

## CURRICULUM VITAE

### 1. Biodata

<b>Name &amp; title</b>	<b>Prof. Benson Muchoki Mwangi</b>
ID/Passport number	ID No. 0618458 PIN A001364102Z Passport No. AK0095146
Address	<b>Institutional:</b> Director, Mariira Campus Murang'a University of Technology P.O. Box 75- 10200, Murang'a, Kenya Email: Institutional email: <a href="mailto:bmmwangi@mut.ac.ke">bmmwangi@mut.ac.ke</a> or Personal email: <a href="mailto:mwangibenson01@gmail.com">mwangibenson01@gmail.com</a>  <b>Permanent address:</b> P.O. Box 950 – 00232, Ruiru, Kenya Cell phone: +254-722462905
Date of Birth	01-01-1959
Place of birth	Mathioya Sub-County, Murang'a County, Kenya
Marital Status	Married with 3 children

### 2. Educational Background

Academic Qualification	Year	Qualification	Institution
PhD (Nat. Sc.)- Limnology	2000	PhD	Vienna University, Austria
Postgraduate Diploma in Limnology	1995	PDG (Limn)	Austrian Academy of Sciences, Mondsee
M.Sc. in Aquatic Science	1992	M.Sc. Aquatic Sc.	Kenyatta University
B.Sc. in Zoology & Botany	1985	Upper 2 <sup>nd</sup> Class Hons	University of Nairobi
A-Level (Form VI) Certificate	1980	Geography, Chemistry and Biology (2 principals and 1 sub) – 11points	Muhoho High School
O-level (Form IV) Certificate	1978	Division 1	Murang'a High School

### 3. Employment History

Academic Appointment	Institution	Period
Associate Professor	Murang'a University of Technology	2021 - present
Senior Lecturer	Murang'a University of Technology	2016 - 2021
Senior Lecturer	University of Embu	2014 to 2015
Senior Lecturer	Kenyatta University	2012-2014
Lecturer	Kenyatta University	1999 - 2012

Tutorial Fellow	Kenyatta University	1992-1998
Graduate Assistant	Kenyatta University	1988 -1991
Fisheries Officer	Kiganjo Trout Farm	1986-1987
Untrained Secondary School Teacher	Iyego Secondary School	1981

#### **4. Administrative Appointments**

1. March 2022 –Director, Mariira Campus for Agricultural and Environmental Sciences
2. June 2016- March 2022: Director, Quality Assurance & Performance Management
3. 2014- 2015: Chairman, Department of Biological Sciences, University of Embu
4. **2013** – Acting Chairman, Department of Zoological Sciences, Kenyatta University

#### **5. Other University Appointments**

##### **a) Murang'a University of Technology**

1. 28<sup>th</sup> Feb 2022 – Appointed Member, Institutional Ethical Review Committee (IERC)
2. 2021- Member, Committee on preparation of the regular institutional quality audit of Murang'a University of Technology
3. 2021 - Member, Odel Board
4. 2021- Member, University Strategic Implementation Committee
5. 2020- Chairman, Committee on Teaching Preparation on re-opening during period of COVID-19 pandemic
6. 2019- Chairman, Committee on the Establishment of Mariira Campus for Agriculture & Environmental Sciences
7. 2018- Member, Administrative Promotion and Appointment Committee
8. 2018- Member, Board of Postgraduate Committee
9. 2017- Member, University AIDS Control Unit (ACU)
10. 2016- Member, University Management Board

##### **b) Embu University College**

1. 2015- Coordinator, Fish Production Project:
2. 2014- Chairman, University Staff Training and Welfare Committee
3. 2014- Member. Board of Postgraduate Studies

##### **c) Kenyatta University**

- **2013** - Appointed a committee member to the School committee for the development of an common units in Earth sciences in SPAS
- **2011**. Appointed by the KU Vice-Chancellor to the Board of Community Outreach and Extension.
- **2011** – 2014: Member, Vice-Chancellors committee on development of an MOU between Kenyatta University and Kenya Wildlife Service
- **2011** – 2014: Member, Vice-Chancellors Kenyatta University Aquaculture Committee
- **2006** – **2014**: Chairman, KU School of Pure and Applied Sciences Board of Undergraduate Studies.
- **2005** – **2014**: Departmental (Zoology, KU) Academic Supervisor for 4<sup>th</sup> students
- **2007** – **2008**: Chairman, SPAS Committee developing a course on B.Sc. in Coastal and Marine Resource Management for Mombasa and Kilifi Campuses. This course was fully developed and approved by Senate in less than a year.
- **2008** – Represented the Department for a HIV mainstreaming course at AVU, Kenyatta University.

