

SITE DESCRIPTION OF LAC DZIANI BOUNDOUNI, COMORES, 1KM001

Translation of official information

Lac Dziani Boundouni is a crater lake, with for the Comores unusually soft water. It is situated in the south-east part of Mohéli Island in the Djando region.

1. Boundaries

West: Iconi Village (Hamavouna)
North: the Massif and the Boundouni Cone
East: Itsamia Village, the main town in the region. Itsamia Chissioua M'chaco is mainly inhabited by marine waterfowl. It is a rocky, steep islet without vegetation, that is protected by its own natural inaccessibility.

2. Area: 30 ha.

3. Management organisation: The Direction Générale de l'Environnement de la République Fédérale Islamique des Comores is locally represented through regional services.

4. List of Fauna

There are no large animal species present, but in contrast the lake supports a rich and varied bird population as the list below shows. Species inventories were drawn up by the missions of Louette, and more recently by Ledant (1993) and Bousquet-Ledant (1994).

Species	Date of count		
	10/08/93	07/09/93	15/07/94
Little Grebe <i>Tachybaptus ruficollis</i>	455	446	380
Malagasay Pond Heron <i>Ardeola idea</i>		1	1
Green-backed Heron <i>Butorides striatus</i>	-	1	-
Cattle Egret <i>Bubulcus Ibis</i>	2	1	-
Great White Egret <i>Egretta alba</i>	2	2	2
Grey Heron <i>Ardea cinerea</i>	1	2	1
Moorhen <i>Gallinula chloropus</i>	4	10	12
Greenshank <i>Tringa nebularia</i>	1	1	2
Common Sandpiper <i>Actitis hypoleucos</i>	1	2	1
unidentified Calidris sandpipers <i>Calidris</i> spp.	-	6	-

5. Reason for Protection

There is a double scientific interest for protection of Lake Dziani Boundouni:

a. There is a large variety of waterfowl. The little grebes are predominantly numerous. The number of little grebes at the lake represents more than 1% of the biogeographical population of this species. According to Bousquet and Ledant, the effectiveness and the mystery of the location of their reproduction might be explained by the existence of a migratory movement that comes from Africa or Madagascar.

b. The remarkable limnological characteristics of the site specify the need for explanation of the original phenomenons of local beliefs. A monster lived at the bottom of the lake, periodically provoking some upheaval. This theory that, according to V. Tilot "could be caused by rises in water level due to percolation of water with gas and ore that is produced in the lake. This also created a kind of hills comparable to abyssal hydrothermal stacks associate with volcanic phenomenons.

This particular environment deserves to be protected and represents a threat in case of forest fire, because it could contain flammable products. It will also be interesting to explore the lake in the most detailed way, in order to check if it is an old crater lake, and to check what the relationships to life in the oceans are. The fauna that lives in these extreme conditions could be of great scientific interest.

6. References

- Bousquet, B. and Ledant, J.P. 1994. Conservation de la biodiversité et développement durable sur l'île de Mohéli (Comores). SAT1-COI/94/02. FAO, 93 p.

- Ledant, J.P. 1993. Rapport de mission du consultant en conservation des écosystèmes forestiers. Projet FAO/PNUD, TCP/COI/25541 (T) Réserve marine et côtière de Nioumachoua. FAO, 77 p.
- Louette, M. 1988. Les oiseaux des Comores Ann. Musée Royal de l'Afrique Centrale (Zool.) 255: 1-192.
- Tilot, V. 1994. Etude de l'Environnement Marine et Côtier et des aspects socio-économiques de la pêche autour de l'île de Mohéli. Projet PNUD/UNESCO/UICN-COI/91/006, 142 p.