

## *Liberiictis kuhni*, Liberian Mongoose

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## Taxonomy

| Kingdom  | Phylum   | Class    | Order     | Family      |
|----------|----------|----------|-----------|-------------|
| Animalia | Chordata | Mammalia | Carnivora | Herpestidae |

**Taxon Name:** *Liberiictis kuhni* Hayman, 1958

### Common Name(s):

- English: Liberian Mongoose
- French: Mangouste du Liberia

### Taxonomic Notes:

Recent phylogenetic studies of Herpestidae demonstrated that *Liberiictis* is closer to other social mongooses (subfamily Mungotinae), and that it is closer to the Banded Mongoose (*Mungos mungo*) than to the cusimanses (genus *Crossarchus*) (Veron *et al.* 2004, in press; Patou *et al.* 2009).

## Assessment Information

**Red List Category & Criteria:** Vulnerable C1 [ver 3.1](#)

**Year Published:** 2016

**Date Assessed:** April 20, 2015

### Justification:

Listed as Vulnerable based on a total population containing c. 5,200 mature individuals (roughly estimated based on a range area of 78,000 km<sup>2</sup>, an average population density highly unlikely to exceed 1 individual/10 km<sup>2</sup>, and a proportion of mature individuals of 67%) and the belief that the species is likely to have undergone a population decline of at least 10% over the last 12 years (assuming a generation length of four years) based on the loss of habitat within its range in the upper Guinea forests, combined with the impacts of hunting.

### Previously Published Red List Assessments

2012 – Vulnerable (VU) – <http://dx.doi.org/10.2305/IUCN.UK.2012.RLTS.T11933A16973819.en>

2008 – Vulnerable (VU)

1996 – Endangered (EN)

1994 – Endangered (E)

1990 – Endangered (E)

1988 – Endangered (E)

## Geographic Range

### Range Description:

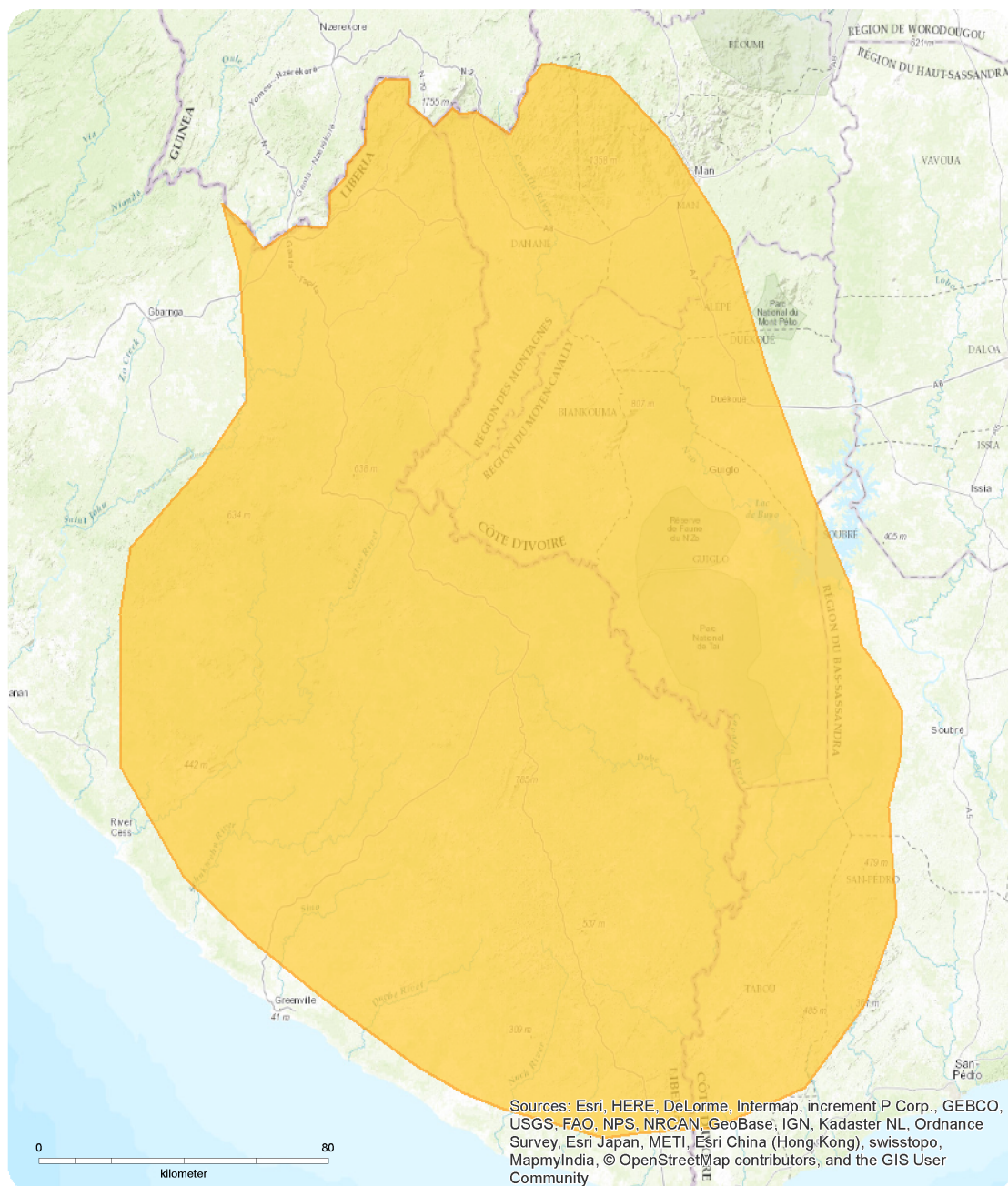
The species is known only from north-eastern Liberia (Goldman and Taylor 1990) and western Côte d'Ivoire. Recent camera-trap evidence confirmed its presence in Sapo N. P., 80 km further south than previously recorded in Liberia (Vogt *et al.* 2012). The species was not detected during a broad reconnaissance and camera-trapping study conducted in the Putu Mountains, southeast Liberia, but local reports suggest that it was historically present and may persist at low density. It is likely to occur in suitable habitat in S. Guinea (Taylor and Dunham 2013).

