Aquatic Ecology Publications

**LAKE KARIBA**

1. Mutasa, F.K., Jones, B., Hove-Musekwa, S.D., **Tendaupenyu, I.H**., Nhiwatiwa, T. and Ndebele-Murisa, M.R., (2022). **Stability Analysis and Optimal Control of a Limnothrissa Miodon Model with Harvesting**. *Discrete Dynamics in Nature and Society*, *2022*.
2. **Magqina, T.,** Dalu, T., Mhlanga, L., & Nhiwatiwa, T. (2021). **Age and growth rate estimations as a basis for assessing the population dynamics of *Hydrocynus vittatus* Castelnau 1861 in the Sanyati Basin of Lake Kariba, Zimbabwe**. *Lakes & Reservoirs: Research & Management*, 26, e12372. <https://doi.org/10.1111/lre.12372>
3. **Magqina T.,** Dalu T., Mhlanga L. & Nhiwatiwa T. (2020). **Size at maturity, maturity stages and sex ratio of tiger fish *Hydrocynus vittatus* Castelnau 1861 in Lake Kariba, Zimbabwe: Assessing the influence of decades of fisheries exploitation**. *African Journal of Aquatic Sciences*. <https://doi.org/10.2989/16085914.2020.1761284>
4. **Magqina, T.,** Dalu, T., Mhlanga, L., Dalu, M.T.B. & Nhiwatiwa, T. (2020). **Challenges and possible impacts of artisanal and recreational fisheries on tiger fish *Hydrocynus vittatus* Castelnau 1861 populations in Lake Kariba, Zimbabwe**. *Scientific African*. <https://doi.org/10.1016/j.sciaf.2020.e00613>
5. Marufu L, Barson M., Chifamba P., **Tiki M.,** Nhiwatiwa T. (2018): **The population dynamics of a recently introduced crayfish, Cherax quadricarinatus (von Martens, 1868), in the Sanyati Basin of Lake Kariba, Zimbabwe**, *African Zoology*. DOI:10.1080/15627020.2018.1448719
6. **Ndhlovu, N**., Saito, O., Djalante, R. and Yagi, N., (2017). **Assessing the sensitivity of small-scale fishery groups to climate change in Lake Kariba, Zimbabwe**. *Sustainability*, *9*(12), p.2209.
7. K. Nyikahadzoi, W. Mhlanga, E. Madzudzo, **I. Tendaupenyu**, E. Silwimba (2017); **Dynamics of transboundary governance and management of small-scale fisheries on Lake Kariba: implications for sustainable use.** *International Journal of*

*Environmental Studies Volume 74 (3): 458-470.* <https://doi.org/10.1080/00207233.2017.1308159>

1. **Tendaupenyu, I. H.,** Pyo, Hee-dong. (2017); **A comparative analysis of Maximum Entropy and Analytical Models for assessing Kapenta, *Limnothrissa miodon*, stock in Lake Kariba.** *Environmental and Resource Economics Review*, Volume 26

(4): 613-639. <https://doi.org/10.15266/KEREA.2017.26.4.613>

1. Utete, B., Mutasa, L**., Ndhlovu, N., Tendaupenyu I.H**. 2013, **Impact of Aquaculture on Water Quality in Lake Kariba, Zimbabwe**. *International Journal of Aquaculture*, **3**(4),11-16.DOI:10.5376/IJA.2013.03.0004 <https://aquapublisher.com/index.php/ija/article/view/633>
2. **The Impact of Climate Change and Fishing Effort on Kapenta catches in Lake Kariba.** Book Chapter 9. Building Climate Resilient Communities in Africa. Insights from Zimbabwe's Urban and Rural Areas. 2018 Conrad Adenauer Publication. <https://www.kas.de/documents/277198/12841641/KAS_Climate+Resilience+Book_Building+Climate+Change+resilient+communities++in+Africa..pdf/611b745a-900c-2578-363e-eec7a5862070?version=1.0&t=1621335859494>

**LAKE TUGWI MUKOSI**

1. **Magqina T.,** **Mungenge C**. & **Mawoyo K.A**. (2021). **Fish diversity and composition of Tugwi Mukosi Dam, Zimbabwe’s largest inland reservoir post impoundment**. *Aqua.* *Fish & Fisheries*; 1–9. <https://doi.org/10.1002/aff2.24>
2. **Magqina T**, Mhere A (2020) **Size at maturity, maturity stages, and sex ratio of Micropterus salmoides (Lacepède, 1802) in Zimbabwe’s largest inland reservoir, Tugwi Mukosi: a baseline study**. Journal of Fisheries. <http://journal.bdfish.org/index.php/fisheries/article/view/JFish20265>
3. Nhiwatiwa, T., **Mungenge, C.P**., Mhlanga, L. & Dalu, T. (2020) **Stratification regimes and thermodynamic modelling of a subtropical African reservoir.** *Lakes & Reservoirs: Science, Policy and Management for Sustainable Use.* DOI: 10.1111/lre.12352