- **2008** – Participated in the **Rapid Results Initiative (RRI)** for the development of new marketable courses for the school of Pure and Applied Sciences.
- **2002 – 2006**; Chairman, Departmental Board for Undergraduate Studies.
- **2007 - Present**: Member, School Board of Postgraduate Studies. I have received a commendation letter for efficient proposal review from the Chairman of the Board, Prof. Mueke.
- **2007 to present**: Member, School Committee on Linkages.
- **2006 – 2007**: Chairman, Departmental Annual Postgraduate Seminars.
- **2005 – present**: Member, Curriculum Review/New Programs Committee
- **2005 - 2008**: Member, Departmental Seminars/Public Lectures Committee
- **2004- present**: Member, Postgraduate Studies Committee
- **2000 – 2002**: Deputy Departmental Examination Coordinator.
- **2002-2005**. Chairman, Income Generating (non-academic programs)
- **2003 – 2004**: Chairman, Departmental Field Course Coordinator

## 6. Teaching experience

<b>Institution</b>	<b>Position</b>	<b>Period</b>	<b>Subjects/topics taught</b>
Murang'a University of Technology	Senior Lecturer	2015 – present	<ul style="list-style-type: none"> <li>• HIV-AIDS,</li> <li>• General Ecology,</li> <li>• General Zoology,</li> <li>• Limnology</li> <li>• Evolutionary Biology,</li> <li>• Population Genetics,</li> <li>• Marine Ecology</li> <li>• History and Philosophy of Biology</li> <li>• Research Methods,</li> <li>• Advanced Statistics</li> <li>• Biostatistics and others</li> </ul>
Department of Ecology, Swedish Agricultural University (SLU), Sweden	Guest Lecturer	February to March 2016	<ul style="list-style-type: none"> <li>• General Ecology and Agricultural Conditions</li> <li>• Water Management and Land use – A case of Lake Naivasha</li> <li>• Participatory Research methods in theory and practice</li> <li>• Effects of Agricultural activities on water quality in Kenya</li> </ul>
University of Embu	Senior Lecturer	2014-2015	<ul style="list-style-type: none"> <li>• General Ecology,</li> <li>• General Zoology,</li> <li>• Evolutionary Biology,</li> <li>• Marine Ecology</li> <li>• History and Philosophy of Biology</li> <li>• Research Methods,</li> <li>• Biostatistics</li> </ul>
Kenyatta University	Senior Lecturer	2014 - 2015	<ul style="list-style-type: none"> <li>• General Ecology,</li> <li>• General Zoology,</li> <li>• Limnology</li> </ul>

			<ul style="list-style-type: none"> <li>• Evolutionary Biology,</li> <li>• Population Genetics,</li> <li>• Marine Ecology</li> <li>• History and Philosophy of Biology</li> <li>• Research Methods,</li> <li>• Biostatistics</li> </ul>
Jomo Kenyatta University of Technology	Part Time Lecturer	2000 - 2009	<ul style="list-style-type: none"> <li>• Ecology</li> <li>• Research Methods</li> <li>• Biostatistics</li> <li>• Fish Biology</li> <li>• Aquaculture</li> </ul>
Egerton University	Part Time Lecturer	1992 to 1995	Marine Ecology

## 7. Development of Academic Programmes

Between 2017 and 2021, I spearheaded the development of the following programmes in the School of Pure, Applied and Health Sciences at MUT:

- i) B.Sc. in Biosciences
- ii) BED Science (Biology)
- iii) B.Sc. General (Biology)
- iv) B.Sc. in Agriculture
- v) M.Sc. in Ecology and Environmental Science
- vi) M.Sc. in Aquatic and Fisheries Sciences
- vii) PhD in Aquatic Ecology

At Kenyatta University, I also spearheaded the development of a B.Sc. in Coastal and Marine Resource Management among others.

## 8. Review of Academic Programmes

- Appointed peer reviewer by CUE for accreditation of academic programmes.
- Have reviewed many programmes and subject expert for CUE in Aquatic Sciences in addition to infrastructure assessment.

## 9. Facilitation of Open & Distance Learning

### 9.1. Leadership on implementation of Online Teaching

In 2020, when the University was closed due to COVID-19 pandemic, I spearheaded the start of online and virtual learning in the University through the following actions:

- i) Preparation of a proposal guideline on the how the online teaching would be effected.
- ii) Preparation of guidelines to assist ICT develop a training manual for staff and students in preparation of the online teaching.
- iii) Preparation of guidelines on online teaching at MUT for August 2020.
- iv) Continuous monitoring on the preparedness and progress of online teaching in the University.

