

IUCN 2008: T107451335A107451605

Scope: Global Language: English



# Hirrius scrobiculatus, Ile-Ile Pygmy Devil

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**Citation:** Hochkirch, A. & Skejo, J. 2019. *Hirrius scrobiculatus*. The IUCN Red List of Threatened Species 2019: e.T107451335A107451605. <a href="http://dx.doi.org/10.2305/IUCN.UK.2019-1.RLTS.T107451335A107451605.en">http://dx.doi.org/10.2305/IUCN.UK.2019-1.RLTS.T107451335A107451605.en</a>

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## **Taxonomy**

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Insecta	Orthoptera	Tetrigidae

Taxon Name: Hirrius scrobiculatus Günther, 1937

### Common Name(s):

• English: Ile-Ile Pygmy Devil

### **Taxonomic Source(s):**

Cigliano, M.M., Braun, H., Eades, D.C. and Otte, D. 2016. Orthoptera Species File. Version 5.0/5.0. Available at: http://Orthoptera.SpeciesFile.org.

## **Assessment Information**

Red List Category & Criteria: Vulnerable B1ab(iii,v) ver 3.1

Year Published: 2019

Date Assessed: June 27, 2018

#### Justification:

The Ile-Ile Pygmy Devil (*Hirrius scrobiculatus*) is endemic to Gunung Ile Ile in Sulawesi. Its estimated extent of occurrence (EOO) is *ca* 1,000 km² and a continuing decline in the number of mature individuals is inferred from the ongoing deforestation. Based upon the threat of deforestation, the number of locations is between one and ten, but here estimated to be above five. Therefore, the species is assessed as Vulnerable.

# **Geographic Range**

#### **Range Description:**

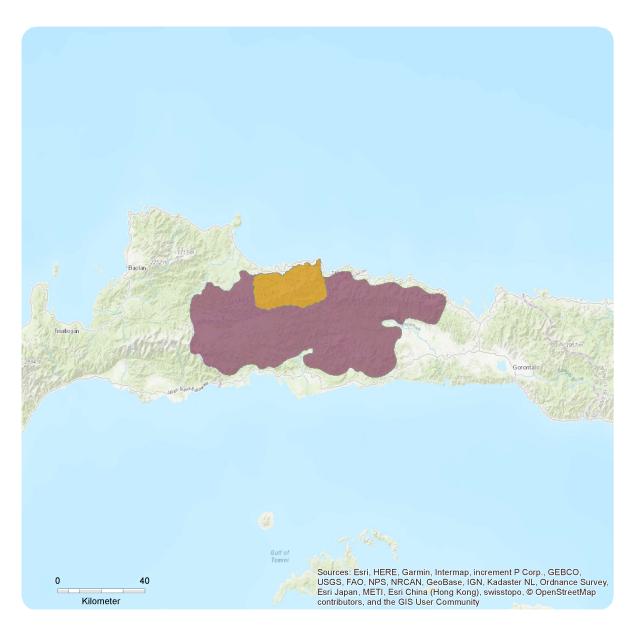
The species is endemic to Sulawesi (Indonesia), where it is only known from the type locality, Gunung Ile (Günther 1937). Its extent of occurrence (EOO) is ca 1,000 km<sup>2</sup>.

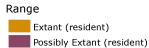
#### **Country Occurrence:**

Native: Indonesia (Sulawesi)

# **Distribution Map**

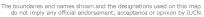
Hirrius scrobiculatus





### Compiled by: SSC Grasshopper Specialist Group







# **Population**

Data on the population size or trend of this species do not exist. A continuing decline in the number of mature individuals is inferred from an observed continuing decline in the extent and quality of habitat.

**Current Population Trend:** Decreasing

# Habitat and Ecology (see Appendix for additional information)

Even though the ecology of this species has not been studied, it is very likely to be associated with montane rainforest habitats (J. Skejo, pers. comm. 2018).

**Systems:** Terrestrial

## **Use and Trade**

The species is not utilized.

## Threats (see Appendix for additional information)

The main threat to this species is deforestation and habitat conversion into farmland, which mainly affects the margins of its range. Between 2006 and 2016 about 2.2% forest has been lost within its extant range (Hansen *et al.* 2013), including areas close to the type locality. Within its possibly extant range deforestation between 2006 and 2010 was 3.6%. Based upon the threat of deforestation, the number of locations is between one and ten (here assumed to be higher than five).

## **Conservation Actions** (see Appendix for additional information)

No conservation action is in place for this species and it does not occur in any protected area. Research into its distribution, habitats, threats and population trend is required. Furthermore, there is a strong need for a better protection of the forests on Gulung Ile Ile to avoid any future declines of the species.

#### **Credits**

**Assessor(s):** Hochkirch, A. & Skejo, J.

**Reviewer(s):** Russell, N.

Contributor(s): Danielczak, A.

# **Bibliography**

Günther, K. 1937. Orthoptera celebica sarasiniana, Fam. Acrididae, Subfam. Acrydinae. *Treubia* 16: 165-195.

IUCN. 2019. The IUCN Red List of Threatened Species. Version 2019-1. Available at: <a href="www.iucnredlist.org">www.iucnredlist.org</a>. (Accessed: 21 March 2019).

## Citation

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## **External Resources**

For <u>Images and External Links to Additional Information</u>, please see the Red List website.

# **Appendix**

# **Habitats**

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

Habitat	Season	Suitability	Major Importance?
1. Forest -> 1.9. Forest - Subtropical/Tropical Moist Montane	Resident	Suitable	Yes

## **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 -> 2.1.2. Small-holder farming	Ongoing	Unknown	Rapid declines	Unknown
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion		
		1. Ecosystem stresses -> 1.2. Ecosystem degradation		
		2. Species Stresses -> 2.1. Species mortality		
5. Biological resource use -> 5.3. Logging & wood harvesting -> 5.3.3. Unintentional effects: (subsistence/small scale) [harvest]	Ongoing	Unknown	Slow, significant declines	Unknown
	Stresses: 1. Ecosystem stresses -> 1.1. Eco		stresses -> 1.1. Ecosyste	em conversion
		1. Ecosystem stresses -> 1.2. Ecosystem degradation		

## **Conservation Actions in Place**

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

Conservation Actions in Place	
In-Place Research, Monitoring and Planning	
Action Recovery plan: No	
Systematic monitoring scheme: No	
In-Place Land/Water Protection and Management	
Occur in at least one PA: No	
Area based regional management plan: No	
Invasive species control or prevention: No	
In-Place Species Management	
Harvest management plan: No	
Successfully reintroduced or introduced beningly: No	
Subject to ex-situ conservation: No	

#### **Conservation Actions in Place**

In-Place Education

Subject to recent education and awareness programmes: No

Included in international legislation: No

Subject to any international management/trade controls: No

## **Conservation Actions Needed**

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

#### **Conservation Actions Needed**

- 1. Land/water protection -> 1.1. Site/area protection
- 1. Land/water protection -> 1.2. Resource & habitat protection

## Research Needed

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

#### **Research Needed**

- 1. Research -> 1.2. Population size, distribution & trends
- 1. Research -> 1.3. Life history & ecology
- 1. Research -> 1.5. Threats

## Additional Data Fields

### Distribution

Estimated extent of occurrence (EOO) (km²): 980

Number of Locations: 1-10,6-10

#### **Population**

Continuing decline of mature individuals: Yes

Extreme fluctuations: Unknown

Population severely fragmented: Unknown

#### **Habitats and Ecology**

Continuing decline in area, extent and/or quality of habitat: Yes

Movement patterns: Not a Migrant

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