

Species Conservation Profiles

# Species conservation profiles of a random sample of world spiders III: Oecobiidae to Salticidae

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## Abstract

#### Background

The IUCN Red List of Threatened Species is the most widely used information source on the extinction risk of species. One of the uses of the Red List is to evaluate and monitor the state of biodiversity and a possible approach for this purpose is the Red List Index (RLI). For many taxa, mainly hyperdiverse groups, it is not possible within available resources to assess all known species. In such cases, a random sample of species might be selected for assessment and the results derived from it extrapolated for the entire group - the

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Sampled Red List Index (SRLI). The current contribution is the third in four papers that will constitute the baseline of a future spider SRLI encompassing 200 species distributed across the world.

#### New information

A sample of 200 species of spiders were randomly selected from the World Spider Catalogue, an updated global database containing all recognized species names for the group. The 200 selected species where divided taxonomically at the family level, and the familes were ordered alphabetically. In this publication, we present the conservation profiles of 58 species belonging to the famillies alphabetically arranged between Oecobiidae and Salticidae, which encompassed Oecobiidae, Oonopidae, Orsolobidae, Oxyopidae, Palpimanidae, Philodromidae, Pholcidae, *Pisauridae*, Prodidomidae and Salticidae.

## Keywords

Araneae, Arthropoda, conservation, endangered species, extinction risk, geographical range, IUCN.

## Introduction

The IUCN Red List of Threatened Species is the most widely used information source on the extinction risk of species (Lamoreux et al. 2003, Rodrigues et al. 2006, Mace et al. 2008 but see Cardoso et al. 2011, Cardoso et al. 2012). It is based on a number of objective criteria, which are relatively easy to apply when adequate information is available (IUCN 2001). The Red List has been used to raise awareness about threatened species, guide conservation efforts and funding, set priorities for protection, measure site irreplaceability and vulnerability and influence environmental policies and legislation (Gardenfors et al. 2001, Rodrigues et al. 2006, Mace et al. 2008, Martín-López et al. 2009).

One of the uses of the Red List is to evaluate and monitor the state of biodiversity and a possible approach for this purpose is the Red List Index (RLI). The RLI helps to develop a better understanding of which taxa, regions or ecosystems are declining or improving their conservation status. It provides policy makers, stakeholders, conservation practitioners and the general public with sound knowledge of biodiversity status and change, and tools with which to make informed decisions. The RLI uses weight scores based on the Red List status of each of the assessed species. These scores range from 0 (Least Concern) to 5 (Extinct/Extinct in the Wild). Summing these scores across all species, relating them to the worst-case scenario - all species extinct, and comparing two or more points in time gives us an indication of how biodiversity is doing. At a global level, the RLI has been calculated for birds (Butchart et al. 2004, Hoffmann et al. 2010), mammals (Hoffmann et al. 2011),

amphibians (Hoffmann et al. 2010), corals (Butchart et al. 2010), and cycads (United Nations 2015).

For many taxa, mainly hyperdiverse groups, it is not possible within available resources to assess all known species. In such cases, a random sample of species might be selected for assessment and the results derived from it extrapolated for the entire group - the Sampled Red List Index (SRLI, Baillie et al. 2008). The SRLI is now being developed for plants (Brummitt et al. 2015) and efforts towards a SRLI of butterflies (Lewis and Senior 2010) and Odonata are also in progress (Clausnitzer et al. 2009).

Spiders currently comprise over 47000 species described at a global level (World Spider Catalog 2018). Of these, only 199 species (0.4%) have beed assessed (www.redlist.org), of which the vast majority are from the Seychelles Islands or belong to the golden-orb weavers, Nephilidae (e.g. Kuntner et al. 2017). To these, a large number will be added in the near future, such as 55 species endemic to the Madeira and Selvagens archipelagos and 25 endemic to the Azores, all in Portugal (Cardoso et al. 2017, Borges et al. submitted). The vast majority of spiders assessed to date are therefore either regionally or taxonomically clustered and do not represent the group as a whole. The current contribution is the second in four papers (Seppälä et al. 2018a, Seppälä et al. 2018b) that will constitute the baseline of a future spider SRLI encompassing 200 species distributed across the world. All the assessments will in the future be included in the IUCN Red List of Threatened Species (www.redlist.org).

## Methods

A sample of 200 species of spiders were randomly selected from the World Spider Catalog (2018), an updated global database containing all recognized species names for the group. The 200 selected species where divided taxonomically to the family level, and those familes were ordered alphabetically. In this publication we present the conservation profiles of 58 species belonging to the famillies alphabetically arranged between Oecobiidae and Salticidae, which encompassed Oecobiidae, Oonopidae, Orsolobidae, Oxyopidae, Palpimanidae, Philodromidae, Pholcidae, *Pisauridae*, Prodidomidae and Salticidae.

Species data were collected from all taxonomic bibliography available at the World Spider Catalog (2018), complemented by data in other publications found through Google Scholar and georeferrenced points made available through the Global Biodiversity Information Facility (www.gbif.org) and also other sources (https://www.biodiversitylibrary.org; https://login.webofknowledge.com; http://srs.britishspiders.org.uk; http://symbiota4.acis.ufl.edu/scan/portal; https://lepus.unine.ch; http://www.tuite.nl/iwg/Araneae/SpiBenelux/?species; https://atlas.arages.de; https://arachnology.cz/rad/araneae-1.html; http://www.ennor.org/iberia). Whenever possible, with each species record we also collected additional information, namely habitat type and spatial error of coordinates.

For all analyses we used the R package red - IUCN redlisting tools (Cardoso 2017). This package performs a number of spatial analyses based on either observed occurrences or

estimated ranges. Functions include calculating Extent of Occurrence (EOO), Area of Occupancy (AOO), mapping species ranges, species distribution modelling using climate and land cover, calculating the Red List Index for groups of species, among others. In this work, the EOO and AOO were calculated in one of two ways:

- for extremely range restricted species for which we assumed to know the full range, these values were classified as observed, the minimum convex polygon encompassing all observations used to calculate the EOO and the 2 km x 2 km cells known to be occupied used to calculate the AOO. When the EOO was smaller than the AOO, it was made equal as per the IUCN guidelines (IUCN Standards and Petitions Subcommittee 2017).

- for widespread species or those for which we did not have confidence to know the full range, we performed species distribution modelling (SDM). This was done based on both climatic (Fick and Hijmans 2017) and landcover (Tuanmu and Jetz 2014) datasets, at an approximately 1x1 km resolution. Before modelling, the world layers were cropped to the region of interest to each species and reduced to four layers through a PCA to avoid overfitting. In addition, latitude and longitude were used as two extra layers to avoid the models to predict presences much beyond the known region following the precautionary principle. We then used the Maxent method (Phillips et al. 2006) implemented in the R package red. Isolated patches outside the original distribution polygon were excluded from maps to avoid overestimation of EOO and AOO values. All final maps and values were checked and validated by our own expert opinion. KMLs derived from these maps were also produced using the red package. The cells (2x2 km) predicted to be occupied were used to calculate the AOO. When the EOO was smaller than the AOO, it was made equal as per the IUCN guidelines (IUCN Standards and Petitions Subcommittee 2017).

To infer on possible changes in range and/or abundance, and for forest species only, we have also consulted the Global Forest Watch portal (World Resources Institute 2014), looking for changes in forest cover during the last 10 years that could have affected the species.

Species sizes are total body size in mm and include the range for both males and females when known.

# **Species Conservation Profiles**

# Oecobius rivula Shear, 1970

#### Species information

#### Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Arachnida	Araneae	Oecobiidae

#### Region for assessment:

- Global

#### Geographic range

Biogeographic realm:

- Neotropical

**Countries:** 

- Mexico

Map of records (Google Earth):

Suppl. material 1

#### Basis of EOO and AOO: Unknown

Basis (narrative)

Unknown EOO or AOO.

Min Elevation/Depth (m): 0

Max Elevation/Depth (m): 0

Range description

This species is known only from Mexico, in southern Sinaloa near Durango border. It is notable that the only record is from 1965 (Shear 1970).

#### Extent of occurrence

EOO (km2): Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

## Area of occupancy

AOO (km2): Unknown Trend: Unknown Causes ceased?: Unknown Causes understood?: Unknown Causes reversible?: Unknown Extreme fluctuations?: Unknown

#### Locations

Number of locations: Unknown

Trend: Unknown

#### Population

Number of individuals: Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

**Population Information (Narrative)** 

No population size estimates exist.

#### **Subpopulations**

Trend: Unknown Extreme fluctuations?: Unknown Severe fragmentation?: Unknown

#### Habitat

System: Terrestrial

Habitat specialist: Unknown

Habitat (narrative)

This species has been recorded from deep wet crevices of rocky areas (Shear 1970).

Trend in extent, area or quality?: Unknown

Habitat importance: Major Importance

Habitats:

- 6. Rocky areas (e.g. inland cliffs, mountain peaks)

#### Ecology

Size: 3 mm

Generation length (yr): 1

Dependency of single sp?: Unknown

Ecology and traits (narrative)

Oecobids usually build mesh-webs that are shaped like stars or multilayered webs that are often found in cracks on rocks or other hard surfaces. These spiders catch their prey by binding silk around it (Jocqué and Dippenaar-Schoeman 2006). The feeding ecology of most *Oecobius* species is poorly understood, however, it has been shown that myrmecophagy is common among this genus and these species may be locally specialized predators (García et al. 2014). For instance, *Oecobius annulipes* is commonly in nests of a large ant species, *Plagiolepis pygmaea*, which constitutes its main prey (Glatz 1967).

#### Threats

Threat type: Past

Threats:

- 12. Other options - Other threat

Justification for threats

No known threats.

## Other

Use type: International

Use and trade:

- 18. Unknown

Ecosystem service type: Very important

Research needed:

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

Justification for research needed

Basic research is needed to know the current distribution and population size and trends, ecology and traits of the species, along with possible threats.

# Oecobius trimaculatus O. Pickard-Cambridge, 1872

#### Species information

#### Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Arachnida	Araneae	Oecobiidae

#### Region for assessment:

- Global

## Geographic range

Biogeographic realm:

- Palearctic

**Countries:** 

- Jordan

Map of records (Google Earth):

Suppl. material 2

#### Basis of EOO and AOO: Unknown

Basis (narrative)

Unknown EOO or AOO.

Min Elevation/Depth (m): 0

Max Elevation/Depth (m): 0

#### Range description

Known only from the unspecified type locality in Jordan, recorded prior to 1872 (Pickard-Cambridge 1872).

#### Extent of occurrence

EOO (km2): Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

#### Area of occupancy

AOO (km2): Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

## Locations

Number of locations: Unknown

Trend: Unknown

## Population

Number of individuals: Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

Justification for extreme fluctuations

Population size and trend are unknown.

## **Subpopulations**

Trend: Unknown Extreme fluctuations?: Unknown Severe fragmentation?: Unknown

## Habitat

System: Terrestrial

Habitat specialist: Unknown

Habitat (narrative)

The single known specimen was found in the "plains of Jordan" (Pickard-Cambridge 1872) which suggests this species occurs in grasslands and shrubs. However, since the exact locality is unspecified, the habitat preference of this particular species remains unknown.

Trend in extent, area or quality?: Unknown

Habitat importance: Major Importance

Habitats:

- 18. Unknown

## Ecology

Size: 1.4 - 2.6 mm Generation length (yr): 1 Dependency of single sp?: Unknown

Ecology and traits (narrative)

Oecobids usually build mesh-webs that are shaped like stars or multilayered webs that are often found from cracks on rocks or other hard surfaces. These spiders catch their prey by binding silk around it (Jocqué and Dippenaar-Schoeman 2006). The feeding ecology of most *Oecobius* species is poorly understood, however, it has been shown that myrmecophagy is common among this genus and these species may be locally specialized predators (García et al. 2014). For instance, *Oecobius annulipes* is commonly found in the nests of a large ant species, *Plagiolepis pygmaea*, which is their main prey (Glatz 1967).

#### Threats

Threat type: Past

Threats:

- 12. Other options - Other threat

Justification for threats

No known threats.

#### Other

Use type: International

Use and trade:

- 18. Unknown

Ecosystem service type: Very important

#### **Research needed:**

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

#### Justification for research needed

Basic research is needed to know the current distribution and population size and trends, ecology and traits of the species, along with possible threats.

