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Contribution of reptile's diversity at Lake Tana basin, Ethiopia

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Abstract: Thirty-seven species from reptiles (71.1% of the total herpes species recorded from the study area) belonging to 3 orders, 12 families, and 30 genera. Eleven endemic species (29.7%) were recorded, five Ethiopian endemic and six (regionally endemic), distribute in Ethiopia and some records from only one close countries, four species are found only in Ethiopia and Eritrea, one species in Ethiopia and Sudan. Ten species (28.75%) are listing in CITES (appendix II). According to "Lake Tana-Associated Wetlands Red List Categories 2006". One species (0.03%) "The python" has been assigned into the category of Critically Endangered because population of the species has been declined due to habitat fragmentation and loss, the python is critically threatened partly due to habitat loss and persecution by humans, blamed for killing of domestic animals, especially shoats (goats and sheep) and partly due to resentment from cultural taboos. Three species (0, 08%) "The Nile crocodile, Water Snake and Nile Monitor" are assigned into the category of vulnerable.

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1. Introduction

Ethiopia lies in the Horn of Africa, one of the most important hot spot area of biodiversity in the world. It is known by its high value of natural resources, high biodiversity and endemic species and dense forests. Currently, the deforestation rate is estimated between 100,000 and 200,000 ha a year. Owing to this accelerated loss, the biodiversity will be threatened (Sentayehu Tedla and Martha Gebre, 1998).

The logical first step in the conservation of any area is to identify what species are currently present and explore their structure and function in the ecosystem. Signatory countries of the Convention on Biological Diversity (CBD), like Ethiopia, are obligated to monitor biodiversity. A baseline knowledge is also necessary for monitoring and assessing land-use patterns, pollution, global climate change, and the economic value of natural resources. Studies on reptiles in Ethiopia is very scarce expect that of (Largen and Rasmussen, 1993; Largen and Spawls, 2006; Welch, 1982; Spawls *et al.*, 2002, **Mulualem. 1916**).

The present survey is carried out with the objective to get information on the species diversity of reptiles at Lake Tana basin, which can be considered as a first step in the conservation of reptile biodiversity of the area.

2. Material and Methods

Study area:

Study area Lake Tana is located in the highlands of northwestern Ethiopia (Fig. 1). The

average altitude of Lake Tana is approximately 1800 m, and the area of the basin (including water surface area) is 15 096 km². The water surface area is 3000–3600 km² and the maximum water depth is 14 m. Gilgel Abay, Ribb, Gumera, and Megech are the most important rivers feeding into Lake Tana and contribute over 90 % of the total inflow. The zonal vegetation of the Lake Tana basin is dry evergreen Afromontane forest. However, only small patches of remnant forest currently exist due to heavy deforestation. The biodiversity of the Lake Tana basin is rich, and many endemic plant species grow in this catchment. There are large areas of wetlands in this basin, which are the home of many endemic birds.

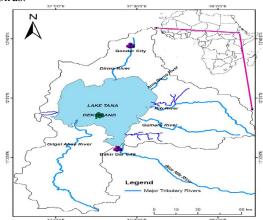


Fig. 1: Map showing the study area,

Survey techniques:

The survey techniques included random quadrat cruise collecting along transects, general-random collecting. All suitable habitats were observed. The information recorded for each specimen included date, locality, approximate time of collection, microhabitat, elevation, age and sex. Photography of animals and biotopes was taken in situ, all records were tied to GPS.

3. Results

CLASS: REPTILIA

ORDER (1): SQUAMATA SUBORDER (1): SAURIA FAMILY: AGAMIDAE

Acanthocercus cyanogaster (Ruppell 1835) Common name: Black-necked Tree Agama

Distribution range: Endemic species of Horn of Africa (Largen and Spawls, 2006).

Distribution records in the study area: 29 km SE of Portuguese Bridge 11°10N °38 10E at 2500 m asl, Gondar 12.6030° N, 37.4521° E at 2,133 m asl, Lalibela 12.0309° N, 39.0476° E and at 2,600 m asl.

Ecological remarks: Localized in Horn of Africa. Diurnal and arboreal, living on trunks of big trees and on rocks. They will open the mouth wide and may bite hard and painfully if they held.

