**CURRICULUM VITAE**

**Collins Ayine NSOR, PhD**

**Senior Lecturer**

**Department of Forest Resources Technology**

**Faculty of Renewable Natural Resources**

**College of Agriculture and Natural Resources**

**Kwame Nkrumah University of Science and Technology**

**Kumasi, Ghana**

**Telephone: +233-209606898**

**E-mail address:** [**cansor.canr@knust.edu.gh**](mailto:cansor.canr@knust.edu.gh)

**ayineus@yahoo.com**

# **(a) UNIVERSITIES ATTENDED AND ACADEMIC DEGREES WITH DATES**

2010- 2013 **University of Cape Coast, Central Region**

*PhD (Oceanography & Limnology) (*Awarded in 2014*)*

2005 - 2007 **Rhodes University, South Africa**

*MSc. (Research option) Environmental Science (*Awarded in March, 2008*)*

2000 - 2004 **University for Development Studies, Tamale**

*BSc (Hons) Agricultural Technology (Renewable Natural Resources Option)*

*(*Awarded in October, 2004*)*

# 1995 - 1998 Teachers Certificate “A” 3-Year Teacher Training. Bagabaga Training College

# 

# 

# **UNIVERSITY TEACHING AND RESEARCH EXPERIENCE (WITH DATES)**

## (a) Academic Ranks and Subjects Taught

**Courses taught at undergrad and postgrad levels**

1. SOF 154: Statistics for Natural Resources
2. EFR 352: Applied Systematics II,
3. EFR 264: Wildlife Biology,
4. EFR 352: Applied Systematics II,
5. EFR 357: Natural & Cultural Heritage
6. EFR 262: Experiment design & data Analysis,
7. GEOG 151: Meteorology
8. WRM/MAS 501: Experimental design and Data analysis