# Caecoonops cubitermitis Benoit, 1964

## Species information

#### Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Arachnida	Araneae	Oonopidae

#### Region for assessment:

- Global

## Geographic range

Biogeographic realm:

- Afrotropical

#### **Countries:**

- Congo, The Democratic Republic of the

Map of records (Google Earth):

Suppl. material 3

Basis of EOO and AOO: Unknown

Basis (narrative)

Unknown EOO or AOO.

#### Range description

This species was found in Kimweza town, near Kinshasa in Congo, prior to 1964 (Benoit 1964).

## Extent of occurrence

EOO (km2): Unknown Trend: Unknown Causes ceased?: Unknown Causes understood?: Unknown Causes reversible?: Unknown Extreme fluctuations?: Unknown

## Area of occupancy

AOO (km2): Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

## Locations

Number of locations: Unknown

Trend: Unknown

#### Population

Number of individuals: Unknown Trend: Unknown Causes ceased?: Unknown Causes understood?: Unknown Causes reversible?: Unknown Extreme fluctuations?: Unknown

## Population Information (Narrative)

No population size estimates exist.

## Subpopulations

Trend: Unknown

Extreme fluctuations?: Unknown

Severe fragmentation?: Unknown

## Habitat

System: Terrestrial

Habitat specialist: Unknown

Habitat (narrative)

This species was found in a nest of *Cubitermes exiguus* termites (Benoit 1964). The genus is known only from steppe-type savannas in Africa (Bouillon 1977).

Trend in extent, area or quality?: Unknown

Habitat importance: Major Importance

Habitats:

- 2.1. Savanna - Dry

## Ecology

Size: 2 mm

Generation length (yr): 1

Dependency of single sp?: Unknown

Ecology and traits (narrative)

Oonopids are nocturnal active hunters that live free on the ground. These spiders have been recorded from different kinds of habitats from dry dunelands to forested areas, human constructions, other spiders' webs and termite nests. Since Oonopids hunt at night, they tend to hide under stones or in dry plant debris or leaf litter during the day. The egg-sac is covered with fluffy silk. Little is known about the behaviour of *Caecoonops* species in the

termite nests, however, these spiders have lost their eyes due to adaptation to living in these nests (Dippenaar-Schoeman and Jocqué 1997).

## Threats

Threat type: Past

Threats:

- 12. Other options - Other threat

Justification for threats

No known threats.

## Other

Use type: International

Use and trade:

- 18. Unknown

Ecosystem service type: Very important

#### **Research needed:**

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

Justification for research needed

Basic research is needed to know the current distribution and population size and trends, ecology and traits of the species, along with possible threats.

# **Oonopinus aurantiacus Simon**, 1893

#### Species information

#### Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Arachnida	Araneae	Oonopidae

Region for assessment:

- Global

## Geographic range

Biogeographic realm:

- Neotropical

**Countries:** 

- Venezuela, Bolivarian Republic of

Map of records (Google Earth):

Suppl. material 4

Basis of EOO and AOO: Species Distribution Model

Basis (narrative)

Given the relatively high number of records (Simon 1893a) it was possible to perform species distribution modelling (see methods for details).

Min Elevation/Depth (m): 490

Max Elevation/Depth (m): 2467

#### **Range description**

This species is known from Venezuela and should be present from Caracas to Valencia and Barquisimeto (Simon 1893a). It is notable that the records are over 100 years old.

#### Extent of occurrence

EOO (km2): 12279 Trend: Unknown Causes ceased?: Unknown Causes understood?: Unknown Causes reversible?: Unknown Extreme fluctuations?: Unknown

## Area of occupancy

AOO (km2): 4756 Trend: Unknown Causes ceased?: Unknown Causes understood?: Unknown Causes reversible?: Unknown Extreme fluctuations?: Unknown

## Locations

Number of locations: Unknown

Trend: Unknown

#### Population

Number of individuals: Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

**Population Information (Narrative)** 

No population size estimates exist.

#### Subpopulations

Trend: Unknown Extreme fluctuations?: Unknown Severe fragmentation?: Unknown

## Habitat

System: Terrestrial

Habitat specialist: No

Habitat (narrative)

This species has been recorded in a relatively mountainous region belonging to the ecoregion of desert and xeric shrublands (Olson et al. 2001). Otherwise, its preferred habitat is unknown.

Trend in extent, area or quality?: Unknown

Habitat importance: Major Importance

Habitats:

- 18. Unknown

## Ecology

Size: 2.5 mm

Generation length (yr): 1

Dependency of single sp?: Unknown

Ecology and traits (narrative)

Oonopids are nocturnal active hunters that live free on the ground. These spiders have been recorded from different kinds of habitats from dry dunelands to forested areas, human constructions, other spiders' webs and termite nests. Since Oonopids hunt at night they tend to hide under stones or in dry plant debris or leaf litter during the day. The egg-sac is covered with fluffy silk (Dippenaar-Schoeman and Jocqué 1997).

## Threats

Threat type: Past

Threats:

- 12. Other options - Other threat

Justification for threats

No known threats.

## Conservation

Conservation action type: In Place

**Conservation actions:** 

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

Justification for conservation actions

There are several protected areas within the predicted historical range of this species (UNEP-WCMC and IUCN 2017).

#### Other

Use type: International

Use and trade:

- 18. Unknown

Ecosystem service type: Very important

#### **Research needed:**

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

Justification for research needed

Basic research is needed to know the current distribution and population size and trends, ecology and traits of the species, along with possible threats.

# Oonops tectulus Chickering, 1970

#### Species information

#### Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Arachnida	Araneae	Oonopidae

Region for assessment:

- Global

## Geographic range

Biogeographic realm:

- Neotropical

**Countries:** 

- Trinidad and Tobago

Map of records (Google Earth):

Suppl. material 5

#### Basis of EOO and AOO: Unknown

Basis (narrative)

Unknown EOO or AOO.

Min Elevation/Depth (m): 0

Max Elevation/Depth (m): 0

Range description

Only reported from St. Augustine, on the university campus (GBIF.org 18th May 2018a) in the Northwest corner of the Island of Trinidad. The region sits between the Caroni Swamp National Park and a well preserved mountain range to the North. The island of Trinidad is less than 20 km east of the Gulf of Paria (Venezuela), separated only by the Bocas del Dragon strait, which contains the small Monos island of Chacachacare, which could reduce that distance to little more than 10km. The region where the species was found is therefore not isolated, and although it would not be surprising that the species is highly restricted biogeographically, the connectivity of the terrain alone, does allow suspecting it.

#### Extent of occurrence

EOO (km2): Unknown Trend: Unknown Causes ceased?: Unknown Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

#### Area of occupancy

AOO (km2): Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

#### Locations

Number of locations: Unknown

Trend: Unknown

## Population

Number of individuals: Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

**Population Information (Narrative)** 

No population size estimates exist.

## **Subpopulations**

Trend: Unknown

Extreme fluctuations?: Unknown

Severe fragmentation?: Unknown

## Habitat

System: Terrestrial

Habitat specialist: No

Habitat (narrative)

This species was reported only once from the university campus (GBIF.org 18th May 2018a) in the Northwest corner of the Island of Trinidad. The region sits between the Caroni Swamp National Park and a well preserved mountain range to the North.

Trend in extent, area or quality?: Unknown

Habitat importance: Major Importance

Habitats:

- 18. Unknown

## Ecology

Size: 1.4 mm

Generation length (yr): 1

Dependency of single sp?: Unknown

Ecology and traits (narrative)

Oonopids are nocturnal active hunters that live free on the ground. These spiders have been recorded from different kinds of habitats from dry dunelands to forested areas, human constructions, other spiders' webs and termite nests. Since Oonopids hunt at night they tend to hide under stones or in dry plant debris or leaf litter during the day. The egg-sac is covered with fluffy silk (Dippenaar-Schoeman and Jocqué 1997).

## Threats

Threat type: Past

Threats:

- 12. Other options - Other threat

#### Justification for threats

No known threats.

## Conservation

Conservation action type: In Place

#### Other

Use type: International

Use and trade:

- 18. Unknown

Ecosystem service type: Very important

#### **Research needed:**

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

#### Justification for research needed

Basic research is needed to know the current distribution and population size and trends, ecology and traits of the species, along with possible threats.

# Scaphidysderina napo Platnick & Dupérré, 2011

#### Species information

#### Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Arachnida	Araneae	Oonopidae

#### Region for assessment:

- Global

## Geographic range

Biogeographic realm:

- Neotropical

**Countries:** 

- Ecuador

Map of records (Google Earth):

Suppl. material 6

Basis of EOO and AOO: Unknown

Basis (narrative)

Unknown EOO or AOO.

Min Elevation/Depth (m): 0

Max Elevation/Depth (m): 0

Range description

This species was collected only once in Parque Nacional Napo-Galeras, Napo, Ecuador on 27 November 2009 on the Niarchos Expedition (Platnick and Dupérré 2011).

#### Extent of occurrence

EOO (km2): Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

#### Area of occupancy

AOO (km2): Unknown

#### Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

## Locations

Number of locations: Unknown

Trend: Unknown

## Population

Number of individuals: Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

**Population Information (Narrative)** 

No population size estimates exist.

#### **Subpopulations**

Trend: Unknown

Extreme fluctuations?: Unknown

Severe fragmentation?: Unknown

## Habitat

System: Terrestrial Habitat specialist: Unknown Habitat (narrative)

Found in leaf litter of tropical forest at an elevation of 1005 m in Parque Nacional Napo-Galeras, which is a protected area in Ecuador with an altitudinal range of 600-3723 m (Platnick and Dupérré 2011).

Trend in extent, area or quality?: Unknown

Habitat importance: Major Importance

Habitats:

- 1.6. Forest - Subtropical/Tropical Moist Lowland

## Ecology

Size: 2.7 mm

Generation length (yr): 1

Dependency of single sp?: Unknown

Ecology and traits (narrative)

Oonopids are tiny nocturnal hunters usually found living on the ground in leaf litter or under rocks (Bradley 2013). They have been recorded from many different kinds of habitats ranging from dry dunelands to forested areas, human constructions, other spiders' webs and termite nests. Oonopids are not known to make capture webs and hunt at night tending to hide under stones or in dry plant debris or leaf litter during the day. They make silken molting chambers and their egg sac is covered with fluffy silk (Dippenaar-Schoeman and Jocqué 1997, Bradley 2013). *Scaphidysderina* is a newly described genus with little data on their ecology (Platnick and Dupérré 2011).

## Threats

Threat type: Past

Threats:

- 12. Other options - Other threat

Justification for threats

No known threats

## Conservation

Conservation action type: In Place

**Conservation actions:** 

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

#### Justification for conservation actions

This species was found in Parque Nacional Napo-Galeras, which is a protected area in Ecuador (Platnick and Dupérré 2011).

## Other

Use type: International

Use and trade:

- 18. Unknown

Ecosystem service type: Very important

#### **Research needed:**

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

#### Justification for research needed

This species is known from a female holotype only, males are unknown (Platnick and Dupérré 2011). Basic research is needed to know the current distribution and population size and trends, ecology and traits of the species, along with possible threats.

# Scaphiella tena Platnick & Dupérré, 2010

#### Species information

#### Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Arachnida	Araneae	Oonopidae

Region for assessment:

- Global

## Geographic range

Biogeographic realm:

- Neotropical

## **Countries:**

- Ecuador

Map of records (Google Earth):

Suppl. material 7

#### Basis of EOO and AOO: Unknown

Basis (narrative)

Unknown EOO or AOO.

Min Elevation/Depth (m): 0

Max Elevation/Depth (m): 0

Range description

This species is known only from the type locality in Ecuador, recorded in 1976 (Platnick and Dupérré 2010).

#### Extent of occurrence

EOO (km2): Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

## Area of occupancy

AOO (km2): Unknown Trend: Unknown Causes ceased?: Unknown Causes understood?: Unknown Causes reversible?: Unknown Extreme fluctuations?: Unknown

## Locations

Number of locations: Unknown

Trend: Unknown

## Population

Number of individuals: Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

**Population Information (Narrative)** 

No population size estimates exist.

#### **Subpopulations**

Trend: Unknown Extreme fluctuations?: Unknown Severe fragmentation?: Unknown

## Habitat

System: Terrestrial

Habitat specialist: Unknown

Habitat (narrative)

A single specimen was found from tropical forest litter at an elevation of 600m (Platnick and Dupérré 2010).