Xenagama zonura (Boulenger 1885)

Common Name: Ethiopian Ridgeback Agama Distribution range: Endemic species of Ethiopia

Distribution records in the study area: 10 km north of Wereta Town (It is the administrative center of Fogera woreda, Bahar Dar -Gondar Road)

11°55'N 37°42'E with an elevation of 1828 meters above sea level.)

Ecological remarks: It was only seen on rocks on road side at noon while driving. Largen and Spawls (2010) mentioned the species as a probable highland endemic in humid and comparatively dry grasslands between 2000 and 2500 m a.s.l.

Agama doriae (Boulenger 1885)

Common Name: Benoue Agama, Doria's Agama, Nigeria Agama

Distribution range: Ghana to Eritrea and Ethiopia.

Distribution records in the study area: Bahr Dar, Portuguese bridge, Grogora (Wawa farm) 12 16 06 28 and 37 17 24 03 E at alt. 1725 m, Dek Isand 11.9156° N, 37.2705° E, and Gondar 12.6030° N, 37.4521° E at 2,133 m asl.

Ecological remarks: Diurnal species, territorial, utilize rocks, trees, and buildings walls as habitat and refuge as well.

FAMILY: CHAMAELEONIDAE

Subfamily: Chamaeleoninae

Genus: Trioceros

Trioceros affinis (Rüppell, 1845) Common name: Dwarf Chamaeleon **Distribution range**: An Ethiopian endemic.

Distribution in the study area: Gondar 12.6030° N.

37.4521° E

Ecological remarks: It is endemic, arboreal and diurnal, lives in woodland and forest.

Chamaeleo africanus (Laurenti 1768)

Common name: African Chamaeleon

Distribution range: Widely and abundantly distributed across Sub-Saharan (including western Nigeria and Cameroon) and north Africa as well as the Horn of Africa.

Distribution records in the study area: Gondar 12.6030° N, 37.4521° E and Blue Nile Gorge and its tributaries. 12° N 37° 15' (37.25°) E Elevation: 1,786 meters

Ecological remarks: Arboreal and diurnal. They feed on insects and other arthropods. They can live in trees but also in quite small bushes and thickets (SPAWLS, 2000).

Chamaeleo gracilis Hallowell 1844

Common name: Slender Chamaeleon, Graceful Chamaeleon

Distribution range: Senegal eastwards to southern Somalia and northern Tanzaia.

Distribution records in the study area: Zegi 11°40'60" N and 37°19'0" E at 1,784 asl

Ecological remarks: Arboreal and diurnal but it will descend to the ground to move from tree to tree. It inhabits moist and dry savanna and found of Acacia

FAMILY: GEKKONIDAE

Hemidactylus laticaudatus Anderson 1910

Common name: Andersson's Leaf-toed Gecko

Distribution range: Known only from Ethiopia and a single record from (Sagneiti) in Eritrea

Distribution records in the study area: Gonder, Tana, and Delgi

Ecological remarks: It is endemic northern Ethiopia and Eritrea. They live buildings foraging for insects around lamps at night

Hemidactylus brookii Gray 1845

Common name: Brook's House Gecko, Spotted House Gecko

Distribution range: West and east Africa, South eastern Asia, Indian Ocean and South America.

Distribution in the study area: Bahar Dar

Ecological remarks: It is common in Bahir Dar inside houses foraging for insects around lamps at

Lygodactylus somalicus Lovreridge 1935. Common name: Somali Dwarf Gecko

Distribution range: Ethiopia, Somalia and Northern

Distribution records in the study area: Shawra village 11 56 0 22 N and 36 52 3 15 E, alt: 2231m

Ecological remarks: Arboreal, active at day time, insect eater. The taxonomy of this species needs more verification. If it is true, this record will be the first record of this species in the area and will add altitudinal range of this species. This species was not known from highlands. It is collected from building wall at a height of 2 m from the ground at altitude of

2231 m. Only one specimen was collected from the study area.

FAMILY: SCINCIDAE

Chalcides ragazzii Boulenger 1890

Common name: Ragazzi's Cylindrical Skink, Ragazzi's Bronze Skink

Distribution range: Southern Algeria and Niger eastwards to Sudan, Eritrea, northern Somalia, Ethiopia and north-western Kenya.