**Research Publications (\* = Corresponding author)**

1. Samuel K. Oppong, **Nsor C. A\*,** Gabriel Kwabena Buabeng (2021). Response of benthic invertebrate assemblages to seasonal and habitat condition in the Wewe River, Ashanti region (Ghana). *Open Life Sciences*, 16: 336–353, <https://doi.org/10.1515/biol-2021-0040>.
2. **Nsor, C. A\*.** John Nkrumah Mensah, Vincent Agumenu (2021). Riparian vegetation dynamics in protected and unprotected areas, Kumawu District—Ashanti Region (Ghana). *Journal of Tropical Ecology*, 62(3): 329 – 486, <https://doi.org/10.1007/s42965-021-00147-4> (SpringerNature Publisher).
3. **Nsor, C. A\*.**  Samuel K. Oppongb, Michael Ochemc, Emmanuel Danquahd, Osei Owusu Antobree**, (2020).** Spatio-temporal dynamics of terrestrial invertebrate assemblages in the riparian zone of the Wewe River, Ashanti region, Ghana**.** *Journal of Open Life Sciences,* 15: 331–345, https://doi.org/10.1515/biol-2020-0037 (DE GRUYTER Publishers).
4. Daniel Dompreh, **Nsor, C. A\*.** and Lucy Amissah (**2019).** Has Talbotiella gentii Lost Its Insect Pollinators? A Threat to Its Fragmentation and Extinction. In Jenkings, O. P. (Ed.). Advances in Animal Science and Zoology, Volume 13, pp. 1 – 25. Nova Science Publishers, New York.
5. **Nsor, C. A\*.,** George Ashiagbor and Emmanuel Danquah **(2019).** Quantifying recent floodplain vegetation change along the White Volta River in the Northenr Region of Ghana. *Ghana Journal of Georgraphy*, 11(1): 159 – 179, doi:https://dx.doi.org/10.4314.gig.v11i1.10*.*
6. Issah Seidu, **Nsor, C. A.**, Emmanuel Danquah, Paul Tehoda, and Samuel K. Oppong **(2019).** Patterns of Odonata Assemblages in Lotic and Lentic Systems in the Ankasa Conservation Area, Ghana**.** *International Journal of Zoology,*Vol. 2019: 14<https://doi.org/10.1155/2019/3094787>. Hindawi Publishers.
7. **Nsor, C. A\*.,** Osei Owusu Antobre, Asaah Sumaila Mohammed, Foster Mensah **(2019).**Modelling the effect of environmental disturbance on community structure and diversity of wetland vegetation in Northern Region of Ghana**.** *Journal of Aquatic Ecology*, 53(1): 119 – 136. https//doi.org: 10.1007/s10452-019-09677-5. Springer Nature Publishers.
8. Emmanuel Baah Agyapong, George Ashiagbor, **Nsor, C. A\*.** and Louise M. van Leeuwen **(2018).** Urban land transformations and its implication on tree abundance distribution and richness in Kumasi, Ghana. *Journal of Urban Ecology*, 4: 1–11
9. **Nsor, C. A\***., Emmanuel Acquah, Grace Mensah, Vincent Kusi-Kyei and Samuel Boadi **(2018).** Avian Community Structure as a Function of Season, Habitat Type, and Disturbance, in Mole National Park, Northern Region (Ghana). *International Journal of Ecology*, 2018: 14 pp, <https://doi.org/10.1155/2018/2045629>.
10. Issah Seidu, **Nsor, C. A.,** Emmanuel Danquah & Lesley T. Lancaster **(2018).** Odonata assemblages along an anthropogenic disturbance gradient in Ghana’s Eastern Region. *Journal of Odonatologica* 47(1/2) 2018: 73-100, doi:10.5281/zenodo.1239947.
11. Issah Seidu, Emmanuel Danquah, **Nsor**, **C. A.,** David Amaning Kwarteng & Lesley T. Lancaster (**2017)**. Odonata community structure and patterns of land use in the Atewa Range Forest Reserve, Eastern Region (Ghana). *International Journal of Odonatology*, 20(3-4): 173-189. <http://dx.doi.org/10.1080/13887890.2017.1369179>.
12. Emmanuel Acquah, **Nsor**, **C. A\*.,** Emmanuel Kwamena Arthur and Samuel Boadi **(2017).** The socio-cultural impact of ecotourism on park-adjacent communities in Ghana. *African Journal of Hospitality, Tourism and Leisure*, 6 (2).
13. Samuel Boadi, **Nsor, C. A\*.**, Daniel Haruna Yakubu, Emmanuel Acquah and Osei Owusu Antobre **(2017).** Conventional and Indigenous Biodiversity Conservation Approach: A Comparative Study of Jachie Sacred Grove and Nkrabea Forest Reserve.*International Journal of Forestry Research*. 2017: 8. doi.org/10.1155/2017/1721024. Hindawi Publishers.
14. Samuel Boadi, **Nsor**, **C. A.,** Osei Owusu Antobre, Emmanuel Acquah **(2016).** An analysis of illegal mining on the Offin shelterbelt forest reserve, Ghana: Implications on community livelihood. *Journal of Sustainable Mining, 15: 115-119*. Elsevier
15. **Nsor, C. A\*.** andEdward Adzesiwor Obodai **(2016).** Environmental Determinants Influencing Fish Community Structure and Diversity in Two Distinct Seasons, among Wetlands of Northern Region (Ghana). *International Journal of Ecology*, 2016:10. doi.org/10.1155/2016/1598701. Hindawi Publishers.
16. **Nsor\***, **C. A.**  Emmanuel Acquah, and Clifford A. Braimah **(2016).** Seasonal Dynamics of Physico-chemical Characteristics in Wetlands of Northern Region (Ghana): Implications on the Functional Status. *International Journal of Aquatic Science*, 7(1): 39-49.
17. **Nsor**\* **C. A.** **(2015).** Determinants of Aquatic Plant Community Structure, Diversity and Distribution in Wetlands of Northern Region (Ghana). *Global Journal of Science and Frontiers Research*, 15(1): 31-41.
18. **Nsor\* C. A.** and Elliot Alhassan, **(2015).** Wetlands conservation in Northern Region of Ghana: An indigenous conservation approach. *Journal of Biology and Nature,* 4(2): 77 – 88.
19. **Nsor\*** **C. A.** and Edward Adzesiwor Obodai. **(2014).** “Environmental Determinants Influencing Seasonal Variations of Bird Diversity and Abundance in Wetlands, Northern Region (Ghana),” *International Journal of Zoology*. 2014: 10. doi.org/10.1155/2014/548401.
20. **Nsor\* C.A.**  and Gambiza James **(2013).** Land use changes and their impacts on the vegetation Kromme River peat basin, South Africa. *Science Journal of Environmental Engineering Research*. 2013(3): 2276-7495.
21. **Nsor\* C. A. (2013).** *Plant diversity status of the Kromme Peatland, Eastern Cape, South Africa*. LAP Lambert Academic Publishing. Heinrich-Börking-Str. 6-8, 66121. Saarbrücken, Germany.
22. E.A. Obodai and **Nsor**, **C. A. (2009).** Aspects of biodiversity and fish production in the Kukobila wetland in the Savelugu-Nanton District of the Northern Region of Ghana. B.Sc. Thesis*. Ethiopian Journal of Environmental Studies and Management,* 2(3): 56-62.