Trend in extent, area or quality?: Unknown

Habitat importance: Major Importance

Habitats:

- 1.6. Forest - Subtropical/Tropical Moist Lowland

## Ecology

Size: 1.39 mm

Generation length (yr): 1

Dependency of single sp?: Unknown

Ecology and traits (narrative)

Oonopids are tiny nocturnal hunters usually found living on the ground in leaf litter or under rocks (Bradley 2013). They have been recorded from many different kinds of habitats ranging from dry dunelands to forested areas, human constructions, other spiders' webs and termite nests. Oonopids are not known to make capture webs and hunt at night tending to hide under stones or in dry plant debris or leaf litter during the day. They make silken molting chambers and their egg sac is covered with fluffy silk (Dippenaar-Schoeman and Jocqué 1997).

## Threats

Threat type: Past

Threats:

- 12. Other options - Other threat

Justification for threats

No known threats.

## Other

Use type: International

Use and trade:

- 18. Unknown

Ecosystem service type: Very important

Research needed:

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

#### Justification for research needed

Basic research is needed to know the current distribution and population size and trends, ecology and traits of the species, along with possible threats.

# Tapinesthis inermis (Simon, 1882)

#### Species information

#### Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Arachnida	Araneae	Oonopidae

#### Region for assessment:

- Global

#### Geographic range

Biogeographic realm:

- Palearctic

**Countries:** 

- Macedonia, the former Yugoslav Republic of
- Poland
- Romania
- San Marino
- Albania
- Latvia
- Liechtenstein
- Lithuania
- Luxembourg
- Belgium
- Bosnia and Herzegovina
- Bulgaria
- Croatia
- Czech Republic
- Denmark
- Germany
- Slovakia
- Sweden
- Switzerland
- Andorra
- Austria
- Hungary
- Netherlands
- Montenegro
- Portugal
- France
- Greece
- Spain
- Italy
- Serbia
- Russian Federation
- Ukraine

## Map of records (Google Earth):

Suppl. material 8

Basis of EOO and AOO: Species Distribution Model

Basis (narrative)

Given the relatively high number of records (Kaston 1948, Hansen 1992, Thaler and Steiner 1993, Lazarov et al. 2001, Van Keer et al. 2006, Reiss et al. 2009, Cardoso and Morano 2010, Van Keer et al. 2010, Iglesias et al. 2013, Henrard et al. 2014) it was possible to perform species distribution modeling (see methods for details).

Min Elevation/Depth (m): 0

Max Elevation/Depth (m): 3147

#### **Range description**

This species has been recorded in central and western Europe, and has also been introduced to the USA (Kaston 1948, Hansen 1992, Thaler and Steiner 1993, Lazarov et al. 2001, Van Keer et al. 2006, Reiss et al. 2009, Cardoso and Morano 2010, Van Keer et al. 2010, Iglesias et al. 2013, Henrard et al. 2014).

#### Extent of occurrence

EOO (km2): 4123053

Trend: Stable

#### Justification for trend

Any definite range change over time was not available in the records, but we assume it to be stable, being a widespread species.

Causes ceased?: Yes

Causes understood?: Yes

Causes reversible?: Yes

#### Area of occupancy

AOO (km2): 2397328

Trend: Stable

Justification for trend

Any definite range change over time was not available in the records, but we assume it to be stable, being a widespread species.

Causes ceased?: Yes

Causes understood?: Yes

Causes reversible?: Yes

## Locations

Number of locations: Not applicable

Trend: Stable

## Population

Number of individuals: Unknown

Trend: Stable

Causes ceased?: Yes

Causes understood?: Yes

Causes reversible?: Yes

**Population Information (Narrative)** 

No population size estimates exist. This species is predicted to be common and widespread throughout western and central Europe.

#### **Subpopulations**

Number of subpopulations: Unknown

Trend: Stable

#### Habitat

System: Terrestrial

Habitat specialist: Unknown

Habitat (narrative)

This species has been recorded mostly from anthropogenic habitats; e.g. in the city centre, parks, houses and in cellars (Van Keer et al. 2006, Hansen 1992, Kaston 1948). One record has been made from a cave (Reiss et al. 2009).

Trend in extent, area or quality?: Stable

Justification for trend

There are several records for this species and most of them occur within areas of human disturbance. This species seems to be adaptive to strongly modified habitats and are not experiencing any decline.

Habitat importance: Major Importance

Habitats:

- 14.5. Artificial/Terrestrial - Urban Areas

Habitat importance: Suitable

Habitats:

- 7.1. Caves and Subterranean Habitats (non-aquatic) - Caves

## Ecology

Size: 2 - 2.2 mm

Generation length (yr): 1

Dependency of single sp?: No

Ecology and traits (narrative)

Oonopids are nocturnal active hunters that live free on the ground. These spiders have been recorded from different kinds of habitats, from dry dunelands to forested areas, human constructions, webs of other spiders to termite nests. Since Oonopids hunt at night they tend to hide under stones, in dry plant debris or in leaf litter during the day. The egg-sac is covered with fluffy silk (Dippenaar-Schoeman and Jocqué 1997).

#### Threats

Threat type: Past

Threats:

- 12. Other options - Other threat

Justification for threats

No known threats.

## Conservation

Conservation action type: In Place

**Conservation actions:** 

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

Justification for conservation actions

This is a widespread species with no known habitat restrictions and occurs within several protected areas (UNEP-WCMC and IUCN 2017).

## Other

Use type: International

Use and trade:

- 18. Unknown

Ecosystem service type: Very important

#### **Research needed:**

- 3.1. Monitoring Population trends
- 3.4. Monitoring Habitat trends

Justification for research needed

Monitoring is needed to confirm current population and habitat trends.

# Xyccarph myops Brignoli, 1978

## Species information

#### Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Arachnida	Araneae	Oonopidae
Region for assessment:

- Global

## Geographic range

Biogeographic realm:

- Neotropical

#### **Countries:**

- Brazil

Map of records (Google Earth):

Suppl. material 9

#### Basis of EOO and AOO: Unknown

Basis (narrative)

Unknown EOO or AOO.

Min Elevation/Depth (m): 0

Max Elevation/Depth (m): 0

Range description

Known only from three records from the type locality near Manaus in Brazil (Brignoli 1978), last recorded in 1983 (Höfer and Brescovit 1996).

#### Extent of occurrence

EOO (km2): Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

# Area of occupancy

AOO (km2): Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

#### Locations

Number of locations: Unknown

Trend: Unknown

## Population

Number of individuals: Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

**Population Information (Narrative)** 

No population size estimates exist.

#### **Subpopulations**

Trend: Unknown Extreme fluctuations?: Unknown Severe fragmentation?: Unknown

#### Habitat

System: Terrestrial

Habitat specialist: Unknown

Habitat (narrative)

All specimens were recorded in a non-inundated rainforest (Höfer and Brescovit 1996).

Trend in extent, area or quality?: Unknown

Habitat importance: Major Importance

Habitats:

- 1.6. Forest - Subtropical/Tropical Moist Lowland

## Ecology

Size: 1.2 - 1.6 mm

Generation length (yr): 1

Dependency of single sp?: No

Ecology and traits (narrative)

Individuals of this species seem to live deep in the soil or root mat (Höfer and Brescovit 1996). Oonopids are nocturnal active hunters that live free on the ground. These spiders have been recorded from different kinds of habitats from dry dunelands to forested areas, human constructions, other spiders' webs and termite nests. Since Oonopids hunt at night they tend to hide under stones or in dry plant debris or leaf litter during the day. The eggsac is covered with fluffy silk (Dippenaar-Schoeman and Jocqué 1997).

#### Threats

Threat type: Past

Threats:

- 12. Other options - Other threat

Justification for threats

No known threats.

# Conservation

Conservation action type: In Place

**Conservation actions:** 

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

Justification for conservation actions

The type locality is not inside protected areas but the species should occur in the wide range of protected areas next to the known site (UNEP-WCMC and IUCN 2017).

# Other

Use type: International

Use and trade:

- 18. Unknown

Ecosystem service type: Very important

#### **Research needed:**

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

Justification for research needed

Basic research is needed to know the current distribution and population size and trends, ecology and traits of the species, along with possible threats.

# Maoriata magna (Forster, 1956)

## Species information

#### Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Arachnida	Araneae	Orsolobidae

Region for assessment:

- Global

## Geographic range

Biogeographic realm:

- Australasian

**Countries:** 

- New Zealand

Map of records (Google Earth):

Suppl. material 10

Basis of EOO and AOO: Species Distribution Model

**Basis (narrative)** 

Given the relatively high number of records (Forster 1956, Forster and Platnick 1985), it was possible to perform species distribution modelling (see methods for details).

Min Elevation/Depth (m): 0

Max Elevation/Depth (m): 2886

Range description

This species is known from New Zealand only, last recorded in 1984 (Forster 1956, Forster and Platnick 1985).

#### Extent of occurrence

EOO (km2): 34659 Trend: Unknown Causes ceased?: Unknown Causes understood?: Unknown Causes reversible?: Unknown Extreme fluctuations?: Unknown

# Area of occupancy

AOO (km2): 20388

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

## Locations

Number of locations: Unknown

Trend: Unknown

## Population

Number of individuals: Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

**Population Information (Narrative)** 

No population size estimates exist.

#### Subpopulations

Trend: Unknown Extreme fluctuations?: Unknown Severe fragmentation?: Unknown

#### Habitat

System: Terrestrial

Habitat specialist: Unknown

Habitat (narrative)

This species has been recorded from forests, in moss and leafmould (Forster 1956, Forster and Platnick 1985). In addition, the range of this species seems to be mostly within mountain and fjord regions.

Trend in extent, area or quality?: Unknown

Habitat importance: Major Importance

Habitats:

- 1.4. Forest - Temperate

## Ecology

Size: 4.2 mm

Generation length (yr): 1

Dependency of single sp?: Unknown

Ecology and traits (narrative)

Orsolobids are free-living spiders wandering on the ground in low vegetation and among moss and in humus or leaf litter (Dippenaar-Schoeman and Jocqué 1997).

## Threats

Threat type: Past

Threats:

- 12. Other options - Other threat

Justification for threats

No known threats.

# Conservation

Conservation action type: In Place

**Conservation actions:** 

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

Justification for conservation actions

There is a wide protected area, namely Te Wahipounamu world heritage site in southwest New Zealand, reaching across the range of this species (UNEP-WCMC and IUCN 2017).

# Other

Use type: International

Use and trade:

- 18. Unknown

Ecosystem service type: Very important

#### **Research needed:**

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

Justification for research needed

Basic research is needed to confirm the current distribution and population size and trends, ecology and traits of the species, along with possible threats.

# Tasmanoonops hickmani Forster & Platnick, 1985

## Species information

#### Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Arachnida	Araneae	Orsolobidae

Region for assessment:

- Global

## Geographic range

Biogeographic realm:

- Australasian

#### **Countries:**

- Australia

Map of records (Google Earth):

Suppl. material 11

#### Basis of EOO and AOO: Unknown

Basis (narrative)

Unknown EOO or AOO.

Min Elevation/Depth (m): 0

Max Elevation/Depth (m): 0

Range description

This species is known only from the type locality close to Brisbane, in Queensland, Australia, recorded in 1975 (Forster and Platnick 1985).

#### Extent of occurrence

EOO (km2): Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

# Area of occupancy

AOO (km2): Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

#### Locations

Number of locations: Unknown

Trend: Unknown

## Population

Number of individuals: Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

**Population Information (Narrative)** 

No population size estimates exist.

#### **Subpopulations**

Trend: Unknown Extreme fluctuations?: Unknown Severe fragmentation?: Unknown

#### Habitat

System: Terrestrial

Habitat specialist: Unknown

Habitat (narrative)

All specimens were found in litter of rainforest (Forster and Platnick 1985).

Trend in extent, area or quality?: Unknown

Habitat importance: Major Importance

Habitats:

- 1.6. Forest - Subtropical/Tropical Moist Lowland

## Ecology

Size: 4.62 - 5.13 mm

Generation length (yr): 1

Dependency of single sp?: Unknown

Ecology and traits (narrative)

Orsolobids are free-living spiders wandering on the ground in low vegetation and among moss and in humus or leaf litter (Dippenaar-Schoeman and Jocqué 1997).

#### Threats

Threat type: Past

Threats:

- 12. Other options - Other threat

Justification for threats

No known threats.