## 9.2. Odel Learning Teaching Modules

- i. **Mwangi, B. M. 2008.** History and Philosophy of Biology. A teaching module for open learning students, Kenyatta University, 150pp.
- ii. **Mwangi, B. M. 2002.** Research Methods for Health Sciences. A teaching module for postgraduate students, Kenyatta University. 156pp.
- iii. **Mwangi, B. M. and E. W. Kairu, 2002.** Introduction to Ecology and Bioanalysis: A teaching module for undergraduate students, Kenyatta University. 120pp.

## 10. Funded Research Projects

#	PROJECT PROPOSAL	FUNDING ORGANIZATION	Year
1	Conservation and Restoration of Wetland Ecosystems for Sustainable livelihoods in Murang'a County, Kenya” - PI	NRF Funded - Ksh 17,167,800	2017 - present
2	Murang'a University of Technology Infrastructural Project	NRF (2016-2017 Financial Year) - Collaborator	2017 - present
3	Impact of extreme flooding of Lake Baringo on livestock & fisheries productivity and livelihoods among the farming communities living around the lake - Collaborator	RUFORUM Funded Project with Prof. Michael Gicheru as PI (3 million Ksh 1.5 million)	2014- 2016
4	Climate Change Consequences on health, fisheries and livelihoods of Lake Baringo Riparian Communities	KU Vice-Chancellors Research Grant with Prof. Michael Gicheru(PI) (1.5 million Ksh)	2014 - 2016
5	Enhancing Riverine Fisheries Productivity and Water Quality Improvement through Integrated Weir and Riparian Vegetation Propagation Technologies in the Lake Victoria Basin	VicRes funded project (50,000 USD)  PI- Dr. Benson M. Mwangi  Collaborators 1. Dr. G. Gatheri (Kenya), 2. Dr. Daniel A. Shilla (Tanzania) and 3. Mr. Mr. Baker Ntambi (Uganda)	2009 – 2013
6	Optimization and commercialization of fishery value chain within Narumoru Rural Communities, Kenya	Kenya Agricultural Productivity (KAPP) project with Dr. Eunice Kairu as PI (3 million)	2007-2010
7	Utilization of Reservoirs and Dams in Fish Production in Maragua, Thika and Kiambu Districts	CHE Funded Project with Dr. James J. Jumbe as PI (Ksh 2,990,000/=)	2006 - 2009

8	Introduction of Aquaculture and Fishing on Small Dams and Reservoirs to Increase Fish Availability and Income of the Local Communities in Thika and Maragua Districts, Kenya	AICAD Funded project with Dr. James J. Jumbe (1.5 million)	2005-2008
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## 11. Unsuccessful Submitted Research Proposals

1. **STEM Education Capacity Building in Kenya:** A Collaborative and Participatory Action Research Initiative between High Schools and Universities: An Eighteen Months Pilot Study. Response to SPENCER call - May 2020:
2. **Impact of Competence Based Curriculum (CBC)** Introduction on Development of Learners Skills and Competencies in Primary Schools in Kenya. Response to SPENCER call
3. Gender-Analysis of Institutional Frameworks in Higher Institutions of Learning in Kenya and Uganda and Labour Markets to Advance Women Leadership in Stem Fields. PI led a Consortium comprising of a member from the University of Nairobi, USIU-A, Premier Peak Foundation, MUT and Makerere University. Total cost if awarded 18 million. Submitted May 2021.
4. Effects of *Prosopis juliflora* (Mathenge) on biodiversity and ecosystem services in Tana River County, Kenya. NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY. Response to 2012/2013 call
5. Impacts of River Yala impoundment on sustainable utilization and conservation of Yala swamp. Response to 2007 Commission for Higher Education (CHE) proposal call