Distribution records in the study area: Gondar, Bahr Dar

Ecological remarks: Day active lizards, feeding mainly on insects. It was seen in Bahir Dar around a small bridge made of wood and woody branches over a small stream at one of Blue Nile outlet just near of Bahir Dar University. There is no clear threat to this species.

Mochlus afer (Peters, 1854)

Common name :Peters' Writhing Skink

Distribution: Somalia Kenva. Tanzania. Mozambique, Sudan, Ethiopia, Uganda, Malawi, N/E/S Democratic Repulic of Congo (Zaire), Central African republic.

Distribution records in the study area: Tera Ogadam 12 08 41 02 N and 37 44 30 02 E and alt 2400

Ecological remarks: It has been seen hiding under a stone at mid-day, running very fast. It is recorded for the first time in this area from a woodland at 2400 m alt.

Panaspis tancredii (Boulenger, 1909)

Common name: Ethiopian Snake-Eyed Skink

Distribution range: Ethiopia.

Distribution records in the study area: Gondar, one specimen has been seen hiding under stone may be belonging to this species

Ecological remarks: Additional research is needed into the taxonomy, distribution range, habitat requirements and threats to this species.

Trachylepis isselii (Peters 1871)

Common name: Variable skink **Distribution range:** Eritrea and Ethiopia.

Distribution records in the study area: Portuguese

bridge, Vicinity of Gondar. Bair Dar

Ecological remarks: It is localized in small geographic area, thus it needs more concern

Trachylepis maculilabris (Grav 1845)

Distribution range: Angola, Benin, Cameroon, Congo, Ethiopia, Gabon, Ghana, Guinea, Liberia, Malawi, Mozambique, Nigeria, Principe, Somalia, Tanzania, Togo, Zaire, Zambia, Zimbabwe

Distribution records in the study area: Bahr Dar, Tera Ogadam 12 08 41 02 N and 37 44 30 02 E and alt 2292

Ecological remarks: It is active daily lizard, feeds on a variety of arthropods. It seems that there is no threat to this species.

Trachylepis auinauetaeniata (Lichenstein1823)

Common name: Five-lined Skink

Distribution: Benin, Burkina Faso, Cameroon, Central African Republic, Chad, Congo Brazzaville, Congo Kinshasa, Djibouti, Egypt, Equatorial Guinea, Eritrea, Ethiopia, Gambia, Ghana, Guinea, Ivory Coast, Kenya, Malawi, Mali, Mozambique, Niger, Nigeria, Senegal, Sierra Leone, Somalia, South Sudan, Sudan, Tanzania, Togo, Uganda.

Distribution records in the study area: Bahr Dar, Portuguese bridge, 29 km SE of Portuguese bridge, W and NW of Lake Tana.

Ecological remarks: It is common and widespread diurnal skink, insectivores. It lives in marginal lands, canal sides, old buildings, ruins, and gardens, urban areas. Prefers rocky areas or equivalent human made substitutes.

It is not threatened.

Trachylepis varia (Peters 1867) Common name: Variable Skink

Distribution range: Known only from southeastern Sudan, Ethiopia and Somalia to northeastern regions of South Africa, thence westwards to Namebia and southern Angola.

Distribution records in the study area: Dlegie

Ecological remarks: It is diurnal species, feeds on Insect and other arthropods, terrestrial sometimes climbs. Tolerant of urbanization. It was collected near urban area close to Tana Lake.

Trachylepis wingatii (Werner 1906) Common name: Wingate's Skink

Distribution range: Known only from southeastern Sudan and western Ethiopia.

Distribution records in the study area: Bahr Dar

Ecological remarks: It is diurnal species, feeds on Insect and other arthropods. This species used to be in open ground although it usually takes cover amongst vegetation. It is very common in Bahir Dar.

FAMILY: VARANIDAE

Varanus niloticus (Linnaeus 1766)

Common name: Nile Monitor

Distribution range: Senegal to Eritrea, Ethiopia and Somalia northwards along the Nile Valley to Egypt and southwards to South Africa.

Distribution records in the study area: It is common in Tana Lakes, wetlands and rivers. It was seen in wetlands around Zigi and south of Tana Lake. It is reported in the swampy habitats within the study area.

Ecological remarks: Associated with rivers, lakes and similar sources of permanent water. According to "Lake Tana Associated Wetlands Red List Categories 2006", ranking it as: Valnerable.