# Conservation

Conservation action type: In Place

# Other

Use type: International

Use and trade:

- 18. Unknown

Ecosystem service type: Very important

Research needed:

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

Justification for research needed

Basic research is needed to know the current distribution and population size and trends, ecology and traits of the species, along with possible threats.

# Hamataliwa cordata Zhang, Zhu & Song, 2005

## Species information

#### Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Arachnida	Araneae	Oxyopidae

#### Region for assessment:

- Global

## Geographic range

Biogeographic realm:

- Palearctic

**Countries:** 

- China

Map of records (Google Earth):

Suppl. material 12

## Basis of EOO and AOO: Unknown

Basis (narrative)

Unknown EOO or AOO.

Min Elevation/Depth (m): 0

Max Elevation/Depth (m): 0

#### Range description

This species is known only from the type locality near Tianlin, Guangxi, China, recorded in 2002 (Zhang et al. 2005).

#### Extent of occurrence

EOO (km2): Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

#### Area of occupancy

AOO (km2): Unknown Trend: Unknown Causes ceased?: Unknown Causes understood?: Unknown Causes reversible?: Unknown Extreme fluctuations?: Unknown

# Locations

Number of locations: Unknown

Trend: Unknown

## Population

Number of individuals: Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

**Population Information (Narrative)** 

No population size estimates exist.

#### **Subpopulations**

Trend: Unknown

Extreme fluctuations?: Unknown

Severe fragmentation?: Unknown

#### Habitat

System: Terrestrial

Habitat specialist: No

Habitat (narrative)

The type locality is within the tropical and subtropical moist broadleaf forest ecoregion (Olson et al. 2001). Species of the same genus have been observed from tree barks, twigs or shrubs (Zhang et al. 2005).

Trend in extent, area or quality?: Unknown

Habitat importance: Major Importance

Habitats:

- 18. Unknown

## Ecology

Size: 4.95 mm

Generation length (yr): 1

Dependency of single sp?: No

#### Ecology and traits (narrative)

Spiders of the family Oxyopidae are commonly known as lynx spiders for their catlike hunting tactics. Oxyopids have tapered abdomens and characteristic hexagonal eye arrangements with small anterior median eyes. They are either nocturnal or diurnal, have good vision and are agile hunters living mainly on plants where they jump from leaf to leaf catching their prey with spiny legs. These spiders feed mainly on moths and have also been observed feeding on pests in agroecosystems. Female oxyopids guard their egg-sacs which they often attach to a leaf (Dippenaar-Schoeman and Jocqué 1997). *Hamataliwa* species are commonly found on the bark of trees and twigs or on woody shrubs (Zhang et al. 2005).

#### Threats

Threat type: Past

#### Threats:

- 12. Other options - Other threat

Justification for threats

No known threats.

## Other

Use type: International

Use and trade:

- 18. Unknown

Ecosystem service type: Very important

Research needed:

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

## Justification for research needed

Basic research is needed to know the current distribution and population size and trends, ecology and traits of the species, along with possible threats.

# Boagrius pumilus Simon, 1893

# Species information

#### Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Arachnida	Araneae	Palpimanidae

#### Region for assessment:

- Global

## Geographic range

Biogeographic realm:

- Indomalayan

#### **Countries:**

- Singapore
- Malaysia
- Indonesia

#### Map of records (Google Earth):

Suppl. material 13

Basis of EOO and AOO: Unknown

#### Basis (narrative)

Most records from unspecified localities. (Simon 1893b, Li 2002, Norma-Rashid and Li 2009).

Min Elevation/Depth (m): 0

Max Elevation/Depth (m): 0

#### **Range description**

This species is known from Malaysia, Singapore and Indonesia, however with unspecified localities (Simon 1893b, Li 2002, Norma-Rashid and Li 2009). The last record is from 1988 in Singapore (Li 2002), although the majority of records are without dates.

#### Extent of occurrence

EOO (km2): Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

#### Area of occupancy

AOO (km2): Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

#### Locations

Number of locations: Unknown

Trend: Unknown

## Population

Number of individuals: Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

**Population Information (Narrative)** 

No population size estimates exist.

## **Subpopulations**

Trend: Unknown Extreme fluctuations?: Unknown Severe fragmentation?: Unknown

#### Habitat

System: Terrestrial

Habitat specialist: Unknown

Habitat (narrative)

Palpimanids are ground-dwellers and can be found in a wide range of habitats (Dippenaar-Schoeman and Jocqué 1997). However, the predicted range of this species is within tropical and subtropical moist broadleaf forest (Olson et al. 2001). It seems that large areas of their range, especially within the Sumatran and Malaysian regions, are now deforested and cultivated (World Resources Institute 2014).

Trend in extent, area or quality?: Unknown

Habitat importance: Major Importance

Habitats:

- 18. Unknown

## Ecology

Size: 3 mm

Generation length (yr): 1

Dependency of single sp?: No

#### Ecology and traits (narrative)

Spiders of the family Palpimanidae can be found in a wide range of habitats (Dippenaar-Schoeman and Jocqué 1997), but they mostly live on the ground and move slowly, holding their front lengs up while walking. In the daytime they are commonly found hiding under stones in their sac-like retreats and there has been observations of araneophagous behaviour. Apart from this, in general, the ecology and behaviour of this family is largely unknown.

## Threats

Threat type: Ongoing

#### Threats:

- 2.2. Agriculture & aquaculture - Wood & pulp plantations

#### Justification for threats

Between the years 2001-2015 there has been a loss of 4,085,762 ha in the forest area of Singapore and Sumatra (World Resources Institute 2014). Since this species is a ground-dweller, and the family it represents can be found in various habitats from arid regions to densely forested areas, it remains unknown whether deforestation really affects this species.

#### Conservation

Conservation action type: In Place

#### Other

Use type: International

#### Ecosystem service type: Very important

**Research needed:** 

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

#### Justification for research needed

Basic research is needed to know the current distribution and population size and trends, ecology and traits of the species, along with possible threats.

# Philodromus gertschi Schick, 1965

## Species information

#### Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Aranchnida	Araneae	Philodromidae

#### Region for assessment:

- Global

## Geographic range

#### Biogeographic realm:

- Nearctic

**Countries:** 

- United States

Map of records (Google Earth):

Suppl. material 14

Basis of EOO and AOO: Species Distribution Model

Basis (narrative)

Given the relatively high number of records (Schick 1965, Dondale and Redner 1968) it was possible to perform species distribution modelling (see methods for details).

Min Elevation/Depth (m): 0

Max Elevation/Depth (m): 3636

## **Range description**

This species potential historical range spans the west coast of the USA and Mexico (Schick 1965, Dondale and Redner 1968). However, we should note that all records are over 40 years old.

## Extent of occurrence

EOO (km2): 372475

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

## Area of occupancy

AOO (km2): 191780

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

## Locations

Number of locations: Unknown

Trend: Unknown

## Population

Number of individuals: Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

**Population Information (Narrative)** 

No population size estimates exist.

## **Subpopulations**

Trend: Unknown

Extreme fluctuations?: Unknown

Severe fragmentation?: Unknown

#### Habitat

System: Terrestrial

Habitat specialist: Unknown

Habitat (narrative)

All known specimens have been found in coastal sage and oak habitats, yellow pine forests, and from grass in oak forests (Dondale and Redner 1968).

Trend in extent, area or quality?: Unknown

Justification for trend

This species has been observed in different habitat types. yet the last observations are old.

Habitat importance: Major Importance

Habitats:

- 1.4. Forest - Temperate

- 3.8. Shrubland - Mediterranean-type Shrubby Vegetation

#### Ecology

Size: 3.5 - 4.5 mm

Generation length (yr): 1

Dependency of single sp?: No

Ecology and traits (narrative)

Philodromids are agile and free-living, quickly moving hunters that are usually caught on plants or on the soil surface. They can easily hide into rock cracks and crevices due to their flat bodies. *Philodromus* species have been observed to capture their prey by "lying in ambush with legs extended" (Dippenaar-Schoeman and Jocqué 1997). Mature individuals of this particular species were collected from May through July, mainly in June. Immatures were found from January through March and they molted to maturity in the laboratory from February through April. No diapause was observed (Schick 1965).

#### Threats

Threat type: Past

Threats:

- 12. Other options - Other threat

Justification for threats

No known threats.

#### Conservation

Conservation action type: In Place

**Conservation actions:** 

- 1.1. Land/water protection - Site/area protection

#### Justification for conservation actions

At least part of the species range is inside protected areas, for example Ventana and San Rafael wilderness areas in California (UNEP-WCMC and IUCN 2017).

# Other

Use type: International

Use and trade:

- 18. Unknown

Ecosystem service type: Very important

Research needed:

- 3.1. Monitoring Population trends
- 3.4. Monitoring Habitat trends

Justification for research needed

Monitoring is needed to know current population and habitat trends.

# Suemus tibelliformis Simon, 1909

# Species information

#### Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Arachnida	Araneae	Philodromidae

## Taxonomic notes

There are only juveniles known from this species. A dubious taxonomic status may be considered.

Region for assessment:

- Global

# Geographic range

#### Biogeographic realm:

- Indomalayan

#### **Countries:**

- Viet Nam

Map of records (Google Earth):

Suppl. material 15

Basis of EOO and AOO: Unknown

Basis (narrative)

Unknown EOO or AOO.

Min Elevation/Depth (m): 0

Max Elevation/Depth (m): 0

Range description

This species is known only from the type locality in Nghệ An, Viet Nam, recorded prior to 1909 (Simon 1909).

#### Extent of occurrence

EOO (km2): Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

#### Area of occupancy

AOO (km2): Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

## Locations

Number of locations: Unknown

Trend: Unknown

## Population

Number of individuals: Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

Population Information (Narrative)

No population size estimates exist.

#### **Subpopulations**

Trend: Unknown

Extreme fluctuations?: Unknown

Severe fragmentation?: Unknown

#### Habitat

System: Terrestrial

Habitat specialist: Unknown

Habitat (narrative)

The type locality of this species is within the tropical and subtropical moist broadleaf forest ecoregion (Olson et al. 2001). Otherwise habitat preference of this particular species remains unknown.

Trend in extent, area or quality?: Unknown

Habitat importance: Major Importance

Habitats:

- 18. Unknown

## Ecology

Size: 6 - 7 mm

Generation length (yr): 1

Dependency of single sp?: No

Ecology and traits (narrative)

Philodromids are agile and free-living, quickly moving hunters that are usually caught on plants or on the soil surface. They can easily hide into rock cracks and crevices due to their flat bodies (Dippenaar-Schoeman and Jocqué 1997).

#### Threats

Threat type: Past

Threats:

- 12. Other options - Other threat

Justification for threats

No known threats.

## Conservation

Conservation action type: In Place

**Conservation actions:** 

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

#### Justification for conservation actions

This species may occur in a wide conservation area, Western Nghệ, an UNESCO-MAB Biosphere Reserve, near its type locality (World Resources Institute 2014).

## Other

Use type: International

Use and trade:

- 18. Unknown

Ecosystem service type: Very important

## Research needed:

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

## Justification for research needed

The taxonomic status of the species should be confirmed as it is known from only juveniles. If a valid species, basic research is needed to know the current distribution and population size and trends, ecology and traits, along with possible threats.

# Belisana anhuiensis (Xu & Wang, 1984)

# Species information

#### Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Arachnida	Araneae	Pholcidae

#### **Region for assessment:**

- Global

## Geographic range

Biogeographic realm:

- Palearctic

#### **Countries:**

- China

Map of records (Google Earth):

Suppl. material 16

Basis of EOO and AOO: Unknown

Basis (narrative)

Unknown EOO or AOO.

Min Elevation/Depth (m): 0

Max Elevation/Depth (m): 0

Range description

This species is known only from two localities in eastern China (Xu and Wang 1984, Huber 2005b).

#### Extent of occurrence

EOO (km2): Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

#### Area of occupancy

AOO (km2): Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

## Locations

Number of locations: Unknown

Trend: Unknown

## Population

Number of individuals: Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

Population Information (Narrative)

No population size estimates exist.

#### **Subpopulations**

Trend: Unknown

Extreme fluctuations?: Unknown

Severe fragmentation?: Unknown

#### Habitat

System: Terrestrial

Habitat specialist: No

Habitat (narrative)

The species known localities are located in the border of tropical and subtropical moist broadleaf forests and temperate broadleaf and mixed forests (Olson et al. 2001). The precise habitat type is unknown.