## 12. Publications in Referred Journals

1. **Mwangi, B. M.** (1998). Food and Feeding habits of juvenile *Oreochromis leucostictus* Trewavas (Teleostei = Cichlidae) in Lakes Naivasha and Oloidien, Kenya. East African Journal of Science 1(2): 97-102.
2. Jumbe, J., **Mwangi, B. M.** and L. Maina (2006). Utilization of reservoir dams for fish production in Maragua and Thika Districts. AICAD Research Mini-reviews Vol. 4; 85-89.
3. Kaluli, J. W., Githuku, C., Home, P. and Mwangi, B. M. (2011). Towards a national policy to support wastewater reuse in Kenya. Journal of Agriculture, Science and Technology (JAGST), 13(1): 116-125.
4. Kimani, R. W, Mwangi, B. M. and Gichuki, C. M. (2011). Treatment of flower farm wastewater effluents using constructed wetlands in lake Naivasha, Kenya. Indian Journal of Science and Technology Vol. 5: 1-9.
5. Mwangi, B. M., Ombogo, M. A., Amadi, J., Baker, N. and Mugalu, D. (2012). Fish species composition and diversity of small riverine ecosystems in the Lake Victoria Basin, Kenya. International Journal of Science and Technology 2(9): 675-680.
6. Ndiwa, C. T., **Mwangi, B. M.**, Kairu, E., Kaluli, J. W. and Nyingi, D. (2012). Physicochemical characteristics of undrainable water dams utilized for fish farming in the semi-arid Naromoru area, Central Kenya. Journal of Agriculture, Science and Technology (JAGST) 14(2): 45-55

7. Odhiambo C. and **Mwangi, B. M. (2014)**. Influence of large woody debris accumulations on macroinvertebrate distribution in a low order forested tropical stream, Sagana River, Kenya. *Journal of Agriculture, Science and Technology (JAGST)* 16 (3): 13-14
8. Kanyi, N. C., **Mwangi, B. M.** and Mbunzi, S. M. 2016. Effects of irrigated and rain fed conditions on infestation levels of thrip (Thysanoptera: Thripidae) infesting *Dolichos lablab* (L.) in Eastern Kenya. *African Journal of Agricultural Research* 11(18): 1656-1660
9. Muema J. C., Kaluli J. W., Gathenya J. M. and **Mwangi B. M. (2018)**. Evaluation of wetland loss in Maraua Watershed, Murang'a County, Kenya. *Journal of Sustainable Research in Engineering*, Vol. 4 (4): 160-170
10. Theuri O. W., Kitur E., Ngugi C. C, **Mwangi B. M.** and Nzeve J. K. (2019). Impact of aquaculture development on water quality of fish ponds in Gatundu North and South Sub-counties, Kenya. *International Journal of Fisheries and Aquatic Studies* 7(4):01-06
11. Maina C., **Mwangi B. M.** and Jumbe J. J. (2021). Species composition and distribution of mayflies (Ephemeroptera) in relation to land use systems along the Thika River, Kenya, *African Journal of Aquatic Science* 46(2): 196-205 DOI: 10.2989/16085914.2020.1842169
12. **Mwangi, B. M. (2021)**. Threats to land use changes on wetland and water areas of Murang'a County, Kenya. *Applied Ecology and Environmental Sciences* 9 (6): 585-590. DOI:10.12691/aees-9-6-2
13. **Mwangi, B. M. (2021)**. Wetland degradation status and conservation challenges in Murang'a County, Kenya. *International Journal of Ecosystem* 11(1): 8-16
14. Abillah, I. O., **Mwangi, B. M.**, Juma, R. and Machogu, C. (2021). Sustainability of livelihood strategies of riparian communities in Muang'a County, Kenya. *International Journal of Humanities and Social Science Invention* 10 (Issue 6 Ser. 1): 16-24
15. Abillah, I. O., **Mwangi, B. M.**, Juma, R. and Machogu, C. (2021). Gender roles in wetlands conservation and restoration in Murang'a County, Kenya. *International Journal of Humanities and Social Science Invention* 10 (Issue 6 Ser.1): 25-32
16. Kabochi S. K, **Mwangi B. M.**, Gicheru M. M., Michuki G. N. and Onyango I. A. (2021). Mosquitoes composition, abundance and distribution in swampy and flooded shoreline habitats of Lake Baringo, Kenya, during a period of extreme flooding (2012-2013). *International Journal of Mosquito Research* 7 (6): 1-4
17. Gicheru, M., **Mwangi, M. B.**, M., Onyango, A. I., Michuki, G. N. and. Kabochi, S.K., (2021). Epidemiological patterns of Rift Valley Fever from diverse habitats during an extreme unprecedented flooding of Lake Baringo basin, Kenya, 2012-2013. *East African Journal of Science, Technology and Innovation* 2(3): 1-10
18. Muia, D., Gicheru, M., Mutiso, J., Mwangi, B., Kavinda, L. and Kairu, E. 2021. Effects of extreme flooding of Lake Baringo on livelihoods of communities lining around the lake. *Advances in Applied Sociology*, 11: 404-414.
19. Kanyi, N. C., Karuri, H., Nyasani, J. O. and Mwangi, B. 2021. Land effects on termite assemblages in Kenya. *Heliyon*, 7(12, E08588), Elsevier Ltd. <https://doi.org/10.1016/j.heliyon.2021.e08588>
20. Kanyi, N. C., Karuri, H., Nyasani, J. O. and Mwangi, B. 2022. Termite species and functional groups in maize intercrop systems in Machakos County, Kenya. *Crop Protection*, Elsevier Ltd. <https://doi.org/10.1016/j.cropro.2021.105881>
21. Movin O. Oginga, James W. Kaluli, Benson M. Mwangi and James M. Raude. 2022. Effects of Land Use and Land Cover Change on Potential Ecosystem Service Value in Mathioya Watershed, Murang'a County, Kenya. *Journal of Sustainable Research in Engineering* Vol. 7 (2), 58-71