Suborder (2): Ophidia Family: Typhlopidae

Letheobia somalica Boulenger 1895 Common name: Ethiopian Blind snake **Distribution range:** Endemic to Ethiopia

Distribution records in the study area: Vicinity of

Gondar, Lake Tana region, Zegie

Ecological remarks: LARGEN AND RAMUSSEN (1993) mentioned that Rhinotyphlops somalicus appears to be endemic to Ethiopia clarifying that that the suggestion of Welch (1982) that it has been collected from western Somalia is

Afrotyphlops blanfordii (Boulenger 1889)

Common name: Blanford's Blind-snake

Distribution range: Eritrea; Ethiopia

Distribution records in the study area: Bahr Dar, Gondar.

Ecological remarks: It is poorly known species, but it is living underground, nocturnal, and feeds on termites.

Family: BOIDAE

Python sebae (Gmelin 1789)

Common name: Central African Rock Python

Distribution range: Senegal, Gambia, Guinea Bissau, Guinea, Sierra Leone, Liberia, Ivory Coast, Ghana, Togo, Benin, Nigeria, Cameroon, Central African Republic, Mali, Niger, Chad, Sudan, Ethiopia, Eritrea, Uganda, Democratic Republic of the Congo (Zaire), Congo, Gabon (BLANC & FRETEY 2000), Rwanda, Burundi, Tanzania, Angola, Namibia, Somalia

Distribution records in the study area: Bahr Dar. Portuguese bridge, Dek Island, Delgi

Ecological remarks: Usually nocturnal, but will bask and hunt during the day. Mostly terrestrial. but juvenile will climb trees. Often aquatic, and adults may spend a lot of time in water, hunting and feeding there. Hunted for their skins and meat. According to "Lake Tana-Associated Wetlands Red List Categories 2006", ranking it as: Critically endangered because the destruction of its habitat.

FAMILY: COLUBRIDAE

Platyceps florulentus (Geoffroy Saint-Hilaire, 1827)

Common name: Flowered Racer

Distribution range: Egypt ,Sudan, Ethiopia and Eritrea.

Distribution records in the study area: Vicinity of Gondar, W side of Lake Tana (Dungulbar), Grogora.

Ecological remarks: Diurnal and crepuscular, feeding on a variety of small prey items including frogs. It is common and harmless. They inhabit wetland margins, on canal banks, marginal cultivated lands, ruins and old houses, and semi desert.

Crotaphopeltis hotamboeia (Laurenti 1768)

Common name: White-lipped Snake

Distribution range: Africa south of 15° N, excluding Somalia

Distribution records in the study area: Bahr Dar, Vicinity of Gondar.

Ecological remarks: Nocturnal and terrestrial. feeding on a variety of small prey items including frogs.

Dasypeltis scabra (Linnaeus 1758)

Common Name: Common Egg-eating Snake

Distribution range: Africa south of Sahara. Known also from southwest Morocco, Egypt, and southwest Arabia

Distribution records in the study area: Gondar, Zegie.

Ecological remarks: Egg-eaters nocturnal. occupying a variety of habitats, with the exception of true desert and closed-canopy forest (Branch 1988).

Lamprophis fuliginosus (Boie 1827) **Common Name: Brown House Snake**

Distribution range: The African House Snake is one of the most common and widespread snakes in Africa. It is found on the whole continent south of the Sahara Desert, from Ethiopia and Sudan in the east, west to Senegal, and north to Mauritania and Morocco. It is so common in some areas that its absence from an area is more noteworthy than its

Distribution records in the study area: Zegie, Vicinity of Gondar.

Ecological remarks: African House Snakes are highly sexually dimorphic in size; females attain larger adult size than males. Adult male rarely exceeds 3 feet in length, while adult females can exceed 5 feet, it is found around human dwellings. where it feeds on the rodents that usually live there.

Lycophidion capense (Smith 1831)

Common name: Cape Wolf Snake

Distribution range: It is widespread in the eastern half of the continent, from South Africa and Angola to southern Egypt.

Distribution record in the study area: Zegie

Ecological remarks: It is nocturnal rather than sluggish, slow moving snake inhabiting damp situations under stones or among vegetable debris and feeding mostly on smooth scaled lizards of the skink family (Gasperetti, 1988).