Trend in extent, area or quality?: Unknown

Habitat importance: Major Importance

Habitats:

- 18. Unknown

#### Ecology

Size: 1.2 mm

Generation length (yr): 1

Dependency of single sp?: No

Ecology and traits (narrative)

Pholcids build a tangled space web and they do not have an eggsac but the females carry the clump of eggs in their chelicerae instead. When disturbed these spiders vibrate their web rapidly (Dippenaar-Schoeman and Jocqué 1997). Most *Belisana* species have been collected in primary tropical forests, from the leaf litter or under the leaves (Huber 2005b), but are also known to occur in agricultural regions (Song 1987).

#### Threats

Threat type: Past

Threats:

- 12. Other options - Other threat

Justification for threats

No known threats.

#### Other

Use type: International

Use and trade:

- 18. Unknown

Ecosystem service type: Very important

Research needed:

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

## Justification for research needed

Basic research is needed to know the current distribution and population size and trends, ecology and traits of the species, along with possible threats.

# Carapoia fowleri Huber, 2000

# Species information

#### Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Arachnida	Araneae	Pholcidae

#### Region for assessment:

- Global

## Geographic range

Biogeographic realm:

- Neotropical

**Countries:** 

- Guyana
- French Guiana
- Suriname
- Peru
- Brazil
- Venezuela, Bolivarian Republic of

Map of records (Google Earth):

Suppl. material 17

Basis of EOO and AOO: Species Distribution Model

**Basis (narrative)** 

Given the relatively high number of records (Huber 2000, Huber 2005a, GBIF.org 31th July 2017a) it was possible to perform species distribution modelling (see methods for details).

Min Elevation/Depth (m): 0

Max Elevation/Depth (m): 657

#### Range description

This species is relatively well-known (collected multiple times between 1988 and 1991, see GBIF.org 31th July 2017a, Huber 2000, Huber 2005a) in the Amazonas and is predicted to be widespread throughout the northern parts of Brazil and to be present also in Guyana, Suriname, French Guiana and near the Brazilian border in Venezuela and Peru.

#### Extent of occurrence

EOO (km2): 4192490

Trend: Decline (inferred)

Justification for trend

Given the forest loss within the Amazon region (World Resources Institute 2014), and this being a species dependent on forests, we expect the EOO to be declining.

Causes ceased?: No

Causes understood?: Yes

Causes reversible?: No

#### Area of occupancy

AOO (km2): 3646928

Trend: Decline (inferred)

Justification for trend

Given the forest loss within the Amazon region (World Resources Institute 2014), and this being a species dependent on forests, we expect the AOO to be declining.

Causes ceased?: No

Causes understood?: Yes

Causes reversible?: No

Locations

Number of locations: Unknown

Trend: Unknown

## Population

Number of individuals: Unknown

Trend: Decline (inferred)

Justification for trend

Given the forest loss within the Amazon region (World Resources Institute 2014), and this being a species dependent on forests, we expect the population size to be declining.

Basis for decline:

- (c) a decline in area of occupancy, extent of occurrence and/or quality of habitat

Causes ceased?: No

Causes understood?: Yes

Causes reversible?: No

Extreme fluctuations?: Unknown

Population Information (Narrative)

No population size estimates exist. This species seems to be widespread. However, the forest loss is causing decline in the AOO (World Resources Institute 2014) which may cause decline in the population as well.

#### **Subpopulations**

Trend: Decline (inferred)

Justification for trend

Given the forest loss within the Amazon region (World Resources Institute 2014), and this being a species dependent on forests, we expect the number of subpopulations to be declining.

## Habitat

System: Terrestrial

Habitat specialist: No

Habitat (narrative)

Known the Amazonian tropical forest (Huber 2000).

Trend in extent, area or quality?: Decline (inferred)

Justification for trend

The forest loss inside the estimated range has been over 7,000,000 ha between 2001 and 2015 (World Resources Institute 2014).

Habitat importance: Major Importance

Habitats:

- 1.6. Forest - Subtropical/Tropical Moist Lowland

## Ecology

Size: 4 - 4.4 mm

Generation length (yr): 1

Dependency of single sp?: No

Ecology and traits (narrative)

Pholcids build a tangled space web and they do not have an eggsac but the females carry the clump of eggs in their chelicerae instead. When disturbed these spiders vibrate their web rapidly (Dippenaar-Schoeman and Jocqué 1997). Otherwise, the ecology of this particular species is unknown.

## Threats

Threat type: Ongoing

Threats:

- 5.3. Biological resource use - Logging & wood harvesting

#### Justification for threats

The forest loss inside the estimated range has been over 7,000,000 ha between 2001 and 2015 (World Resources Institute 2014).

## Conservation

Conservation action type: In Place

**Conservation actions:** 

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

Conservation action type: Needed

**Conservation actions:** 

- 2.1. Land/water management Site/area management
- 2.3. Land/water management Habitat & natural process restoration

Justification for conservation actions

There are several protected areas within the estimated range of this species (World Resources Institute 2014). Nevertheless, site management and habitat & natural process restoration should be a priority across its range.

#### Other

Use type: International

Use and trade:

- 18. Unknown

Ecosystem service type: Very important

**Research needed:** 

- 3.1. Monitoring Population trends
- 3.4. Monitoring Habitat trends

#### Justification for research needed

Monitoring is needed to confirm the currently known population and habitat trends.
# Modisimus cuadro Huber & Fischer, 2010

### Species information

#### Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Arachnida	Araneae	Pholcidae

#### Region for assessment:

- Global

### Geographic range

#### Biogeographic realm:

- Palearctic

#### **Countries:**

- Dominican Republic

Map of records (Google Earth):

Suppl. material 18

#### Basis of EOO and AOO: Species Distribution Model

#### Basis (narrative)

Given the relatively high number of records (Huber et al. 2010) it was possible to perform species distribution modelling (see methods for details).

Min Elevation/Depth (m): 0

Max Elevation/Depth (m): 595

#### **Range description**

This species is known from several localities in the Dominican Republic (Huber et al. 2010) and the distribution model predicts it to occur throughout the eastern half of the country.

# Extent of occurrence

EOO (km2): 21578

Trend: Stable

Justification for trend

Assumed to be stable given the ability to occupy several habitat types.

Causes ceased?: Yes

Causes understood?: Yes

Causes reversible?: Yes

### Area of occupancy

AOO (km2): 15584

Trend: Stable

Justification for trend

Assumed to be stable given the ability to occupy several habitat types.

Causes ceased?: Yes

Causes understood?: Yes

Causes reversible?: Yes

# Locations

Number of locations: Not applicable

Justification for number of locations

No known threats to the species.

Trend: Stable

# Population

Number of individuals: Unknown

Trend: Stable

Justification for trend

Assumed to be stable given the ability to occupy several habitat types.

Causes ceased?: Yes

Causes understood?: Yes

Causes reversible?: Yes

Extreme fluctuations?: Unknown

**Population Information (Narrative)** 

No population size estimates exist, yet it is assumed to be stable given the ability to occupy several habitat types.

#### **Subpopulations**

Number of subpopulations: Unknown

Trend: Stable

Justification for trend

Assumed to be stable given the ability to occupy several habitat types.

#### Habitat

System: Terrestrial

Habitat specialist: No

Habitat (narrative)

Recorded from various habitat types such as tropical deciduous and mixed forest, degraded forest, forests near rivers and also from caves. Usually found close to the ground, for example under dead leaves or logs and in low vegetation (Huber et al. 2010). Therefore, forest loss may not cause plausible effects to the survival of this species, although we do not know for certainty.

Trend in extent, area or quality?: Stable

Justification for trend

This species seems to adapt to various habitat types and therefore is not experiencing any decline.

### Habitat importance: Major Importance

### Habitats:

- 1.6. Forest Subtropical/Tropical Moist Lowland
- 14.6. Artificial/Terrestrial Subtropical/Tropical Heavily Degraded Former Forest

Habitat importance: Suitable

Habitats:

- 7.1. Caves and Subterranean Habitats (non-aquatic) - Caves

# Ecology

Size: 2.7 mm

Generation length (yr): 1

Dependency of single sp?: No

Ecology and traits (narrative)

Pholcids build a tangled space web and they do not have an eggsac but the females carry the clump of eggs in their chelicerae instead. When disturbed these spiders vibrate their web rapidly (Dippenaar-Schoeman and Jocqué 1997). Otherwise ecology of this particular species is unknown.

# Threats

Threat type: Past

Threats:

- 12. Other options - Other threat

Justification for threats

No known threats.

# Conservation

Conservation action type: In Place

**Conservation actions:** 

- 1.1. Land/water protection - Site/area protection

- 1.2. Land/water protection - Resource & habitat protection

Justification for conservation actions

There is at least one protected area within the predicted range of this species, namely Del Este National Park. (UNEP-WCMC and IUCN 2017)

#### Other

Use type: International

Use and trade:

- 18. Unknown

Ecosystem service type: Very important

#### **Research needed:**

- 3.1. Monitoring Population trends
- 3.4. Monitoring Habitat trends

Justification for research needed

Monitoring of population and habitat trends would allow confirming inferred trends.

# Pholcus jixianensis Zhu & Yu, 1983

### Species information

#### Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Arachnida	Araneae	Pholcidae

#### Region for assessment:

- Global

#### Geographic range

Biogeographic realm:

- Palearctic

**Countries:** 

- China

Map of records (Google Earth):

Suppl. material 19

Basis of EOO and AOO: Unknown

Basis (narrative)

Unknown EOO or AOO.

Min Elevation/Depth (m): 0

Max Elevation/Depth (m): 0

Range description

Known only from the type locality in Ji County, China, recorded in 1982 (Zhu et al. 1983).

# Extent of occurrence

EOO (km2): Unknown Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

# Area of occupancy

AOO (km2): Unknown Trend: Unknown Causes ceased?: Unknown Causes understood?: Unknown Causes reversible?: Unknown

### Extreme fluctuations?: Unknown

### Locations

Number of locations: Unknown

Trend: Unknown

#### Population

Number of individuals: Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

**Population Information (Narrative)** 

No population size estimates exist.

#### **Subpopulations**

Number of subpopulations: Unknown

Trend: Unknown

Extreme fluctuations?: Unknown

Severe fragmentation?: Unknown

### Habitat

System: Terrestrial

Habitat specialist: Unknown

#### Habitat (narrative)

The single known specimen was found under a stone near a river (Zhu et al. 1983). The type locality seems to be covered with farmlands and human constructions. The type

locality belongs to the ecoregion of tropical and subtropical moist broadleaf forests (Olson et al. 2001).

Trend in extent, area or quality?: Unknown

Habitat importance: Major Importance

Habitats:

- 18. Unknown

# Ecology

Size: 5 - 5.3 mm

Generation length (yr): 1

Dependency of single sp?: No

Ecology and traits (narrative)

Pholcids build a tangled space web and they do not have an eggsac but the females carry the clump of eggs in their chelicerae instead. When disturbed these spiders vibrate their web rapidly (Dippenaar-Schoeman and Jocqué 1997). Otherwise, the ecology of this particular species is unknown.

# Threats

Threat type: Past

Threats:

- 12. Other options - Other threat

Justification for threats

No known threats.

# Other

Use type: International

Use and trade:

- 18. Unknown

Ecosystem service type: Very important

Research needed:

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

### Justification for research needed

Basic research is needed to know the current distribution and population size and trends, ecology and traits of the species, along with possible threats.

# Smeringopus natalensis Lawrence, 1947

# Species information

#### Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Arachnida	Araneae	Pholcidae

#### Region for assessment:

- Global

# Geographic range

Biogeographic realm:

- Afrotropical

#### **Countries:**

- Lesotho
- Swaziland
- Mozambique
- South Africa

### Map of records (Google Earth):

Suppl. material 20

Basis of EOO and AOO: Species Distribution Model

Basis (narrative)

Given the relatively high number of records (Lawrence 1967, Huber 2012) it was possible to perform species distribution modelling (see methods for details).

Min Elevation/Depth (m): 0

Max Elevation/Depth (m): 1804

### Range description

This species is widespread in South and Southeast Africa, from southern Mozambique to Cape Town (Lawrence 1967, Huber 2012). It has also been found in Australia (Perth, Western Australia and Sydney, New South Wales) as an invasive species (Huber 2001). The species distribution model predicts the existence of suitable habitat also in Lesotho and Swaziland.