**Country Occurrence:**

**Native:** Côte d'Ivoire; Liberia

# Distribution Map

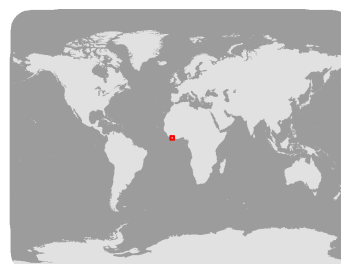
*Liberiictis kuhni*



Range

Extant (resident)

Compiled by:  
IUCN (International Union for  
Conservation of Nature)



The boundaries and names shown and the designations used on this map do not imply any official endorsement, acceptance or opinion by IUCN.



## Population

Reliable information on their population status is not available (the first live individual was taken only as 1989, from Nimbo When), but they are declining in many areas. Populations in Taï N. P. estimated at approximately 1.5 individuals/km<sup>2</sup> (Taylor and Dunham 2013). This species may occur naturally at low density (relative to other mongoose species) in some parts of its range.

**Current Population Trend:** Decreasing

## Habitat and Ecology (see Appendix for additional information)

Occurs in primary and secondary forests, and is found mainly in swamp forest and streambeds with deep sandy soils where earthworms are abundant. Although present in secondary forests, the lack of den sites may restrict the species's distribution (Taylor and Dunham 2013). Behavioural observations and faecal analyses suggest that it is an earthworm specialist, but small vertebrates and insect larvae may also be taken if found while digging for worms. Fallen fruits are also consumed (Taylor and Dunham 2013).

**Systems:** Terrestrial

## Use and Trade

Heavily hunted as bushmeat throughout its range (Gilchrist *et al.* 2009, Greengrass 2011).

## Threats (see Appendix for additional information)

Threats include habitat loss from agriculture, logging and mining, and hunting with dogs, shotguns, and snares (Taylor 1992, Greengrass 2011). They may also be vulnerable to the use of pesticides in forest plantations, as worms are known to accumulate toxins at levels dangerous to mammalian predators (Taylor and Dunham 2013).

## Conservation Actions (see Appendix for additional information)

They are known to be present in Taï and Sapo National Parks.

## Credits

**Assessor(s):** Taylor, M.E., Greengrass, E.J., Dunham, A. & Do Linh San, E.

**Reviewer(s):** Duckworth, J.W. & Hoffmann, M.

**Contributor(s):** Gaubert, P. & Pacifici, M.

## Bibliography

Gilchrist, J.S., Jennings, A.P., Veron, G. and Cavallini, P. 2009. Family Herpestidae (Mongooses). In: D.E. Wilson and R.A. Mittermeier (eds), *Handbook of the Mammals of the World. 1. Carnivores*, pp. 262-328. Lynx Edicions, Barcelona, Spain.

Goldman, C.A. and Taylor, M.E. 1990. *Liberiictis kuhni*. *Mammalian Species* 348: 1-3.

Greengrass, E. 2011. Exploring the dynamics of bushmeat hunting and trade in Sapo National Park. Fauna & Flora International, Cambridge, UK.

Greengrass, E.J. 2013. A survey of small carnivores in the Putu Mountains, southeast Liberia. *Small Carnivore Conservation* 48: 30-36.

IUCN. 2016. The IUCN Red List of Threatened Species. Version 2016-1. Available at: [www.iucnredlist.org](http://www.iucnredlist.org). (Accessed: 30 June 2016).

Patou, M.-L., McLenachan, P.A., Morley, C.G., Couloux, A., Jennings, A.P. and Veron, G. 2009. Molecular phylogeny of the Herpestidae (Mammalia, Carnivora) with a special emphasis on the Asian *Herpestes*. *Molecular Phylogenetics and Evolution* 53: 69-80.

Taylor, M.E. 1992. The Liberian mongoose. *Oryx* 26: 103-106.