### **13. Research Reports,**

#### **a) Research reports**

1. NRF Funded Project – Presentation to the NRF Board 2021
2. Presentation to Murang’a County Assembly Members – Environment Committee - 2019
3. NRF Funded Research Project – Status Report 7<sup>th</sup> Feb 2019
4. Monitoring & Evaluation NRF Funded Projects February, 2019
5. 2018: Challenges facing delivery of quality examinations in young Kenyan Universities. Paper presented at the 8<sup>th</sup> Annual Forum of the East African Higher Education Quality Assurance Network; 7-10<sup>th</sup> May 2018, Kigali, Rwanda

### **14. Quality Assurance Monitoring and Evaluation Reports – a sample**

1. Report on Assessment of Exam Quality – 2<sup>nd</sup> Semester 2020/2021 academic year - July 2021
2. Mid-semester teaching progress report for 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> years – April 2021
3. Student lecturer evaluation report for semester 1 2021/2021 academic year (September – December 2020).
4. Letter to all academic staff dated 5<sup>th</sup> September 2019 for lecture take off report – 1<sup>st</sup> Semester 2019/2020 academic year
5. Report on lecture take off – semester I 2019/2020 academic year
6. Student-lecturer evaluation report for semester I (Sept-Dec) 2018/2019 academic year – March 2019
7. Report on Deans Audit on the Exam process – 16<sup>th</sup> January 2017

### **15. Mariira Campus Reports**

1. Proposal for establishment of Mariira Campus for Agricultural and Environmental Sciences of Murang’a University of Technology – November 2020
2. Memorandum of Understanding for partnership in utilization of Mariira Farm – Feb 2020
3. Proposal for partnership in the utilization of Mariira Farm for teaching and training between Murang’a University of Technology and Murang’a County Government

### **16. Conferences, Workshops and Seminars**

1. Kabochi, S. K., Gicheru, M. M., **Mwangi, B. M.**, Michuki, G. N. and Onyango, I. A. (2019). Composition of mosquitoes in ecological habitats of Lake Baringo Basin during unprecedented flooding. Research and Innovation for the Achievement of SDGs and Kenya’s Big Four Agenda, 23<sup>rd</sup> – 25<sup>th</sup> October 2019, Kenyatta University, Nairobi, Kenya.
2. **June 2018:** Conducted a training workshop for all MUT academic and administrative staff on “Effective Academic Writing”, Murang’a University of Technology.
3. 20<sup>th</sup> June 2021. Gave a virtual talk to Murang’a University of Technology men on Fatherhood; “A father is a guiding light for the family”, during the Internal Father’s Day.
4. 13<sup>th</sup> May 2021. Gave a virtual talk on HIV prevention to all MUT staff and students
5. 2014. Presented a talk on “Writing skills and presentations” to Embu University staff and students.
6. 2015. Presentation during a farmers training workshop in Embu on “Fish Farming in Kenya”.