### Extent of occurrence

EOO (km2): 1017872

Trend: Stable

Justification for trend

Any definite range change over time was not available in the records, but we assume it to be stable, being a widespread and even invasive species.

Causes ceased?: Yes

Causes understood?: Yes

Causes reversible?: Yes

### Area of occupancy

AOO (km2): 564196

Trend: Stable

Justification for trend

Any definite range change over time was not available in the records, but we assume it to be stable, being a widespread and even invasive species.

Causes ceased?: Yes

Causes understood?: Yes

Causes reversible?: Yes

### Locations

Number of locations: Not applicable

Justification for number of locations

No known threats to the species.

Trend: Stable

#### Population

Number of individuals: Unknown

Trend: Stable

Justification for trend

This species is predicted to be common and widespread throughout the eastern parts of South Africa and it is notable that it has been reported to be invasive in Australia.

Causes ceased?: Yes

Causes understood?: Yes

Causes reversible?: Yes

**Population Information (Narrative)** 

No population size estimates exist. This species is predicted to be common and widespread throughout the eastern parts of South Africa and it is notable that it has been reported to be invasive in Australia.

#### **Subpopulations**

Number of subpopulations: Unknown

Trend: Stable

#### Habitat

System: Terrestrial

Habitat specialist: No

Habitat (narrative)

*Smeringopus natalensis* is present in a variety of habitats, including highveld, coastal and sand forests, grassveld savanna, dry riverbeds, wastelands and human constructions (Huber 2012).

Trend in extent, area or quality?: Stable

Justification for trend

*Smeringopus natalensis* is present in a variety of habitats, including highveld, coastal and sand forests, grassveld savanna, dry riverbeds, wastelands and human constructions (Huber 2012).

Habitat importance: Major Importance

Habitats:

- 1.5. Forest Subtropical/Tropical Dry
- 2.1. Savanna Dry
- 4.5. Grassland Subtropical/Tropical Dry
- 14.5. Artificial/Terrestrial Urban Areas

# Ecology

Size: 6.3 mm

Generation length (yr): 1

Dependency of single sp?: No

Ecology and traits (narrative)

Pholcid spiders build a tangled space web. These spiders do not have an eggsac but the females carry the clump of eggs in their chelicerae. When disturbed the pholcid spiders vibrate their web rapidly. A relative species from Africa, *S. elongatus*, has been reported to prey mostly on ants and building a space web. *S. pallidus*, on the other hand, has been reported from mammal burrows building a criss-cross web between the webs of *Olorunia ocellata* and *Euprosthenops proximus* (Dippenaar-Schoeman and Jocqué 1997). Otherwise, ecology of this particular species remains unknown.

# Threats

Threat type: Past

#### Threats:

- 12. Other options - Other threat

Justification for threats

No known threats.

#### Conservation

Conservation action type: In Place

**Conservation actions:** 

- 1.1. Land/water protection - Site/area protection

Justification for conservation actions

Several protected areas exist within the species range. No conservation actions seem to be necessary since the species is widespread and adaptable, often even invasive (Huber 2001).

### Other

Use type: International

Use and trade:

- 18. Unknown

Ecosystem service type: Very important

Research needed:

- 3.1. Monitoring Population trends
- 3.4. Monitoring Habitat trends

Justification for research needed

Monitoring is needed to confirm current population and habitat trends.

# Spermophora jocquei Huber, 2003

# Species information

#### Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Arachnida	Araneae	Pholcidae

#### **Region for assessment:**

- Global

### Geographic range

### Biogeographic realm:

### - Afrotropical

### **Countries:**

- Comoros

Map of records (Google Earth):

Suppl. material 21

### Basis of EOO and AOO: Unknown

Basis (narrative)

Unknown EOO or AOO.

Min Elevation/Depth (m): 0

Max Elevation/Depth (m): 0

### Range description

This species was first collected in Mt. Choungui, Mayotte in 1998 (which is a French overseas territory), and described in 2003 (Huber 2003). The fact that it has not been recorded earlier is likely to be an artifact of undersampling, rather than a reflection of the species rarity, as there were no previous arachnological studies in the region. Mayote is the oldest and smallest island (377km<sup>2</sup>) in the Comoros archipelago and is probable, although

not certain, that the species is indeed endemic to that island, as there are many other taxa with similar ranges.

#### Extent of occurrence

EOO (km2): Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

### Area of occupancy

AOO (km2): Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

### Locations

Number of locations: Unknown Trend: Unknown

# Population

Number of individuals: Unknown Trend: Unknown Causes ceased?: Unknown Causes understood?: Unknown Causes reversible?: Unknown Extreme fluctuations?: Unknown

**Population Information (Narrative)** 

No population size estimates exist.

### **Subpopulations**

Trend: Unknown

Extreme fluctuations?: Unknown

Severe fragmentation?: Unknown

### Habitat

System: Terrestrial

Habitat specialist: Unknown

Habitat (narrative)

Found on the ground of tropical forest (Huber 2003). As the species was collected by pitfall trapping, it is possible that it inhabits the leaf litter.

Trend in extent, area or quality?: Unknown

Habitat importance: Major Importance

Habitats:

- 1.6. Forest - Subtropical/Tropical Moist Lowland

# Ecology

Size: 1.9 mm

Generation length (yr): 1

Dependency of single sp?: No

Ecology and traits (narrative)

Pholcids build a tangled space web and they do not have an eggsac but the females carry the clump of eggs in their chelicerae instead. When disturbed these spiders vibrate their web rapidly (Dippenaar-Schoeman and Jocqué 1997).

# Threats

Threat type: Past

Threats:

- 12. Other options - Other threat

Justification for threats

No known threats.

### Conservation

Conservation action type: In Place

**Conservation actions:** 

- 1.1. Land/water protection - Site/area protection

- 1.2. Land/water protection - Resource & habitat protection

Justification for conservation actions

Several forest reserves cover part of the island and the water area around it is protected (Mayotte Marine Nature Park, UNEP-WCMC and IUCN 2017) which indicates the island itself is subject to some degree of protection. Recent assessments of other leaf litter invertebrates of Mayote showed that the local fauna is not doing as poorly as in other oceanic islands, which indicates that this species habitat, although likely to be small, is fairly well preserved.

### Other

Use type: International

Use and trade:

- 18. Unknown

Ecosystem service type: Very important

**Research needed:** 

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

### Justification for research needed

Basic research is needed to know the current distribution and population size and trends, ecology and traits of the species, along with possible threats.

# Charminus camerunensis Thorell, 1899

# Species information

#### Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Arachnida	Araneae	Pisauridae

#### Region for assessment:

- Global

### Geographic range

Biogeographic realm:

- Afrotropical

#### **Countries:**

- Zambia
- Guinea
- Guinea-Bissau
- Mali
- Rwanda
- Senegal
- Sierra Leone
- Liberia
- Benin
- Burkina Faso
- Burundi
- Cameroon
- Central African Republic
- Chad
- Congo
- Congo, The Democratic Republic of the
- Côte d'Ivoire

- Gabon
- Gambia
- Ghana
- Sudan
- Tanzania, United Republic of
- Togo
- Uganda
- Nigeria
- Kenya
- Equatorial Guinea
- Angola

Map of records (Google Earth):

Suppl. material 22

Basis of EOO and AOO: Species Distribution Model

Basis (narrative)

Given the relatively high number of records (Thorell 1899, Blandin 1978, Sierwald 1997) it was possible to perform species distribution modelling (see methods for details).

Min Elevation/Depth (m): 0

Max Elevation/Depth (m): 3995

**Range description** 

Recorded from Gabon, Cameroon, Togo, Ivory Coast and Democratic Republic of the Congo (Thorell 1899, Blandin 1978, Sierwald 1997), the species distribution model predicts it has potentially suitable habitat throughout Central and Western Africa, across most of the tropical forest region.

# Extent of occurrence

EOO (km2): 7029667 Trend: Unknown Causes ceased?: Unknown Causes understood?: Unknown Causes reversible?: Unknown Extreme fluctuations?: Unknown

# Area of occupancy

AOO (km2): 4903768

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

### Locations

Number of locations: Unknown

Justification for number of locations

Unknown.

Trend: Unknown

# Population

Number of individuals: Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

**Population Information (Narrative)** 

No population estimates exist.

# **Subpopulations**

Number of subpopulations: Unknown

Trend: Unknown

### Habitat

System: Terrestrial

Habitat specialist: Unknown

Habitat (narrative)

The predicted range of this species is covered with tropical and subtropical moist broadleaf forests but also with tropical and subtropical grasslands, shrublands and savannas (Olson et al. 2001). *Charminus* species are commonly found in grass fields and open forests (Dippenaar-Schoeman and Jocqué 1997).

Trend in extent, area or quality?: Unknown

Habitat importance: Major Importance

Habitats:

- 18. Unknown

### Ecology

Size: 8 - 10 mm

Generation length (yr): 1

Dependency of single sp?: Unknown

Ecology and traits (narrative)

Spiders of the family *Pisauridae* are called nursery-web spiders and most of the species hunt in the vegetation (Sierwald 1997). Spiders of this genus have been observed to live beneath the leaves where they tend to build a tube-like retreat in a curve of the leaf. Thin sheets of silk are attached to the surronding vegetation which are used to detect vibration from threats. Only juveniles occupy the retreats (Dippenaar-Schoeman and Jocqué 1997).

### Threats

Threat type: Past

Threats:

- 12. Other options - Other threat

Justification for threats

No known threats.

# Other

Use type: International

Use and trade:

- 18. Unknown

Ecosystem service type: Very important

Research needed:

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

### Justification for research needed

Basic research is needed to confirm the current distribution and population size and trends in more detail. More data on ecology and traits of the species, along with possible threats, is also essential to be gathered in order to make a proper assessment.

# Dolomedes mendigoetmopasi Barrion, 1995

# Species information

#### Common names

Filipino fishing spider

#### Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Arachnida	Araneae	Pisauridae

### Region for assessment:

- Global

# Geographic range

Biogeographic realm:

- Australasian

**Countries:** 

- Philippines

Map of records (Google Earth):

Suppl. material 23

Basis of EOO and AOO: Unknown

Basis (narrative)

Unknown EOO or AOO.

Min Elevation/Depth (m): 0

Max Elevation/Depth (m): 0

Range description

This species has only been recorded from the Philippines in 1991 (Barrion Alberto 1995).

### Extent of occurrence

EOO (km2): Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

### Area of occupancy

AOO (km2): Unknown

Trend: Unknown Causes ceased?: Unknown Causes understood?: Unknown Causes reversible?: Unknown Extreme fluctuations?: Unknown

# Locations

Number of locations: Unknown

Trend: Unknown

# Population

Number of individuals: Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

**Population Information (Narrative)** 

No population size estimates exist.

### **Subpopulations**

Trend: Unknown

Extreme fluctuations?: Unknown

Severe fragmentation?: Unknown

### Habitat

System: Terrestrial Habitat specialist: Unknown Habitat (narrative)

This species was found in a small pond (Barrion Alberto 1995). Species of the same genus are often found in fresh waterbodies, for example in lakes and ponds (Carico 1973).

Trend in extent, area or quality?: Unknown

Habitat importance: Major Importance

Habitats:

- 15.2. Artificial/Aquatic - Ponds (below 8ha)

# Ecology

Size: 15 mm

Generation length (yr): 1

Dependency of single sp?: No

Ecology and traits (narrative)

Species of the genus *Dolomedes* often live near water, feeding on aquatic insects. Despite this, catches of small fish, tadpoles, freshwater shrimps and small toads have been reported (Carico 1973, Dippenaar-Schoeman and Jocqué 1997). These spiders have the ability to run on the surface of the water by "skating" to escape from their predators and to hunt. The surface tension of the water traps their prey and allows *Dolomedes* species to hunt whilst taking advantage of their own hydrophobical body features. These spiders also have the ability to dive underwater, either to escape or to catch prey (Carico 1973). Females carry the egg-cocoon in their mandibles. They make a large nursery web for the juveniles, where they live for a while, after being hatched (Emerton 1902). The nursery web is commonly attached high in weeds (Carico 1973).

# Threats

Threat type: Past

Threats:

- 12. Other options - Other threat

Justification for threats

No known threats.

