syombua (2005): Density, Distribution and Habitat Utilization patterns by Elephants (*Loxodonta africana*) in Southern Aberdares, Kenya

Bernard N. Ngoru (2006): Influence of major competitors on the abundance and distribution of Cheetah in Masai Mara National Reserve, Kenya.

Gabbho. A. Abdi (2007): Wetland characterization, use by local communities and role in supporting biodiversity in the semi-arid Ijara District, Northern Kenya

Rebecca Kariuki (2008): Effects of cattle grazing and trampling on vegetation quality for herbivores in Lewa Wildlife Conservancy

Ndalila Mercy (2009): The distribution and diversity of land snails in Shimba Hills National Reserve, Kenya.

Purity Muthoni (2009): Assessment of land degradation in four ranches in the Athi Kapiti Ecosystem from crop farming.

Mwololo Mary (2009): Impacts of predation on the growth of Grevy Zebra population in Lewa Wildlife Conservancy

Nguku Esther (2010): Population Structure and Distribution of *Prunus africana* in Mt Kenya Forest Ecosystem

Bubi, Jackline Wamuyu (2011): Created grassland diversity after 12 years of mowing in Southern Sweden

Undergraduate Dissertations

Muthuma, E. (1999): The ecology and Behaviour of Long-tailed Fiscal Shrike (*Lanius melanoleucus*) in Chiromo Campus. Dissertation 1994.

Gitahi, C (1999): The Effect of environment on litter size in the White-toothed Shrew (*Crocidura sp.*) and the Albino rat (*Rattus norvegicus*) and Albino Mouse (*Mus musculus*), Dissertation. 1994

Namu F. N.(2002): An Ecological study of the blue- headed Bee-Eater (*Merops muelleri*) in Kakamega Forest, Western Kenya.

Wanjiku Maina, C. (2006): A study on the effects of fire on the herbaceous layer, species composition and herbivore utilization in Nairobi National Park.

Referees:

1 Dr Evans M. Mwangi,
University of Nairobi
P.O. Box 30197 00100
Nairobi
Cell: 0722711422

Email: emmwangi@uonbi.ac.ke

2 Dr E.M Akunda
Director, School of Biological Sciences
University of Nairobi
P.O. Box Box 30197 00100
Nairobi
Cell; 0721363086
Email: director-biosci@uonbi.ac.ke
Office Tel 020444231

Languages

Language	Speaking	Reading	Writing
Kiswahili	Excellent	Excellent	Excellent
English	Excellent	Excellent	Excellent
Kikuyu	Excellent	Excellent	Excellent

Updated: May 2013