Meizodon regularis Fischer 1856

Common name: Regular Bush snake, Eastern **Crowned Snake**

Distribution range: Kenya, Uganda, Ethiopia, Somalia, and Sudan.

Distribution in the study area: Zegie, 40 km S of Gondar.

Ecological remarks: It is poorly known a slim, harmless smooth snake. Fast moving, diurnal and terrestrial, often found in waterside vegetation. Hides under ground cover or in holes at night. This species needs more studies to investigate its natural history.

Natriciteres olivacea (Peters 1854)

Common name: Olive Marsh Snake

Distribution range: East and Western Africa

Distribution records in the study area: Bahr Dar

Ecological remarks: It is a savanna species confined principally to swampy localities, fresh water wetlands, rivers, lake. Its diet consists mainly of various species of frogs, but also includes tiny fish and frog's eggs. According to "Lake

Tana-Associated Wetlands Red List Categories 2006", ranking it as: Vulnerable.

Philothamnus battersbyi Loveridge 1951 Common name: Battersby's Green Snake

Distribution range: Cameroon, Ethiopia, Kenya, Somalia, Sudan, Uganda

Distribution in the study area: Bahr Dar, Gonder, Abbai River near Lake Tana, Delgi

Ecological remarks: Non venomous, arboreal and diurnal. Moist savanna and woodland, often near water sources

Psammophis sibilans (Linnaeus 1758) Common name: African Beauty Snake

Distribution range: Egypt, and western, Central, South-Central, Eastern and North-Eastern Africa, Angola, Congo, Sudan, Eritrea, Ethiopia, Somalia, Uganda, Kenya

Distribution records in the study area: North shore of lake Tana (Serba), Bahar Dar, Little Abbay bridge, near fogera wetland 11 50 57 08 N and 37 38 40 02 Eat alt. 1808 m, Grogora (Wawa farm) 12 16 06 28 and 37 17 24 03 E at alt. 1725 m

Ecological remarks: It is a diurnal species it is very common and wide spread. This species feeds mainly on rodents, lizards and frogs. It is a savanna species, found in wet land margins, nearby semi-desert, riverain habitats and agricultural fields. Appears to be climb trees occasionally

Psammophis punctulatus DUMÉRIL & BIBRON 1854

Speckled Sand Racer, Sand snake

Distribution: Sudan, N. Ethiopia, Eritrea, Djibouti, Uganda, N. Somalia, NE. Kenya, N. Tanzania

Distribution records in the study area: Grogora 12 14 00 05 N and 37 18 03 08 E at alt. 1846 Ecological remarks: Diurnal and very fast species. Pseudoboodon lemniscatus (Dumeril & Bibron

Common name: Ethiopian Mountain Snake Distribution range: Eritrea, Ethiopia

Distribution records in the study area: Lake Tana, Vicinity of Gondar

Ecological remarks: Non venomous, nocturnal, feeds on amphibians and small birds. Its Narrow geographical range gives it priority of conservation.

FAMILY: ELAPIDAE

Dendroaspis polyepis Gunther 1864 Common Name: Black Mamba

Distribution range: Eastern Africa, from southern Ethiopia to southwest Africa.

Distribution records in the study area: NW of Lake Tana

Ecological remarks: Venomous snake. At present not endangered. Increasing human disturbance could cause a threat in the future.

Naja haje (Linnaeus 1758) Common name: Egyptian Cobra Distribution range:

Saudi Arabia, Yemen, Oman, Western Sahara, Morocco, Algeria, Libya, Egypt, Mauritania, Mali, Burkina Faso, Niger, Chad, Sudan, Eritrea, Ethiopia, Somalia, Senegal, Gambia, Guinea-Bissau, Guinea, Sierra Leone, Liberia, Côte d'Ivoire, Ghana, Togo, Benin, Nigeria, Cameroon, Central African Republic, Democratic Republic of the Congo, Uganda, Kenya, Tanzania.

Distribution records in the study area: Dek Island 11 52 53 0 N and 37 14 57 1 at alt. 1799 m. One fresh dead specimen was found on the island, and it was very familiar to the local people

Ecological remarks: An aggressive snake, attacking viscously when cornered. Its characteristic cobra threat stance with the elevated anterior part of the body and dilated hood is very characteristic. The Egyptian Cobra (the common name of *Nja haja*) is very dangerous snake in view of its aggressive nature and its potent venom which is produced in large quantities.