# Conservation

Conservation action type: In Place

# Other

Use type: International

Use and trade:

- 18. Unknown

Ecosystem service type: Very important

Research needed:

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

### Justification for research needed

Basic research is needed to know the current distribution and population size and trends, ecology and traits of the species, along with possible threats.

# Dolomedes tenebrosus Hentz, 1844

# Species information

### Common names

Large fishing spider

#### Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Arachnida	Araneae	Pisauridae

### Region for assessment:

- Global

### Geographic range

Biogeographic realm:

- Nearctic

**Countries:** 

- Mexico
- Canada
- United States

Map of records (Google Earth):

Suppl. material 24

Basis of EOO and AOO: Species Distribution Model

Basis (narrative)

Given the relatively high number of records (Hentz 1844, Montgomery 1902, Emerton 1909, Comstock 1912, Bishop 1924, Kaston 1948, Dondale and Redner 1990, Guarisco 1999, Knysh and Giberson 2012, GBIF.org 31th July 2017c) it was possible to perform species distribution modelling (see methods for details).

Min Elevation/Depth (m): 0

Max Elevation/Depth (m): 2150

#### Range description

This species is widespread in the eastern USA and southeastern Canada (Hentz 1844, Montgomery 1902, Emerton 1909, Comstock 1912, Bishop 1924, Kaston 1948, Dondale and Redner 1990, Guarisco 1999, Knysh and Giberson 2012, GBIF.org 31th July 2017c).

### Extent of occurrence

EOO (km2): 7391781

Trend: Stable

Justification for trend

Being a widespread species we assume the trend to be stable.

Causes ceased?: Yes

Causes understood?: Yes

Causes reversible?: Yes

# Area of occupancy

AOO (km2): 2913904

Trend: Stable

Justification for trend

Being a widespread species we assume the trend to be stable.

Causes ceased?: Yes

Causes understood?: Yes

Causes reversible?: Yes

# Locations

Number of locations: Not applicable

Justification for number of locations

No known threats to the species.

Trend: Stable

# Population

Number of individuals: Unknown

Trend: Stable

Justification for trend

Inferred from the AOO and habitat trends.

Causes ceased?: Yes

Causes understood?: Yes

Causes reversible?: Yes

#### **Population Information (Narrative)**

No population size estimates exist. However, given the high number of records, most of them from the 2010s, this species seems to be relatively widespread.

#### **Subpopulations**

Number of subpopulations: Unknown

Trend: Stable

#### Habitat

System: Terrestrial

Habitat specialist: No

#### Habitat (narrative)

Commonly found in swamp environments and ponds in southern United States coastal plain and lakes and ponds in the glaciated part of the range and easily collected from vertical tree trunks emerging from slow-moving streams and ponds. In the case of slow-moving streams *Dolomedes* species are found for example on cypress trees and vegetation rising from the water. *D. tenebrosus*, in particular, stays near the waterline (Carico 1973). Contrary to other species of the genus, this species is often found in woods under logs and more often in association with houses such as sheds, basements and kitchens (Guarisco 1999, Carico 1973).

Trend in extent, area or quality?: Stable

Justification for trend

Able to live in various habitat types, from swamps to urban areas.

Habitat importance: Major Importance

Habitats:

- 1.4. Forest Temperate
- 5.2. Wetlands (inland) Seasonal/Intermittent/Irregular Rivers/Streams/Creeks
- 5.4. Wetlands (inland) Bogs, Marshes, Swamps, Fens, Peatlands
- 14.5. Artificial/Terrestrial Urban Areas

# Ecology

Size: 15 - 26 mm (females), 7 - 13 mm (males)

Generation length (yr): 1

Dependency of single sp?: No

Ecology and traits (narrative)

*D. tenebrosus* is one of the largest spiders in the USA (Emerton 1902). Species of the genus *Dolomedes* often live near water feeding on aquatic insects and often catching small fish, tadpoles, freshwater shrimps and small toads (Carico 1973, Dippenaar-Schoeman and Jocqué 1997). These spiders have the ability to run on the surface of water by "skating" to escape from the predators and to hunt. *Dolomedes* species use the water surface as the web to catch their prey as the insects get trapped by the surface tension but the spiders themselves have hydrophobical features in their body. These spiders also have the ability to dive underwater, either to escape or to catch the prey (Carico 1973). Females carry the egg-cocoon in their mandibles. They make a large nursery web for the juveniles to live for a while after being hatched (Emerton 1902). The nursery web is commonly attached high in weeds. Adult *D. tenebrosus* females occur throughout the year although suggested to be inactive during the cold months (Kaston 1948). Adult males are commonly found in May, although they can be present also earlier in the south and later in the north. Immatures can be found throughout the year (Carico 1973).

# Threats

Threat type: Past

### Threats:

- 12. Other options - Other threat

Justification for threats

No known threats.

# Conservation

Conservation action type: In Place

**Conservation actions:** 

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

Justification for conservation actions

There are several protected areas within the predicted range of this species (UNEP-WCMC and IUCN 2017).

# Other

Use type: International

Use and trade:

- 18. Unknown

Ecosystem service type: Very important

#### Research needed:

- 3.1. Monitoring Population trends
- 3.4. Monitoring Habitat trends

Justification for research needed

Monitoring is needed to confirm the inferred population and habitat trends.

# Hygropoda longitarsis (Thorell, 1877)

# Species information

#### Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Arachnida	Araneae	Pisauridae

#### **Taxonomic notes**

This species is known only from juveniles, requiring taxonomic revision (Thorell 1877).

### Region for assessment:

- Global

# Geographic range

Biogeographic realm:

- Indomalayan

**Countries:** 

- Viet Nam
- Indonesia

Map of records (Google Earth):

Suppl. material 25

Basis of EOO and AOO: Unknown

Basis (narrative)

Unknown EOO or AOO.

Min Elevation/Depth (m): 0

Max Elevation/Depth (m): 0

Range description

This species was recorded from Vietnam and from the Celebs (Sulawesi) in Indonesia prior to 1877 (Thorell 1877).

# Extent of occurrence

EOO (km2): Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

# Area of occupancy

AOO (km2): Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

### Locations

Number of locations: Unknown

Trend: Unknown

# Population

Number of individuals: Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

Justification for extreme fluctuations

No population size estimates exist.

#### **Subpopulations**

Trend: Unknown

Extreme fluctuations?: Unknown

Severe fragmentation?: Unknown

### Habitat

System: Terrestrial Habitat specialist: Unknown Habitat (narrative)

Vietnam and Sulawesi island in Indonesia belong to the ecoregion of tropical and subtropical moist broadleaf forests (Olson et al. 2001). The exact type localities are unknown, as is the preferred habitat.

Trend in extent, area or quality?: Unknown

Habitat importance: Major Importance

Habitats:

- 18. Unknown

# Ecology

Size: Unknown

Generation length (yr): 1

Dependency of single sp?: Unknown

Ecology and traits (narrative)

Spiders of the family *Pisauridae* are called nursery-web spiders and most of the species hunt in the vegetation (Sierwald 1997). They make a large nursery web for the juveniles to live for a while after being hatched (Emerton 1902). The nursery web is commonly attached high in weeds.

# Threats

Threat type: Past

Threats:

- 12. Other options - Other threat

Justification for threats

No known threats.

# Other

Use type: International

Use and trade:

- 18. Unknown

Ecosystem service type: Very important

**Research needed:** 

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

### Justification for research needed

This species is known only from juveniles, requiring taxonomic revision (Thorell 1877). If a valid species, basic research is needed to know the current distribution and population size and trends, ecology and traits, along with possible threats.

# Prodidomus woodleigh Platnick & Baehr, 2006

# Species information

#### Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Arachnida	Araneae	Prodidomidae

#### Region for assessment:

- Global

### Geographic range

Biogeographic realm:

- Australasian

### **Countries:**

- Australia

Map of records (Google Earth):

Suppl. material 26

Basis of EOO and AOO: Species Distribution Model

Basis (narrative)

Given the relatively high number of records, all in the 1990s (Platnick and Baehr 2006), it was possible to perform species distribution modelling (see methods for details).

Min Elevation/Depth (m): 0

Max Elevation/Depth (m): 510

**Range description** 

This species is distributed in Western Australia and all the records are from the 1990s (Platnick and Baehr 2006).

# Extent of occurrence

EOO (km2): 224823

Trend: Stable

Justification for trend

Despite a lack of monitoring data, given the large range of the species and threats being unknown, we assume the EOO to be stable.

Causes ceased?: Yes

Causes understood?: Yes

Causes reversible?: Yes

# Area of occupancy

AOO (km2): 126612

Trend: Stable

Justification for trend

Despite a lack of monitoring data, given the large range of the species and threats being unknown, we assume the AOO to be stable.

Causes ceased?: Yes
Causes understood?: Yes

Causes reversible?: Yes

#### Locations

Number of locations: Not applicable

Justification for number of locations

No known threats to the species.

Trend: Stable

#### Population

Number of individuals: Unknown

Trend: Stable

Justification for trend

Despite a lack of monitoring data, given the large range of the species and threats being unknown, we assume the population size to be stable.

Causes ceased?: Yes

Causes understood?: Yes

Causes reversible?: Yes

**Population Information (Narrative)** 

No population size estimates exist. Despite a lack of monitoring data, given the large range of the species and threats being unknown, we assume it to be stable.

#### **Subpopulations**

Number of subpopulations: Unknown

Trend: Stable

Justification for trend

Despite a lack of monitoring data, given the large range of the species and threats being unknown, we assume the number of subpopulations to be stable.

# Habitat

System: Terrestrial

Habitat specialist: No

Habitat (narrative)

Specimens were collected from open country (Platnick and Baehr 2006). The habitat within the range of this species is mostly desert and xeric shrublands (Olson et al. 2001).

Trend in extent, area or quality?: Stable

Habitat importance: Major Importance

Habitats:

- 3.8. Shrubland Mediterranean-type Shrubby Vegetation
- 8.2. Desert Temperate

# Ecology

- Size: 1.9 2.85 mm
- Generation length (yr): 1

Dependency of single sp?: No

Ecology and traits (narrative)

The ecology and behaviour of this particular species is largely unknown, although it is notable that specimens of *P. woodleigh* were collected by pitfall traps (Platnick and Baehr 2006). Prodidomids in general are known to be nocturnal ground-dwelling hunters. At daytime they rest and hide under debris or under stones (Dippenaar-Schoeman and Jocqué 1997).

## Threats

Threat type: Past

Threats:

- 12. Other options - Other threat

Justification for threats

No known threats.

## Conservation

Conservation action type: In Place

**Conservation actions:** 

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

Justification for conservation actions

There are few protected areas within the predicted range of this species, for example the large Nature Reserve of Toolonga (UNEP-WCMC and IUCN 2017).

#### Other

Use type: International

Ecosystem service type: Very important

Research needed:

- 3.1. Monitoring Population trends
- 3.4. Monitoring Habitat trends

Justification for research needed

Monitoring is needed to confirm inferred population and habitat trends.

# Theuma aprica Simon, 1893

## Species information

#### Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Arachnida	Araneae	Prodidomidae

Region for assessment:

- Global

# Geographic range

Biogeographic realm:

- Afrotropical

## **Countries:**

- South Africa

Map of records (Google Earth):

Suppl. material 27

#### Basis of EOO and AOO: Unknown

Basis (narrative)

Unknown EOO or AOO.

Min Elevation/Depth (m): 0

Max Elevation/Depth (m): 0

Range description

Known only from an unspecified type locality in South Africa, collected prior to 1893 (Simon 1893c).

## Extent of occurrence

EOO (km2): Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

### Area of occupancy

AOO (km2): Unknown Trend: Unknown Causes ceased?: Unknown Causes understood?: Unknown Causes reversible?: Unknown Extreme fluctuations?: Unknown

#### Locations

Number of locations: Unknown

Trend: Unknown

### Population

Number of individuals: Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

**Population Information (Narrative)** 

No population size estimates exist.

#### Subpopulations

Number of subpopulations: Unknown Trend: Unknown Extreme fluctuations?: Unknown Severe fragmentation?: Unknown

# Habitat

System: Terrestrial

Habitat specialist: Unknown

Habitat (narrative)

The preferred habitat is unknown.

Trend in extent, area or quality?: Unknown

Habitat importance: Major Importance

Habitats:

- 18. Unknown

# Ecology

Size: 5.8 mm

Generation length (yr): 1

Dependency of single sp?: No

Ecology and traits (narrative)

The ecology and behaviour of this particular species is largely unknown. Prodidomids in general are known to be nocturnal ground-dwelling hunters. At daytime they rest and hide under debris or under stones (Dippenaar-Schoeman and Jocqué 1997).