7. 2011. Attended an International Interdisciplinary Conference on the Environment in Kona, Hawaii, June 28<sup>th</sup> – July 3<sup>rd</sup> 2011. Presented a paper on the efficiency of constructed wetlands in treatment of flower farm waste water effluents around Lake Naivasha, Kenya.
8. **Mwangi, B. M. 2018:** Challenges facing delivery of quality examinations in Young Kenyan Universities”. Paper presented at the 8<sup>th</sup> training EAQAN workshop on “ICT for Quality Higher Education and Expanded Access- Leveraging Technology for Effective QA Systems in East Africa, Kigali, Rwanda. Workshop organized by EAQAN in collaboration with IUCEA
9. **June 2018:** Attended a training workshop on “Programme and Institutional Peer Review” by the Kenyan Commission on University Education, Naivasha, Kenya.
10. **January 2018:** Attended the 4<sup>th</sup> Kenyan Quality Assurance Network (KUQAN) training workshop on “Institutional Quality Audit and Re-certification, Naivasha, Kenya.”
11. **October 2-16:** Participated in a training workshop on “Internal Quality Assurance in Higher Education, Murang’a University of Technology.
12. **May 2017:** Attended the 7<sup>th</sup> training workshop organized by EAQAN in collaboration with IUCEA on “Sharing Experiences of 10 years of Quality Enhancement in East Africa Higher Education, Dar Es Salaam, Tanzania.
13. **August 2016:** Attended a training workshop “Education Curriculum Reform in Kenya” at the Kenya Institute of Curriculum Development (KICD).
14. **May 2016:** Attended the 6<sup>th</sup> training workshop organized by EAQAN in collaboration with IUCEA on “Enhancing Teaching Quality in Higher Education for Better Student Outcome, Entebbe, Uganda.
15. **January 2016:** Conducted a Training Workshop for all MUT Academic staff on “Examination Process Audit”, Murang’a University of Technology.
16. **May 2014:** Participated in a training workshop on “Pedagogy”, Murang’a University of Technology.
17. **August 2014:** Participated in a training workshop on “Enhancing Academic Quality Assurance in Higher Education”, University of Embu.
18. **May 2008: Attended a Trainers of Trainers in Data for Decision Making (D4D)** in the Health Sector, Great Lakes Resort, Naivasha. Sponsored by FHI and NASCOP.
19. **March – November, 1995:** Post-Graduate Course in Limnology, Mondsee, Austria: Sponsored by UNESCO and the Austrian Academic Exchange Service.
20. **November, 1991:** Certificate Course in Marine Mammal Conservation and Biology in the Eastern African Region, UNEP training Workshop on marine mammal conservation in the East African Region, Gigiri, Nairobi.
21. **1996: Certificate in Fisheries and Wildlife Management**, Ministry of Tourism and Wildlife, Naivasha Institute of Wildlife and Fisheries.

During the International Conference on Technology and Innovation for Sustainable Development held on 3<sup>rd</sup> – 5<sup>th</sup> Nov. 2021 at MUT, we presented 5 papers:

1. Conservation status of Murang’a County Wetlands, Kenya. *Benson M. Mwangi, James Wambua Kaluli and Titus Ndiwa*
2. Impact of Riparian Community’s livelihood strategies on Wetlands Conservation and Restoration in Murang’a County, Kenya. *Isaiah O. Abillah, Richard Juma, Clifford Machogu and Benson M. Mwangi*
3. Fish Species Composition and Diversity in South and North Mathioya Rivers, Murang’a County, Kenya. *Ngodia S. Naipamei, Benson M. Mwangi, Titus Ndiwa and Rawlynce Bett*

4. Anthropogenic Stressors Driving Wetland Loss in Mathioya Watershed, Murang'a County, Kenya. *Movin O. Oginga*
5. Composition and diversity of Bird Species of Murang'a County Wetlands, Kenya. *Misael Osano, Benson M. Mwangi and Tittus Ndiwa*

## 17. Supervision of PhD students

### a. Completed PhD students

1. Nahashon C. Kanyi. University of Embu. Integrated Management Practices of Termite species infecting maize, *Zea mays*, in Embu County, Kenya. Thesis Defended and Passed, June 2022
2. Kamau, Samuel Kabochi (2021): Seasonal Variation of Mosquitoes Species Composition (Culicidae), Abundance and Potential Risks to Arboviruses in Unprecedented Extreme Flooding of Lake Baringo Basin, Baringo County, Kenya, PhD Thesis, Kenyatta University. Graduated September, 2021.
3. Isaiah Ochieng Abillah (2021). Livelihood strategies of riparian communities and their impacts on wetland conservation in Murang'a County, Kenya. PhD thesis, Murang'a University of Technology. Graduated, December 2021.
4. Caroline Wangari Kihara, PhD, Murang'a University of Technology – Title of thesis: The Mediating Role of Tourists' Emotional Satisfaction on Service Quality and Behavioural Intentions Relationship at Masai Mara Game Lodges, Kenya

### b. Ongoing PhD supervision

1. Gichohi Patrick Mwangi. Genetic diversity of crop raiding elephants and community based mitigation of human-elephant conflict to enhance livelihoods in Mutara, Laikipia Ecosystem, Kenya. University of Embu.
2. Caroline Wangari Kihara. Service quality evaluation on tourists' emotional satisfaction and behavioural intentions in lodges at Masai Mara Game Resrve, Kenya. Murang'a University of Technology.
3. Carolyne Wachu Maina, Species distribution modeling, population status, and threat analysis of grey crowned crane in the Nairobi metropolitan area. Kenyatta University.
4. Kipkemoi Evans. Impacts of catchment land use on water quality of small wetlands, Murang'a county, Kenya