**Manuscripts under various stages of peer review**

1. Habitat condition as an indicator of plant species coexistence in a niche space: Implications on the functioning status of riparian ecosystems – *Journal Folia Geobotanica (*Springer Nature Publishers);
2. Modelling woody community structure of four riparian communities in Kumawu District – Ashanti Region (Ghana) – *Journal Preslia*;
3. Modelling of species range shift and structural assemblages in Owabi Ramsar wetland, Ashanti Region (Ghana) – *African Journal of Aquatic Science* (Taylor & Francis Publishers)
4. Comparative assessment of the structural attributes of *Vitellaria Paradoxa* CF. Gaertn. and *Parkia Biglobosa* (Jacq.) Benth. to environmental drivers in Mole National Park and Pack adjacent communities (Ghana) -*West African Journal of Applied Ecology* (AJOL Publishers).

**Reviewer and an editorial member of some peer review Journals**

January, 2021 Manucript Reviewer, *Journal Vegetos* (SpringerNature Publishers

January, 2020 **Manuscript Reviewer,** *International Journal of Ecology* (Hindawi Publishers)

September, 2019 **Manuscript** **Reviewer**, *Journal of Global Ecology & Conservation* (Elsevier Publishers),

July, 2019 **Manuscript** **Reviewer**, *Journal of Lakes & Reservoir: Science, Policy and Management for Sustainable use* (WILEY Publishers)

March 2019 **Member** **of the Editorial Board**, *Research in Ecology Journal* (Redolence Academic Services, Tamil Nadu, South India.)

January 2019 -2023 **Member** **of the Editorial Board**, *Asian Journal of Research in Agriculture and Forestry* (Science Domain International Publishers)

May 2018 **Manuscript** **Reviewer**, *Journal of Biology and Nature*

(International Knowledge Press Publishers)

May 2018 **Manuscript** **Reviewer**, *Asian Journal of Research in Agriculture*

*and Forestry* (Science Domain International Publishers)

July 2017 **Manuscript Reviewer**, *Journal of Agriculture and Ecology*

*Research International* (Science Domain International Publishers)

**Supervision of Student Project Work/Theses/Research**

**Undergraduate Student Theses**

**BSc Year 2019/2020**

1. **Rockson Acolatse (2020):** Assessing the functional state of the owabi wetland, using the plant species range shift approach, in the ashanti region (Ghana)
2. **Nana Afusa Ankomah Dei (2020)**: Bird Community structure and habitat preferences in the Owabi wildlife Sanctuary, Ghana
3. **Bonnah Yeaboah Kennedy (2020)**: Predictive factors influencing insect community structure in Mole National Park, Northern Region (Ghana)
4. **Minnow Adrian Teschemaker Jr**. (2020): Factors influencing Habitat preferences of birds and their distribution patterns in four different landuse types, in the Wewe forest reserve, Kumasi Ghana
5. **Henrietta Asamoah-Sawiri (2020)**: Assessment of habitat preferences and threats on Leopad in Mole National Park, Norther Region, Ghana
6. **Odame Felix Kofi (2020**): Distribution and potential impact of alien invasive species in Mole National Park, Northern Region (Ghana)
7. **Otchere Christiana (2020):** Plant structural assemblages in urban wetland, Kumasi Metropolitan Area (Ghana)

**BSc Year 2018/2019**

1. **John Mensah (2019):** A Comparative Assessment of Macrophyte Community Distribution along Four Riverine Continuum in Bomfobiri Wildlife Sanctuary, Ashanti Region, Ghana
2. **Buabeng Gabriel Kwabena (2019):** Modelling the spatial distribution of benthic invertebrate along the Wewe River, Kumasi, Ghana
3. **Micheal Ochem (2019):** Terrestrial invertebrate community structure along the riparian zone of the Wewe River, Kumasi Ghana
4. **Obodum Emelia Kusi (2019):** Investigating terrestrial invertebrate plant community type association along the riparian zone of the Wewe River, Kumasi, Ghana

