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Lake Tseny: the last refuge of the Pinstripe damba (*Paretroplus menarambo*)

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***Pinstripe damba*: Madagasikara Voakajy 2018**

Considered as Extinct in the Wild in 2004 (Loiselle et al. 2004), the pinstripe damba (*Paretroplus menarambo*) was rediscovered from Lake Tseny (Loiselle, 2008, Andriafidison

et al., 2011) where it is now endemic. Lake Tseny is situated within Tsaratanana I municipality, Port-Bergé district, Sofia Region. The freshwater lake is on 641 hectares in the western ecoregion of Madagascar. It was listed as a Key Biodiversity Area in 2018, with other endemic fish as well (Máiz-Tomé et al., 2018). The lake is surrounded by aquatic vegetation dominated by phragmites. Its upland is mostly degraded into agricultural land, and habitat loss along with invasive exotics have compounded the problem of overfishing.

Since 2012, team Madagasikara Voakajy has collaborated with national and international partners for saving the biodiversity of Lake Tseny with the local communities, mostly fishermen. The project activities include: (i) community support, (ii) scientific research and (iii) environmental education.

- (i) Community support: Five cooperatives of fishermen around the lake with 500 people from 10 villages were trained on fish stock management and fishing regulation. In addition, a boat to ferry local communities across the lake, net with prescribed sized mesh was donated to each cooperative. At the end of 2020, we conducted rapid assessment of each cooperative along with the regional authority of fishery from Port-Bérgé. As a result, cooperatives received fishing cards for their members, and one new cooperative was created from Ambario village as well.
- (ii) Scientific research: Since 2012, pinstripe damba and freshwater fish diversity surveys at lake Tseny are conducted. The lake is home to threatened freshwater species of fish (*Arius frenatus*, *Paretroplus lamenabe*, *Sauvagella robusta*, *Paretropus kinieri*), turtle (The Madagascar big-headed turtle (*Erymnochelys madagascariensis*), and birds (Madagascar pond-heron (*Ardeola idea*). Funded by Tany meva, and in collaboration with APPA (Association des Paysans Pisciculteurs d'Andapa), captive breeding of the Pinstripe damba in the breeding centre in Andapa was accomplished. From 15 genitors in 2015, 250 fish from three new generations were raised.
- (iii) Environmental education: A public awareness campaign for the fishing community is held every year in the villages. In these events, the prevailing regulations and their benefits to biodiversity and people livelihood are discussed in detail. In addition, environmental awareness for primary school children is conducted.



Meeting with cooperatives, copyright Madagascar Voakajy 2020

From next year, the drafting of a management plan for the lake with the participation of stakeholders, and a trial to reintroduce fish from APPA breeding centre to Lake Tseny will commence as per the scientific and social aspects thereof.

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References

Andriafidison, D., Jenkins, R.K.B., Loiselle, P.V., McCaskie, T., Rakotoarivelo, A.A., Rahalambomanana, J., Ravelomanana, T., Raminosoa, N. and Saunder, A. 2011. Preliminary fish survey of Lac Tseny in north-western Madagascar. *Madagascar Conservation & Development* 6(2): 83-87.

Loiselle, P. & participants of the CBSG/ANGAP CAMP "Faune de Madagascar" workshop, Mantasoa, Madagascar 2001. 2004. *Paretroplus menarambo*. *The IUCN Red List of Threatened Species* 2004: e.T44492A10901061. Downloaded on 23 August 2021

Loiselle, P. 2008. *Paretroplus menarambo*. *The IUCN Red List of Threatened Species* 2008: e.T44492A10900904.

<https://dx.doi.org/10.2305/IUCN.UK.2008.RLTS.T44492A10900904.en>. Downloaded on 23 August 2021.

Máiz-Tomé, L., Sayer, C. and Darwall, W. (eds) (2018). The status and distribution of freshwater biodiversity in Madagascar and the Indian Ocean islands hotspot. Gland, Switzerland: IUCN. viii+128pp.

Ravelomanana, T. 2016. *Paretroplus menarambo*. *The IUCN Red List of Threatened Species* 2016:e.T44492A58307800.<https://dx.doi.org/10.2305/IUCN.UK.20163.RLTS.T44492A58307800.en>Downloaded on 23 August 2021.