## 18. Supervision of Masters students

### 18.1 Completed Masters Students

#	Name of Student	Thesis Title	MSc/ PhD,	Status of project (Graduated, Ongoing)

1	Theuri Olive Wairimu	Assessment of the Impacts of Aquaculture Development on Quality of Water Resources and Livelihoods in Gatundu Division of Kiambu County.	M. Env.	Graduated - 2019
2	Carolyne Wachu Maina	Distribution and abundance of mayfly (order Ephemeroptera) in relation to water quality changes along Thika River, Kenya	MSc	Graduated - 2018
3	Mrs. Mary Nyambura Muriithi	Compliance to Exclusive Breastfeeding among Mothers attending Maternal Child Health Facilities in Mathira, Nyeri County	MPH	Graduated - 2017
4	Sammy Mwanzia Musyoka	Oil Production Potential of Fast Growing Phytoplankton Species from Lake Naivasha and Water Reservoirs in Embu University College	MSc	Graduated - 2017
5	Kongo Richard Khatali	A comparative survey of riverine biodiversity of River Seme (Kenya) and Nambale (Uganda) in the Lake Victoria Basin Eco Region.	MSc	Graduated - 2017
6	Njoroje John Ngugi	Spatial and temporal dynamics of mosquitoes infesting rural and urban areas of Kilifi County, Kenya and their disease transmission potential.	MSc	Graduated -2015
7	Nahashon Chege Kanyi	Effects of seasonality and production systems on diversity and infestation levels of athropod pests of <i>Dolichos lablab (l)</i> in Meru central and Yatta Districts of Kenya. Graduated 2014	MSc	Graduated - 2014
8	Dedan Mwangi Mungai	Assessment of postharvest losses of Nile Perch ( <i>Lates niloticus</i> ) incurred by fishermen from Lake Victoria, Kenya	MSc	Graduated -2014
9	Daniel Kinyua M'Mauta	Use of insecticide-treated nets for malaria prevention among students in boarding secondary schools, Igembe District, Kenya	MSc	Graduated - 2014
10	Sindani Waswa Bonzemo	Assessment of Water Quality Status of River Kibisi in Mt. Elgon Area by use of Ephemeroptera, Plecoptera and Tricoptera (EPT) Method	MSc	Graduated - 2013

11	Mwazo Alexander Gombe	Distribution and vegetation association of Grevy's Zebra ( <i>Equus grevyi</i> ) in Tsavo East National Park and the surrounding Ranchlands.	MSc	Graduated - 2012
12	Ombogo Mornica AKINYI	Studies on the effects of weirs on the riverine fisheries productivity of Rivers Awach and Kisian of the Lake Victoria Basin, Kenya.	MSc	Graduated - 2012
13	Jesinter Aluoch Amadi	Impacts of weirs on benthic invertebrate communities of two small rivers in Western Kenya: Rivers Awach and Kiasian.	MSc	Graduated - 2012
14	Rosemary Wanjiru Kimani	The efficiency of constructed wetlands as pollution control mechanism: A case study of the kingfisher wetland within the Lake Naivasha Ecosystem.	MSc	Graduated - 2011
15	Titus Chemandwa Ndiwa	Assessment of Fish Production and Water Quality Status of Undrainable Water Reservoirs in the Naromoru area, Central Kenya.	MSc	Graduated - 2011
16	Olambla Odongo Isaac	Evaluating aspects of the production biology of <i>Clarias gariepinus</i> in integrated rice-fish culture in east Kano, Nyando District, Kenya.	MSc	Graduated - 2011
17	Rucha Kenneth Kibaara	Factors determining access and utilization of antiretroviral therapy strategy by people living within HIV in Thika District, Central Province Kenya.	MPH	Graduated - 2008
18	Charity Wanjiku Maingi	Sexual behaviour as a risk factor for STDs and HIV among women in the fishery industry along Lake Victoria Beaches in Kisumu, Kenya	MPH	Graduated - 2008
19	Charles Odhiambo	Organic Matter Dynamics along Sagana River, Kenya	MSc	Graduated - 2005
20	Francis Kage	Effects of Heavy Metal Pollution on the Macroinvertebrate Distribution along Nairobi River, Kenya.	MSc	Graduated - 2002

