

LIST OF SCIENTIFIC ARTICLES BY TANAPA STAFF FROM NATIONAL PARKS

(proposed online title just “Scientific articles” as a sub-menu under the main menu Publications)

Fire regulates the abundance of alien plant species around roads and settlements in the Serengeti National Park. Bukombe, J., Smith, S., Kija, H., Loishooki, A., Sumay, G., Mwita, M., Mwakalebe, G., & Kihwele, E. (2018). *Management of Biological Invasions*, 9(3), 357–367.
<https://doi.org/10.3391/mbi.2018.9.3.17>

Genomic signatures of high-altitude adaptation and chromosomal polymorphism in geladas. Chiou, K. L., Janiak, M. C., Schneider-Crease, I. A., Sen, S., Ayele, F., Chuma, I. S., Knauf, S., Lemma, A., Signore, A. V., D’Ippolito, A. M., Abebe, B., Haile, A. A., Kebede, F., Fashing, P. J., Nguyen, N., McCann, C., Houck, M. L., Wall, J. D., Burrell, A. S., ... Snyder-Mackler, N. (2022). *Nature Ecology & Evolution*, 6(5), 630–643.
<https://doi.org/10.1038/s41559-022-01703-4>

Pathogenic Spirochetes in Monkeys: Stealthy Pathogens of Global Importance. Chuma, I. S., Abel, L., Hallmaier-Wacker, L. K., Šmajc, D., & Knauf, S. (2020). In S. Knauf & L. Jones-Engel (Eds.), *Neglected Diseases in Monkeys* (pp. 95–119). Springer International Publishing. https://doi.org/10.1007/978-3-030-52283-4_5

Widespread *Treponema pallidum* Infection in Nonhuman Primates, Tanzania. Chuma, I. S., Batamuzi, E. K., Collins, D. A., Fyumagwa, R. D., Hallmaier-Wacker, L. K., Kazwala, R. R., Keyyu, J. D., Lejora, I. A., Lipende, I. F., Lüert, S., Paciência, F. M. D., Piel, A., Stewart, F. A., Zinner, D., Roos, C., & Knauf,

S. (2018). *Emerging Infectious Diseases*, 24(6), 1002–1009.

<https://doi.org/10.3201/eid2406.180037>

Savannas are vital but overlooked carbon sinks. Dobson, A., Hopcraft, G., Mduma, S., Ong'era, J. O., Fryxell, J., Anderson, T. M., Archibald, S., Lehmann, C., Poole, J., Caro, T., Mulder, M. B., Holt, R. D., Berger, J., Rubenstein, D. I., Kahumbu, P., Chidumayo, E. N., Milner-Gulland, E. J., Schlüter, D., Otto, S., ... Sinclair, A. R. E. (2022). *Science*, 375(6579), 392–392.

<https://doi.org/10.1126/science.abn4482>

Ecohydrology-based planning as a solution to address an emerging water crisis in the Serengeti ecosystem and Lake Victoria. Elliot, H. S., & Martin, L. E. (Eds.). (2011). In, *River ecosystems: Dynamics, management and conservation*. Nova Science Publishers.

Wildlife water utilization and importance of artificial waterholes during dry season at Ruaha National Park, Tanzania. Epaphras, A. M., Gereta, E., Lejora, I. A., Ole Meing'ataki, G. E., Ng'umbi, G., Kiwango, Y., Mwangomo, E., Semanini, F., Vitalis, L., Balozi, J., & Mtahiko, M. G. G. (2008). *Wetlands Ecology and Management*, 16(3), 183–188. <https://doi.org/10.1007/s11273-007-9065-3>

Mathematical modelling Treponema infection in free-ranging Olive baboons (*Papio anubis*) in Tanzania. Hawkins, D., Kusi, R., Schwab, S., Chuma, I. S., Keyyu, J. D., Knauf, S., Paciência, F. M. D., Zinner, D., Rychtář, J., & Taylor, D. (2022). *Epidemics*, 100638. <https://doi.org/10.1016/j.epidem.2022.100638>

Road-based line distance surveys overestimate densities of olive baboons.

Kiffner, C., Paciência, F. M. D., Henrich, G., Kaitila, R., Chuma, I. S., Mbaryo, P., Knauf, S., Kioko, J., & Zinner, D. (2022). *PLOS ONE*, 17(2), e0263314.
<https://doi.org/10.1371/journal.pone.0263314>

The role of vegetation in the water budget of the Usangu wetlands, Tanzania.