Taylor, M.E. and Dunham, A.E. 2013. *Liberiictis kuhni* Liberian Mongoose. In: J. Kingdon and M. Hoffmann (eds), *The Mammals of Africa. V. Carnivores, Pangolins, Equids and Rhinoceroses*, pp. 361-363. Bloomsbury, London, UK.

Veron, G., Colyn, M., Dunham, A., Taylor, P. and Gaubert, P. 2004. Molecular systematics and origin of sociality in mongooses (Herpestidae, Carnivora). *Molecular Phylogenetics and Evolution* 30: 582-598.

Veron, G., Patou, M.-L. and Jennings, A.P. In press. Systematics and evolution of the mongooses (Herpestidae, Carnivora). In: E. Do Linh San, J.J. Sato, J.L. Belant and M.J. Somers (eds), *Small Carnivores: Evolution, Ecology, Behaviour and Conservation*. Wiley-Blackwell, Oxford, UK.

Vogt, T., Forster, B., Wuawah, J.N., Ransom, C., Hodgkinson, C. and Collen, B. 2012. First records of Liberian Mongoose *Liberiictis kuhni* in Sapo National Park, southeast Liberia. *Small Carnivore Conservation* 47: 35-37.

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## External Resources

For [Images and External Links to Additional Information](#), please see the [Red List website](#).

## Appendix

### Habitats

(<http://www.iucnredlist.org/technical-documents/classification-schemes>)

| Habitat   | Season | Suitability | Major Importance? |
|---|--------|-------------|-------------------|
| 1. Forest -> 1.6. Forest - Subtropical/Tropical Moist Lowland | -      | Suitable    | -                 |

### Threats

(<http://www.iucnredlist.org/technical-documents/classification-schemes>)

| Threat  | Timing    | Scope   | Severity                   | Impact Score     |
|---|-----------|---|----------------------------|------------------|
| 2. Agriculture & aquaculture -> 2.1. Annual & perennial non-timber crops -> 2.1.4. Scale Unknown/Unrecorded                 | Ongoing   | -   | -                          | -                |
|   | Stresses: | 1. Ecosystem stresses -> 1.1. Ecosystem conversion<br>1. Ecosystem stresses -> 1.2. Ecosystem degradation |                            |                  |
| 3. Energy production & mining -> 3.2. Mining & quarrying  | Ongoing   | -   | -                          | -                |
|   | Stresses: | 1. Ecosystem stresses -> 1.1. Ecosystem conversion<br>1. Ecosystem stresses -> 1.2. Ecosystem degradation |                            |                  |
| 5. Biological resource use -> 5.1. Hunting & trapping terrestrial animals -> 5.1.1. Intentional use (species is the target) | Ongoing   | Majority (50-90%)   | Slow, significant declines | Medium impact: 6 |
|   | Stresses: | 2. Species Stresses -> 2.1. Species mortality   |                            |                  |
| 5. Biological resource use -> 5.3. Logging & wood harvesting -> 5.3.5. Motivation Unknown/Unrecorded                        | Ongoing   | -   | -                          | -                |
|   | Stresses: | 1. Ecosystem stresses -> 1.2. Ecosystem degradation<br>2. Species Stresses -> 2.2. Species disturbance    |                            |                  |

### Conservation Actions in Place

(<http://www.iucnredlist.org/technical-documents/classification-schemes>)

| Conservation Actions in Place                 |
|---|
| In-Place Land/Water Protection and Management |
| Occur in at least one PA: Yes                 |

### Conservation Actions Needed

(<http://www.iucnredlist.org/technical-documents/classification-schemes>)

|   |
|---|
| <b>Conservation Actions Needed</b>  |
| 1. Land/water protection -> 1.1. Site/area protection                         |
| 2. Land/water management -> 2.1. Site/area management                         |
| 3. Species management -> 3.1. Species management -> 3.1.1. Harvest management |
| 4. Education & awareness -> 4.3. Awareness & communications                   |

## Research Needed

(<http://www.iucnredlist.org/technical-documents/classification-schemes>)

|  |
|--|
| <b>Research Needed</b>                                     |
| 1. Research -> 1.2. Population size, distribution & trends |
| 1. Research -> 1.3. Life history & ecology                 |
| 1. Research -> 1.5. Threats                                |
| 3. Monitoring -> 3.1. Population trends                    |
| 3. Monitoring -> 3.2. Harvest level trends                 |
| 3. Monitoring -> 3.4. Habitat trends                       |

## Additional Data Fields

|   |
|---|
| <b>Population</b>   |
| Number of mature individuals: 5200                                |
| Continuing decline of mature individuals: Yes                     |
| Extreme fluctuations: Unknown                                     |
| Population severely fragmented: No                                |
| Continuing decline in subpopulations: Unknown                     |
| Extreme fluctuations in subpopulations: Unknown                   |
| All individuals in one subpopulation: No                          |
| <b>Habitats and Ecology</b>                                       |
| Continuing decline in area, extent and/or quality of habitat: Yes |
| Generation Length (years): 4                                      |



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