**BSc Year 2017/2018**

1. **Latif Abdul Mumuni (2017):** Review of Conservation Strategies to promote Wildlife habitat utilization in Mole National Park
2. **Ahiabor Klenam (2017):** Seasonal ungulate habitat preference in Mole National Park: Implication on Ecotourism drive
3. **Tetteh Emmanuel Ansah (2017):** Distribution of Birds in Kakum National Park: Implication on Ecotourism drive

**BSc Year 2016/2017**

Grace Mensah (Miss) (2016): Bird habitat preference and spatial distribution in Mole National Park

**Supervision of Postgraduate (MPhil) Student Theses**

Details of **MPhil (Wildlife and Range Management)** students’ supervision are provided in the section that follows:

1. **2018-Present:** **Martin Manu Kusi.** Assessing the impact of anthropogenic activities on Odonata distribution: A case study of the Owabi wetland sanctuary. **(Co-Supervisor)**

***MPhil (Wildlife & Range Management) Completed and yet to graduate in June, 2019***.

1. **2018-Present: Jemima Kesse.** Bird assemblages in urban green space, Kumasi Metropolitan Area, Ghana. **(Lead Supervisor)** ***MPhil research in progress***
2. **2018-Present: Benard Eshun.** Butterfly community structure in different land sue types. **(Second Supervisor) *MPhil research in progress***
3. **2017: Emma Baah Agyapong.** Assessing the factors that influence the distribution of trees in urban areas: a case of Kumasi Metropolitan Area. **(Second Supervisor)**

***Wildlife & Range Management) Degree awarded***

**5. 2016: Seidu Issah.** Odonata response to anthropogenic impacts: the menace of deforestation in the Atewa Range Forest Reserve. **(Second Supervisor) *MPhil (Wildlife & Range Management) Degree awarded***

**Supervision of Postgraduate (PhD) Student Theses**

I am currently co-supervising three **PhD** students in the Department of Wildlife and Range Management, Department of Fisheries and Watershed Management and Department of Agroforestry. Details of **PhD** students supervised are provided in the section that follows:

1. **2018-Present: Abena Owusu Adjapong**. Ecology of small terrestrial mammals in southern Ghana: community occupancy and microhabitat variables **(Co- Supervisor)**

***PhD research in progress***

1. **2017-Present: Hakeem Kontoh**. Analysing the effect of shade tree distance, landscape on cocoa yield **(Co-Supervisor)**

***PhD research in progress***

1. **2016-Present: Elizabeth Awutunde Seyi**. Effects of the Bui dam on fisheries and the livelihood of some surrounding communities **(Co-Supervisor) *PhD research in progress***

**(d)** **Other professionally related experience**

**2016-2019: Internal examiner of MPhil & PhD Thesis**

I have recently acted as **an internal examiner** for one PhD and four MPhil students:

1. PhD. Student: (**Ziblim Abubakari Imoro**), from the Department of Wildlife & Range Management. His thesis was titled “**Availability, growth and management of indigenous forage shrub species of the northern savanna ecosystem of Ghana**”

1. MPhil student (**Issah Seidu**), from the Department of Wildlife & Range Management. Thesis was titled **Odonata response to anthropogenic impacts: the menace of deforestation in the Atewa Range Forest Reserve**

1. MPhil student (**Baah Agyapong Emma**), from the Department of Wildlife & Range Management. Thesis was titled: **Assessing the factors that influence the distribution of trees in urban areas: a case of kumasi Metropolitan Area**

1. MPhil student (**Dwobeng Nyantakyi**),from the Department of Wildlife & Range Management. Thesis was titled: **Determinants of mammal abundance**

**in Bia Conservation Area**

1. MPhil student (**Martin Manu Kusi**), from the Department of Wildlife & Range Management. Thesis was titled: Assessing the impact of anthropogenic activities on Odonata distribution: A case study of the Owabi wetland sanctuary