Kihwele, E., Mnaya, B., Meng'ataki, G., Birkett, C., & Wolanski, E. (2012). *Wetlands Ecology and Management*, 20(5), 389–398.
<https://doi.org/10.1007/s11273-012-9260-8>

Temporal Changes in the Lesser Flamingos Population

(<i>Phoenicopterus minor</i>) in Relation to Phytoplankton Abundance in Lake Manyara, Tanzania. Kihwele, E. S., Lugomela, C., & Howell, K. M. (2014). *Open Journal of Ecology*, 04(03), 145–161.
<https://doi.org/10.4236/oje.2014.43016>

Upstream land-use negatively affects river flow dynamics in the Serengeti

National Park. Kihwele, E. S., Veldhuis, M. P., Loishooki, A., Hongoa, J. R., Hopcraft, J. G. C., Olff, H., & Wolanski, E. (2021). *Ecohydrology & Hydrobiology*, 21(1), 1–12. <https://doi.org/10.1016/j.ecohyd.2020.12.004>

Environmental Correlates of African Elephant (*Loxodonta africana*) Distribution

in Manyara Area, Tanzania. Kioko, J., Herbert, V., Mwetta, D., Kilango, Y., Murphy-Williams, M., & Kiffner, C. (2015). *Annual Research & Review in Biology*, 5(2), 147–154. <https://doi.org/10.9734/ARRB/2015/12470>

Papyrus wetlands, nutrients balance, fisheries collapse, food security, and

Lake Victoria level decline in 2000–2006. Kiwango, Y. A., & Wolanski, E.

(2008). *Wetlands Ecology and Management*, 16(2), 89–96.

<https://doi.org/10.1007/s11273-007-9072-4>

Nonhuman primates across sub-Saharan Africa are infected with the yaws

bacterium *Treponema pallidum* subsp. *pertenue*. Knauf, S., Gogarten, J.

F., Schuenemann, V. J., De Nys, H. M., Düx, A., Strouhal, M., Mikalová, L.,

Bos, K. I., Armstrong, R., Batamuzi, E. K., Chuma, I. S., Davoust, B., Diatta,

G., Fyumagwa, R. D., Kazwala, R. R., Keyyu, J. D., Lejora, I. A. V., Levasseur,

A., Liu, H., ... Calvignac-Spencer, S. (2018). *Emerging Microbes & Infections*,

7(1), 1–4. <https://doi.org/10.1038/s41426-018-0156-4>

Gene target selection for loop-mediated isothermal amplification for rapid

discrimination of *Treponema pallidum* subspecies. Knauf, S., Lüert, S.,

Šmajs, D., Strouhal, M., Chuma, I. S., Frischmann, S., & Bakheit, M. (2018).

PLOS Neglected Tropical Diseases, 12(4), e0006396.

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Isolation of *Treponema* DNA from Necrophagous Flies in a Natural Ecosystem.

Knauf, S., Raphael, J., Mitjà, O., Lejora, I. A. V., Chuma, I. S., Batamuzi, E. K.,

Keyyu, J. D., Fyumagwa, R., Lüert, S., Godornes, C., Liu, H., Schwarz, C.,

Šmajs, D., Grange, P., Zinner, D., Roos, C., & Lukehart, S. A. (2016).

EBioMedicine, 11, 85–90. <https://doi.org/10.1016/j.ebiom.2016.07.033>

Spatial variation in giraffe demography: A test of 2 paradigms. Lee, D. E., Bond, M. L., Kissui, B. M., Kiwango, Y. A., & Bolger, D. T. (2016). *Journal of Mammalogy*, 97(4), 1015–1025. <https://doi.org/10.1093/jmammal/gyw086>

Migratory herds of wildebeests and zebras indirectly affect calf survival of giraffes. Lee, D. E., Kissui, B. M., Kiwango, Y. A., & Bond, M. L. (2016). *Ecology and Evolution*, 6(23), 8402–8411. <https://doi.org/10.1002/ece3.2561>

Serosurvey of *Treponema pallidum* infection among children with skin ulcers in the Tarangire-Manyara ecosystem, northern Tanzania. Lubinza, C. K. C., Lueert, S., Hallmaier-Wacker, L. K., Ngadaya, E., Chuma, I. S., Kazwala, R. R., Mfinanga, S. G. M., Failing, K., Roos, C., & Knauf, S. (2020). *BMC Infectious Diseases*, 20(1), 392. <https://doi.org/10.1186/s12879-020-05105-4>