ORDER (2): CROCODYLIA FAMILY: CROCODYLIDAE

Crocodylus niloticus Laurenti, 1768

Common name: Nile Crocodile

Distribution range: Angola, Benin, Botswana , Burkina Faso , Burundi , Cameroon , Central African Republic , Chad , Congo , Côte d'Ivoire, Democratic Republic of the Congo, Egypt, Equatorial Guinea, Eritrea, Ethiopia, Gabon , Gambia , Ghana , Guinea , Guinea-Bissau, Kenya , Liberia, Madagascar, Malawi, Mali, Mauritania, Mozambique, Namibia, Niger, Nigeria, Rwanda, Senegal, Sierra Leone, Somalia, South Africa, Sudan, Swaziland, Togo, Uganda, United Republic of Tanzania, Zambia, Zimbabwe

Distribution records in the study area: Tiss Abay, it was reported to occur along the Blue Nile River

Ecological remarks: It inhabits lakes, rivers, freshwater swamps, brackish water. According to Tana-Associated Wetlands Red Categories 2006", ranking it as: Vulnerable

ORDER (3): TESTUDINES FAMILY: TESTUDINIDAE

Stigmochelys pardalis (Bell, 1828)

Common name: Leopard tortoise,

Distribution range: Eastern and southern Africa, Sudan to Republic of South Africa and Angola, from sea level to 2000 m elevation; absent from the Congo Basin.

Distribution records in the study area: Grogora (Wawa farm) 12 16 06 28 and 37 17 24 03 E at alt. 1725 m

Ecological remarks: It occurs in a variety of habitats from arid and semi-arid diurnal species, although avoids the heat of the midday in hot areas by sheltering in thickets, under shady trees or in holes. They eat a wide range of plants. They are collected for pet trade in many parts of Ethiopia. This activity may threat its population.

FAMILY: Trionychidae

Trionyx triunguis (Forskål, 1775)

Common name: African Softshell Turtle, Nile Softshell Turtle

Distribution range: Africa and the eastern Mediterranean

Distribution records in the study area: Tiss Abay, it was reported to occur along the Blue Nile River

Ecological remarks: Trionyx feeds on a of animal prey (molluscs, insects, variety crustaceans, frogs, fish). It inhabits: freshwater (rivers and tributaries, lakes), but enters brackish and sometimes marine waters. This species is threatened destruction and collection consumption.

4. Discussion

Reptile diversity and conservation status:

Within the study site there are 37 species of reptile of which 11 (29.7%) are endemic. Further details are given in Table 1. The majority of the reptile species found within the area are within order Squamata, just two species from the order Testudines and only one species from the order Crocodylia.

Most of the Squamata present are lizards (18 species) and snakes (16 species). The largest reptile family in the region from lizards is Scincidae (8 species). Colubridae is the largest one from snakes (11 species).

The ratio of endemism varies between families, the largest ratio was found in family Typhlopidae 100% (2 species, 2 endemic), 67% from each family Agamidae and Gekkonidae (3 species, 2 endemic) and one species from the three species recorded in the area belonging to family Chamaeleonidae is endemic representing 33%.

Table 1 provides more detail.