**Areas of expertise**

1. Application of Ecological research methods in the field of Ecology;
2. Application of Multivariate statistical models such as Canonical correspondence analysis (CCA), Detrended correspondence analysis (DCA), multiple dimensional scaling (MDS) , Hierarchical cluster analysis (HCA) and Gaussian curves in aquatic ecology research;
3. Application of diversity and species abundance distribution models (SADs) (i.e. Hill Numbers, Renyi Diversity ordering, rarefaction, Geometric series, Broken stick model and McArthur Logarithmic series models) in vegetation, fish and bird analyses;
4. Wetlands inventory/classification, wetlands health assessment (using the Kotze’s and Acreman models);
5. A good background in wetlands conservation approach;
6. Knowledge in plant, fish and bird sampling techniques and identification;
7. Application of **ARIMA Model** (Autoregressive Integrated Moving Averages) in the analysis of historical climate change/variability and prediction of future trends;
8. A good background in plant functional ecology (i.e. trait-environment assessment in both terrestrial and aquatic systems);

8. A good background in quantifying environmental disturbances and land function assessment.

**Knowledge in the application of biostatistical soft wares in ecological analysis**

1. Environmental Community Analysis (ECOM version 1.33) by Henderson and Seaby, 2000. Pisces Conservation Limited, 2000.
2. Community Analysis Package (CAP version 1.52)
3. Multivariate Statistical Package software (MVSP)
4. Statistica version 10.0
5. PC-ORD statistical software
6. SPSS version 20.0.
7. OriginPro. 9.1. statistical software
8. PAST.exe. ver. 2.5 statistical software

**Computer skills**

A good understanding in the use of Microsoft word, Excel, Power point and desktop publisher.

1. **MEMBERSHIP OF PROFESSIONAL BODIES**

* Member: University Teachers Association of Ghana (UTAG)
* Member: International Network on Limnology of Drylands (INLD)
* Member: Diversitas International (DI)
* Member: Drynet (a global initiative giving future to drylands)
* Member: Freshwater Life Matters (FLM)
* Member: International Mire Conservation Group (IMCG)
* Member: Global Wetlands Study Group (GWSG)

**CONFERENCES AND WORKSHOPS ATTENDED**

1. **Resource Person,** a 3-day Orientation Workshop organized by the College of Health Sciences for her PhD students. October 3rd – 5th, 2018, Career Development Centre, Old Pharmacy Block.
2. **Participant,** Stakeholder EngagementWorkshop on Sustainable Wetlands Management for Enhancing Food Security and Ecosystem Resilience in West Africa. Global Monitoring for Environment and Security Africa. November, 2018.

**Consultancy services**

1. Appointed as co-principal consultant by EPA-GH, to conduct preliminary biodiversity and hydrological baseline study at the Atewa Range Forest - 2020
2. Appointed as **co-principal investigator** by Rambol International and QGUK, UK, to embark on a baseline study on Elephant and Biodiversity Survey in Northern Ghana (i.e. Bolgatanga-Bawku- Pulmakom corridor – 2020.
3. Appointed as a Principal investigator by CERSGIS, to undertake a socio-economic and biophysical baseline research, to support integrated management planning for the inventory for the Owabi Wildlife Sanctuary Ramsar Site under the GDZHAO project – 2018;
4. Appointed as a **principal consultant** by Conservation Alliance (CA) to undertake a research on enhancing ecosystem services for smallholder women farmers in the northern region of Ghana through an integrated Bhungroo based research- 2017
5. **Resource Person,** Awareness creation among students about conservation issues at Kumasi Zoological Garden. Global Match for Elephant andRhinos Events Prior to CITESCOP 18 in Sri-Lanka Dubbed Spending a day with Endangered Elephants, Chimps and Lions in Kumasi Zoological Gardens - 2019

**Referees**

1. **Prof. S.K. Opong**

Faculty of Renewable Natural Resources

Dept. of Wildlife and Range Management,

Kwame Nkrumah University of Science and Technology,

University Post Office

Kumasi.

Cell phone no.: +233-244535692

+233 - 206915406

E-mail: [kobbyopong@yahoo.com](mailto:kobbyopong@yahoo.com)

1. **Prof. Steve Amissah**

Provost

College of Agricultural and renewable Natural Resources

Kwame Nkrumah University of Science and Technology,

University Post Office

Kumasi.

Cell phone no.: +233-277402633

E-mail: [steveamisah@yahoo.com](mailto:steveamisah@yahoo.com)

1. **Prof. Emmanuel Danquah**

Head of Department/Vice Dean

Faculty of Renewable Natural Resources

Dept. of Wildlife and Range Management,

Kwame Nkrumah University of Science and Technology,

University Post Office

Kumasi.

Cell phone no.: +233-244742385

E-mail: [emmanueldanquah@gmail.com](mailto:emmanueldanquah@gmail.com)