## 18.2 Ongoing Masters Students supervision

1	KYUNGU WA N'SIMBA Yannick	Assessment of the Performance of Calcined Clay as a Replacement for Cement in Rammed Earth Floor for Low-income Housing	M.Sc. (JKUAT)	2024
2	Movin Ochieng' Oginga	Assessment of wetland health status in Mathioya watershed, Murang'a County, Kenya	M.Sc. (JKUAT)	2019 - present - Finalizing data analysis
3	Misael Osano Otieno	Effects of wetland degradation on avian community as biological indicators in selected wetlands of Murang'a County, Kenya	UON	2019- present  Finalizing thesis writing
4	Ngodia Sylvia Naipamei	Genetic characterization of fish population found in Mathioya riverine ecosystem Murang'a County, Kenya	MSC (UON)	2019- present Finalizing laboratory work (delayed by procurement of DNA extraction kit)

## 19. External Examiner

1. Egerton University, Department of Biological Sciences – Departmental External Examiner since 2018.
2. Egerton University, M. Sc. Thesis on “Effects of land use and streambed topography on decomposition rates of *Syzygium guineense* (willd, 1828) and *eucalyptus saligna* (smith, 1797) leaf litter and macroinvertebrates assemblage in the Kamweti River, Kenya”.
3. Examined a PhD thesis, Kenyatta University: Thesis title - Characterization and Control of Pathogenic Parasites and Bacteria in Nile Tilapia (*Oreochromis niloticus* Linnaeus 1758) in Fish Farming Systems in Bungoma County.
4. 2019. M.Sc. thesis, Egerton University: Title- Effect of Organic Effluents on Water Quality and Benthic Macroinvertebrate Community Structure in Njoro River, Kenya
5. 2018. M.Sc. thesis, University of Fort Hare, South Africa. Title: Assessment of the Tyhume River Health Status Using Macroinvertebrates as Indicators
6. 2017. M.Sc. thesis, Egerton University. Title: Effects of Net Mesh, Exposure Duration and Net Positioning on Macroinvertebrate Drift Densities in the Njoro River, Kenya
7. 2016. PhD thesis, Egerton University. Title: Effects of Stream Size and Forest Type on Leaf Litter Decomposition and Macroinvertebrate Diversity in Central Kenya
8. 2016. PhD thesis, University of Fort Hare, South Africa. Title: Sustainability of Fish Biodiversity and Economic Valuation of Ecosystem Services: Use of Anthropogenic Effects on Fish Assemblage to Assign Economic Value to degraded Ecosystem Services Provided by Tyume River, Nkonkobe Municipality, Eastern Cape Province, South Africa

9. 2014. PhD thesis, Egerton University. Title: Effects of Biotic and Abiotic Factors on the Zooplankton Community in Lake Baringo, Kenya
10. 2013. PhD. thesis, Kenyatta University. Title: Assessment of Pulmonary Function of Kenyan Elite Distance Runners during Rest, Sub-maximal and Maximal Endurance Exercise. Department of Recreation Management and Exercise Science

## 20. Review of Journal Articles

I am a reviewer for the following journals:

1. East African Journal of Science and Technology
2. African Journal of Agricultural Research
3. Journal of Agriculture, Science and Technology (JAGST)
4. International Journal of Biodiversity and Conservation
5. Egerton Journal of Science and Technology

## 21. Membership in Professional Bodies

#	Name of Professional Bodies	Year since membership obtained
1	Full Member, East African Quality Assurance Network (EAQAN)	2016 - present
2	Full Member, Kenya Quality Assurance Network (KUQAN)	2016 - present
3	Nature Kenya and East African Wildlife Society	2009 - present
4	Societies for International Limnologists (SIL)	2000 - present
5	The North American Benthological Society	2000 - 2006

## 22. Community Service

#	Community services	Consulting person /body/organization	Year
1	Community Trainer	Wetland conservation and restoration in Murang'a County- Between May and July 2021, have trained at 30 farmers from each of the following sub-counties in Muang'a County: Mathioya, Kandara and Kigumo.	2018 – To-date
2	Chairman, Board of Management	Gitugi Mixed Secondary School, Murang'a	2015 - present
3	Member, Board of Management	Gitugi Mixed Secondary School, Murang'a	2013-2015
4	Member, Board of Management	Njumbi High School, Murang'a	2013-2015
5	Member, Board of Management	Uhuru Kenyatta Secondary School, Kiambu	2013-present

6	Vice-Chairman	Central Province Peace Committee	2010 - 2012
7	Vice-Chairman	Kahawa Sukari Welfare Association	2011 -2015

**Referees**

1. Prof. Michael Gicheru, Dean, SPAS, Kenyatta University
2. Prof. Charles Njoroge, Jomo Kenyatta University of Agriculture & Technology
3. Rev. Dr. Peterson Wang'ombe, Senior Pastor, Deliverance Church, Kahawa Sukari