**WATER QUALITY P**

1. Mwedzi, T., Mangadze, T., **Chakandinakira, A.T.,** and Bere, T. (2022). **Stream biomonitoring: The role of diatoms, macroinvertebrates and fish.** In *Emerging Freshwater pollutants* (pp 9-24). Elsevier.
2. Madzivanzira, T.C., Mungenge, C., **Chakandinakira, A.T**., Rugwete, N., and Kavhu, B. (2022). **Post‐filling phase ichthyofaunal community and fishery potential of Chitsuwa Reservoir, a small tropical reservoir in Zimbabwe**. *Lakes & Reservoirs: Research & Management*, *27*(1), e12394. <https://dx.doi.org/10.1111/lre.12394>
3. Mlambo, S.S., Utete, B., Mudziwapasi, R., Ncube T.S., Nyamupingidza, B. & **Mungenge, C.** (2020) **Passive Biomonitoring using integrated hepatic oxidative stress biomarkers and gonadal histopathology in *Oreochromis niloticus* from Lake Manyame**, Zimbabwe. *Aquatic Sciences and Technology* Vol 9 (1). <https://doi.org/10.5296/ast.v9i1.17118>

1. **Blessing M Mugaviri**. (2020). **Spatio - temporal distribution and diversity of macro - invertebrates n Lake Chivero**. *Int. J. Adv. Res. Biol. Sci.* 7(12): 82-95. DOI: <http://dx.doi.org/10.22192/ijarbs.2020.07.12.011>
2. **Chakandinakira A.T,** Mwedzi T, Tarakini T and Bere T. (2019). **Ecological Responses of Periphyton Dry Mass and Epilithic Diatom Community Structure for Different Atrazine and Temperature Scenarios**. *Water SA* 45 (4) 580-591. <https://doi.org/10.17159/wsa/2019.v45.i4.7539>
3. Bere, T. and **Chakandinakira, A.T.** (2018). **Diatoms as Indicators of Anthropogenic Changes in Water Quality in Mucheke and Shagashe Rivers, Masvingo, Zimbabwe**. In Matsumura-Tundisi, T. & Tundisi, J. G. (Eds.), *Water Resources Management* (pp. 1530). São Carlos: Editora Scienza. [http://doi.org/10.26626/978-85-5953-0315.2018C001](http://doi.org/10.26626/978-85-5953-031-5.2018C001)

1. Utete, B., Nhiwatiwa, T., **Kavhu, B.,** Kusangaya, S., Viriri, N., Mbauya, A.W. and Tsamba, J., (2018). **Assessment of water levels and the effects of climatic factors and catchment dynamics in a shallow subtropical reservoir**, Manjirenji Dam, Zimbabwe. *Journal of Water and Climate Change*, p. jwc2018134.
2. Utete, B., Phiri, C., Mlambo, S. S., Maringapasi, N., Muboko, N., Fregene, T. B., & **Kavhu, B.** (2018). **Metal accumulation in two contiguous eutrophic peri-urban lakes, Chivero and Manyame, Zimbabwe**. *African Journal of Aquatic Science*, 43(1), 1-15
3. Mhlanga L, **Mungenge C** & Nhiwatiwa T (2017). **Physico-chemical limnology and plankton dynamics of Mazvikadei, a tropical reservoir in Zimbabwe**, African *Journal of Aquatic Science*, DOI: 10.2989/16085914.2017.1336074. <http://dx.doi.org/10.2989/16085914.2017.1336074>
4. **Matokwe T.B.,** Jung H.Y., Kang K.H., Hyun D. J and Kim J. K. (2016). **Characterization of acidogenesis occurring on rainbow trout (*Oncorhynchus mykiss*) sludge by indigenous *Alcaligenes faecalis,*** *Biotechnology and Bioprocess Engineering*, Volume 21, Issue 6, pp 794-803. DOI: 10.1007/s12257-016-0171-z
5. Masocha M, **Mungenge C &** NhiwatiwaT (2016). **Remote Sensing of Nutrients in a Subtropical African Reservoir: Testing Utility of Landsat 8,** *Geocarto International*,DOI:10.1080/10106049.2016.1265596. <http://dx.doi.org/10.1080/10106049.2016.1265596>
6. **Tendaupenyu, P., Ndlovu, M., Tendaupenyu, I.H.** & Pswarayi, F. (2013), **Heavy metal accumulation in *Oreochromis niloticus* muscle from Lake Chivero and Lake Manyame**, *Journal of Applied Sciences in Southern Africa 19 (1): 43-50*
7. **Mungenge, C.,** Zimudzi C., Zimba, M., Nhiwatiwa, T**.** (2013), **Phytochemical screening, cytotoxicity and insecticidal activity of the fish poison plant *Synaptolepis alternifolia* Oliv. (Thymelaeaceae).** *Journal of Pharmacognosy and Phytochemistry 2014; 2 (5): 15-19*

**LAKE MUTIRIKWI**

1. Rashidi M, Mhlanga W, **Tiki M, Svosvai C** (2020) **Small-Scale Fisheries Production and Rural Livelihoods: A Case of Lake Mutirikwi (Lake Kyle), Zimbabwe**. *Journal of Aquaculture and Fisheries* 4: 030.