Estimates of Density and Population Size of African Lions in the Katavi National Park, Tanzania. Massawe, S., Mrosso, H. T., & Kimaro, M. H. (2022). *Open Journal of Ecology*, 12(09), 614–628.
<https://doi.org/10.4236/oje.2022.129035>

Primary production in papyrus (*Cyperus papyrus* L.) of Rubondo Island, Lake Victoria, Tanzania. Mnaya, B., Asaeda, T., Kiwango, Y., & Ayubu, E. (2007). *Wetlands Ecology and Management*, 15(4), 269–275.
<https://doi.org/10.1007/s11273-006-9027-1>

Are Tanzanian National Parks affected by the water crisis? Findings and ecohydrology solutions. Mnaya, B., Elisa, M., Kihwele, E., Kiwango, H.,

Kiwango, Y., Ng'umbi, G., & Wolanski, E. (2021). *Ecohydrology & Hydrobiology*, 21(3), 425–442. <https://doi.org/10.1016/j.ecohyd.2021.04.003>

Papyrus wetlands a lunar-modulated refuge for aquatic fauna. Mnaya, B., Wolanski, E., & Kiwango, Y. (2006). *Wetlands Ecology and Management*, 14(4), 359–363. <https://doi.org/10.1007/s11273-005-5807-2>

The Contribution of Tanzanian National Parks in Controlling the Vectors of Sleeping Sickness. Muse, E. A., Lejora, I., Wakibara, J., Kilewo, M., Chuma, I. S., Kihwele, E., Samwel, D., Mtui, A., Sindato, C., & Malele, I. (2015). *Open Journal of Ecology*, 05(07), 306–314. <https://doi.org/10.4236/oje.2015.57025>

Post-copulatory behavior of olive baboons (Papio anubis) infected by Treponema pallidum. Paciência, F. M. D., Chuma, I. S., Lipende, I. F., Knauf, S., & Zinner, D. (2020). *Animal Behavior and Cognition*. <https://doi.org/10.1101/2020.02.23.961326>

Female post-copulatory behavior in a group of olive baboons (Papio anubis) infected by Treponema pallidum. Paciência, F. M. D., Chuma, I. S., Lipende, I. F., Knauf, S., & Zinner, D. (2022). *PLOS ONE*, 17(1), e0261894. <https://doi.org/10.1371/journal.pone.0261894>

Mating avoidance in female olive baboons (Papio anubis) infected by Treponema pallidum. Paciência, F. M. D., Rushmore, J., Chuma, I. S., Lipende, I. F., Caillaud, D., Knauf, S., & Zinner, D. (2019). *Science Advances*, 5(12), eaaw9724. <https://doi.org/10.1126/sciadv.aaw9724>

Complete mitochondrial genome of an olive baboon (*Papio anubis*) from

Gombe National Park, Tanzania. Roos, C., Chuma, I. S., Collins, D. A.,

Knauf, S., & Zinner, D. (2018). *Mitochondrial DNA Part B*, 3(1), 177–178.

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New mitogenomic lineages in *Papio* baboons and their phylogeographic

implications. Roos, C., Knauf, S., Chuma, I. S., Maille, A., Callou, C., Sabin,

R., Portela Miguez, R., & Zinner, D. (2021). *American Journal of Physical*

Anthropology, 174(3), 407–417. <https://doi.org/10.1002/ajpa.24186>

Prevalence and spectrum of helminths in free-ranging African buffaloes

(*Syncerus caffer*) in wildlife protected areas, Tanzania. Swai, E., Mshanga,

D., Fyumagwa, R., Mpanduji, D., Chuma, I., Kuya, S., Eblate, Z., & Keyyu, J.

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Inverted intergeneric introgression between critically endangered kipunjis and

yellow baboons in two disjunct populations. Zinner, D., Chuma, I. S.,

Knauf, S., & Roos, C. (2018). *Biology Letters*, 14(1), 20170729.

<https://doi.org/10.1098/rsbl.2017.0729>

Mito-phylogenetic relationship of the new subspecies of gentle monkey

<i>*Cercopithecus mitis manyaraensis*. Zinner, D., Knauf, S., Chuma,

I. S., Butynski, T. M., De Jong, Y. A., Keyyu, J. D., Kaitila, R., & Roos, C.

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