Table (1) Reptilian species composition recorded from Lake Tana Sub- Basin

| Order | Family | Genus | Species | IUCN | Regional status |
|-----------|----------------|-----------------|---------------------|---------------|-----------------------|
| Squamat | Agamidae | Acanthocercus | cyanogaster (RE) | LC | - |
| | | Xenagama | zonura (E) | Not evaluated | - |
| | | Agama | doriae | LC | - |
| | Chamaeleonidae | Chamaeleo | africanus * | LC | - |
| | | | gracillis * | LC | - |
| | | Trioceros | affinis (E) * | LC | - |
| | Gekkonidae | Hemidactylus | brookii | LC | - |
| | | | laticaudatus (E) | Not evaluated | - |
| | | Lygodactylus | somalicus (RE) | Not evaluated | - |
| | Scincidae | Chalcides | ragazzii | Not evaluated | - |
| | | Mochlus | afer | Not evaluated | - |
| | | Panaspis | tancredii (E) | DD | - |
| | | Trachylepis | isselii (RE) | Not evaluated | - |
| | | | maculilabris | LC | - |
| | | | quinquetaeniata | LC | - |
| | | | varia | Not evaluated | - |
| | | | wingatii (RE) | LC | - |
| | Varanidae | Varamıs | niloticus * | LC | Vulnerable |
| | Typhlopidae | Afrotyphlops | blanfordii (RE) | DD | - |
| | * • | Letheobia | somalica (E) | Not evaluated | - |
| | Boidae | Python | sebae * | Not evaluated | Critically endangered |
| | Coluberidae | Platyceps | florulentus | LC | - |
| | | Crotaphopeltis | hotamboeia | LC | - |
| | | Dasypeltis | scabra | LC | |
| | | Lamprophis | fuliginosus | Not evaluated | - |
| | | Lycophidion | Lycophidion capense | Not evaluated | |
| | | Meizodon | regularis | Not evaluated | - |
| | | Natriciteres | olivacea | Not evaluated | Vulnerable |
| | | Philothamnus | battersbyi | Not evaluated | - |
| | | Psammophis | sibilans | LC | - |
| | | | punctulatus | DD | - |
| | | Pseudoboodon | lemniscatus (RE) | LC | - |
| | Elapidae | Dendroaspi | polyepis * | LC | - |
| | | Naja | haje * | LC | - |
| Crocodyl | Crocodylidae | Crocodylus | niloticus * | LC | Vulnerable |
| Testudins | Testudinidae | Stigmochelys | pardalis * | LC | - |
| | Terionychidae | Trionyx | triunguis * | Vulnerable | - |
| 3 Orders | 12 Families | 30 | 37 | | |
| (E) E | THEODY AND END | EMIC (DE) - DEC | TONIAL ENIBERIES | • | • |

(E) = ETHIOPIAN ENDEMIC (RE) = REGIONAL ENDEMIC

LISTED IN CITES, APPENDIX II * **Conservation status**

Assessment of the reptile species from the Lake Tana basin according to global and regional IUCN Red List status is given in Table 1. In summary, one species (Trionyx triunguis) is globally threatened and evaluated as Vulnerable.

A total of 19 species (51.3%) are assessed as Least Concern and 3 species (8.1%) were considered to be Data Deficient, while 14 species (37.8) are not evaluated.

In addition to determining the global threat of species, the regional status was examined for some of the recorded reptile species. Four species (10.8) following species are considered to be at a higher threat regionally according to (Lake Tana-Associated Wetlands Red List Categories 2006) than globally: Varanus niloticus, Natriciteres olivacea Crocodylus niloticus (LC globally, VU regionally); Python sebae which is not evaluated globally assessed as Critically endangered. Conservation of reptiles received the concern of scientists because of the role of reptiles in the ecosystem. The fragility of this taxa because of small range and narrow niche requirements they have makes reptiles susceptible to anthropogenic threat. Herpetofauna across the globe face threats from both known and unknown sources (Gibbons et al. 2000) and they are therefore a group of conservation concern.

Reptilian declines have been attributed to habitat loss, fragmentation and degradation (Mittermeier et al. 1992; Gardner et al. 2007), as well as unsustainable trade (Reed and Gibbons 2003; Carpenter et al. 2004; Schlaepfer et al. 2005), invasive species (Gibbons et al. 2000)., pollution (Hopkins 2000; Shelby and Mendonca 2001; Bergeron et al. 2007), disease (Anderson and May 1978; Dobson and Hudson 1986). Climate change is amongst the many hypotheses postulated to explain these declines (Alford & Richards, 1999; Gibbons et al., 2000; Kiesecker et al., 2001; Carey & Alexander, 2003; Collins & Storfer, 2003; Corn, 2005; Araújo et al., 2006).

The main threats conservation of reptiles in Ethiopia is habitat degradation and fragmentation through urbanization, deforestation, Cheng et al. (1998). Lake Tana area has been subject to large scale habitat change by humans for hundreds of years. The different myths that most societies have towards reptiles are also the major factors affecting their populations. In Ethiopia Many people have the wrong perception of considering all snakes and most reptiles as poisonous and dangerous.

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