## Threats

Threat type: Past

Threats:

- 12. Other options - Other threat

Justification for threats

No known threats.

# Other

Use type: International

Use and trade:

- 18. Unknown

Ecosystem service type: Very important

Research needed:

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

Justification for research needed

Basic research is needed to know the current distribution and population size and trends, ecology and traits of the species, along with possible threats.

# Afraflacilla datuntata (Logunov & Zamanpoore, 2005)

#### Species information

#### Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Arachnida	Araneae	Salticidae

#### Taxonomic notes

Species recently transferred from Pseudicius to Afraflacilla (Prószyński 2017).

#### **Region for assessment:**

- Global

#### Geographic range

Biogeographic realm:

- Palearctic

**Countries:** 

- Afghanistan

Map of records (Google Earth):

Suppl. material 28

### Basis of EOO and AOO: Unknown

Basis (narrative)

Unknown EOO or AOO.

Min Elevation/Depth (m): 0

Max Elevation/Depth (m): 0

Range description

Known only from the type locality in Datunta-Stauklamm, Afghanistan, recorded in 1971 (Logunov and Zamanpoore 2005).

## Extent of occurrence

EOO (km2): Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

## Area of occupancy

AOO (km2): Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

# Locations

Number of locations: Unknown

Trend: Unknown

#### Population

Number of individuals: Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

#### Subpopulations

Number of subpopulations: Unknown

Trend: Unknown

Extreme fluctuations?: Unknown

Severe fragmentation?: Unknown

#### Habitat

System: Terrestrial

Habitat specialist: No

Habitat (narrative)

The type locality is located in a region dominated by desert/xeric shrublands (Olson et al. 2001). Otherwise the preferred habitat of this species is unknown.

Trend in extent, area or quality?: Unknown

Habitat importance: Major Importance

Habitats:

- 18. Unknown

# Ecology

Size: 4 mm

Generation length (yr): 1

Dependency of single sp?: Unknown

Ecology and traits (narrative)

Salticids are cursorial hunters with a significantly acute vision with which they stalk or chase their prey. In South Africa, a species from this genus, *Afraflacilla imitator*, appears to be a foliage-dwelling spider collected in fynbos habitats in South Africa (Wesolowska and Haddad 2013).

# Threats

Threat type: Past

# Threats:

- 12. Other options - Other threat

Justification for threats

No known threats.

# Other

Use type: International

Use and trade:

- 18. Unknown

Ecosystem service type: Very important

Research needed:

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

Justification for research needed

Basic research is needed to know the current distribution and population size and trends, ecology and traits of the species, along with possible threats.

# Attulus zaisanicus (Logunov, 1998)

#### Species information

#### Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Arachnida	Araneae	Salticidae

#### **Taxonomic notes**

Species recently transferred from Sitticus to Attulus (Prószyński 2017)

#### **Region for assessment:**

- Global

#### Geographic range

#### Biogeographic realm:

- Palearctic

#### **Countries:**

- Kazakhstan

#### Map of records (Google Earth):

Suppl. material 29

Basis of EOO and AOO: Unknown

Basis (narrative)

Unknown EOO or AOO.

Min Elevation/Depth (m): 0

Max Elevation/Depth (m): 0

#### Range description

Only known from the type locality in the NW foothills of Manrak Mt. Range, ca. 15km upstream of the mouth of Taizhusgen river (Logunov 1998).

### Extent of occurrence

EOO (km2): Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

#### Area of occupancy

AOO (km2): Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

## Locations

Number of locations: Unknown

Trend: Unknown

## Population

Number of individuals: Unknown Trend: Unknown Causes ceased?: Unknown Causes understood?: Unknown Causes reversible?: Unknown Extreme fluctuations?: Unknown

#### **Population Information (Narrative)**

No population size estimates exist.

#### Subpopulations

Number of subpopulations: Unknown

Trend: Unknown

Extreme fluctuations?: Unknown

Severe fragmentation?: Unknown

#### Habitat

System: Terrestrial

Habitat specialist: Unknown

#### Habitat (narrative)

This species was found from an upstream of the mouth of Taizhusgen river (Logunov 1998). The type locality belongs to the ecoregion of temperate grasslands, savannas and shrublands along with deserts and xeric shrublands (Olson et al. 2001), which indicates this species may prefer dry habitats, although this is uncertain.

Trend in extent, area or quality?: Unknown

Habitat importance: Major Importance

Habitats:

- 18. Unknown

#### Ecology

Size: 5.35 mm

Generation length (yr): 1

Dependency of single sp?: No

Ecology and traits (narrative)

Salticids are cursorial hunters with a significantly acute vision with which they stalk or chase their prey. Ecology of this particular species is unknown.

# Threats

Threat type: Past

Threats:

- 12. Other options - Other threat

Justification for threats

No known threats.

# Other

Use type: International

Use and trade:

- 18. Unknown

Ecosystem service type: Very important

Research needed:

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

Justification for research needed

Basic research is needed to know the current distribution and population size and trends, ecology and traits of the species, along with possible threats.

# Bathippus latericius (Thorell, 1881)

# Species information

## Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Arachnida	Araneae	Salticidae

Region for assessment:

- Global

#### Geographic range

Biogeographic realm:

- Indomalayan

#### **Countries:**

- Indonesia

Map of records (Google Earth):

Suppl. material 30

#### Basis of EOO and AOO: Unknown

Basis (narrative)

Unknown EOO or AOO.

Min Elevation/Depth (m): 0

Max Elevation/Depth (m): 0

Range description

Known only from the type locality, Andai, north of Pegunungan Arfak just South of Manokwari, recorded prior to 1881 (Thorell 1881).

#### Extent of occurrence

EOO (km2): Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

### Area of occupancy

AOO (km2): Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

#### Locations

Number of locations: Unknown

Trend: Unknown

#### Population

Number of individuals: Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

**Population Information (Narrative)** 

No population size estimates exist.

#### **Subpopulations**

Number of subpopulations: Unknown Trend: Unknown Extreme fluctuations?: Unknown Severe fragmentation?: Unknown

### Habitat

System: Terrestrial

Habitat specialist: Unknown

Habitat (narrative)

The type locality is within a region of tropical and subtropical moist broadleaf forest (Olson et al. 2001). Otherwise the preferred habitat of this species remains unknown.

Trend in extent, area or quality?: Unknown

Habitat importance: Major Importance

Habitats:

- 18. Unknown

## Ecology

Size: 6.5 mm

Generation length (yr): 1

Dependency of single sp?: Unknown

Ecology and traits (narrative)

Salticids are cursorial hunters with a significantly acute vision with which they stalk or chase their prey. Species from the same genus in Papua New Guinea were collected by beating forest understory vegetation (Zhang and Maddison 2012).

#### Threats

Threat type: Past

Threats:

- 2.2. Agriculture & aquaculture - Wood & pulp plantations

Justification for threats

Forests around the type locality have experienced heavy deforestation, in particular between 2001 and 2016 (World Resources Institute 2014). However, this species has been

recorded only once and the preferred habitat of this species remains unknown, hence clear conclusions about the effects of forest loss to this species cannot be made.

## Conservation

Conservation action type: In Place

## Other

Use type: International

Ecosystem service type: Very important

Research needed:

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

#### Justification for research needed

Basic research is needed to know the current distribution and population size and trends, ecology and traits of the species, along with possible threats.

# Bathippus rechingeri Kulczyn'ski, 1910

# Species information

#### Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Arachnida	Araneae	Salticidae

#### Region for assessment:

- Global

# Geographic range

Biogeographic realm:

- Oceanian

#### **Countries:**

- Solomon Islands

Map of records (Google Earth):

Suppl. material 31

Basis of EOO and AOO: Unknown

Basis (narrative)

Unknown EOO or AOO.

Min Elevation/Depth (m): 0

Max Elevation/Depth (m): 0

Range description

Only known from the type locality Bougainville Island, Papua New Guinea, recorded prior to 1910 (Kulczyński 1910).

#### Extent of occurrence

EOO (km2): Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

#### Area of occupancy

AOO (km2): Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

### Locations

Number of locations: Unknown

Trend: Unknown

#### Population

Number of individuals: Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

**Population Information (Narrative)** 

No population size estimates exist.

## Subpopulations

Number of subpopulations: Unknown Trend: Unknown Extreme fluctuations?: Unknown Severe fragmentation?: Unknown

## Habitat

System: Terrestrial Habitat specialist: Unknown Habitat (narrative)

The type locality is within a region with tropical and subtropical moist broadleaf forest (Olson et al. 2001). Otherwise the preferred habitat of this species remains unknown.

Trend in extent, area or quality?: Unknown

Habitat importance: Major Importance

Habitats:

- 18. Unknown

# Ecology

Size: 4.6 mm

Generation length (yr): 1

Dependency of single sp?: Unknown

Ecology and traits (narrative)

Salticids are cursorial hunters with a significantly acute vision with which they stalk or chase their prey. Species from the same genus in Papua New Guinea were collected by beating forest understory vegetation (Zhang and Maddison 2012).

## Threats

Threat type: Ongoing

Threats:

- 2.2. Agriculture & aquaculture - Wood & pulp plantations

#### Justification for threats

In Bougainville Island alone there has been forest loss of 48,068 ha between 2001 and 2016 (World Resources Institute 2014). However, this species has been recorded only once and the preferred habitat of this species remains unknown, hence clear conlusions about the effects of forest loss to this species cannot be made.

## Other

Use type: International

Use and trade:

- 18. Unknown

Ecosystem service type: Very important

Research needed:

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

Justification for research needed

Basic research is needed to know the current distribution and population size and trends, ecology and traits of the species, along with possible threats.

# Brettus celebensis (Merian, 1911)

## Species information

#### Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Arachnida	Araneae	Salticidae

#### Region for assessment:

- Global

## Geographic range

Biogeographic realm:

- Indomalayan

**Countries:** 

- Indonesia

Map of records (Google Earth):

Suppl. material 32

# Basis of EOO and AOO: Unknown

Basis (narrative)

Unknown EOO or AOO.

Min Elevation/Depth (m): 0

Max Elevation/Depth (m): 0

#### Range description

Recorded only once at Wald bei Duluduo in Sulawesi Island, Indonesia, recorded prior to 1911 (Merian 1911).

#### Extent of occurrence

EOO (km2): Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

#### Area of occupancy

AOO (km2): Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

#### Locations

Number of locations: Unknown

Trend: Unknown

## Population

Number of individuals: Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

**Population Information (Narrative)** 

No population size estimates exist.

#### **Subpopulations**

Number of subpopulations: Unknown

Trend: Unknown

Extreme fluctuations?: Unknown

Severe fragmentation?: Unknown

#### Habitat

System: Terrestrial

Habitat specialist: Unknown

Habitat (narrative)

*Brettus* species are found in rainforests and the type locality in fact is tropical and subtropical moist broadleaf forest (Olson et al. 2001).

Trend in extent, area or quality?: Unknown

Habitat importance: Major Importance

Habitats:

- 1.6. Forest - Subtropical/Tropical Moist Lowland

### Ecology

Size: 6.6 mm

Generation length (yr): 1

Dependency of single sp?: Unknown

Ecology and traits (narrative)

Salticids are cursorial hunters with significantly acute vision with which they stalk or chase their prey. *Brettus* species have been observed to be araneophagous and web-invading, also eating eggs of their prey and the insects stuck in the web. When invading the web of other species they use aggressive mimicry by making signals to lure the web-building spiders (Jackson 2000).

#### Threats

Threat type: Past

Threats:

- 12. Other options - Other threat

Justification for threats

No known threats.

#### Other

Use type: International

Use and trade:

- 18. Unknown

Ecosystem service type: Very important

Research needed:

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

### Justification for research needed

Basic research is needed to know the current distribution and population size and trends, ecology and traits of the species, along with possible threats.

# Carrhotus viduus (C. L. Koch, 1846)

# Species information

#### Synonyms

Plexippus cumulatus (Karsch, 1892)

#### **Common names**

#### Black and white jumper

#### Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Arachnida	Araneae	Salticidae

#### Region for assessment:

- Global

## Geographic range

#### Biogeographic realm:

- Palearctic

#### **Countries:**

- Pakistan
- Viet Nam
- Philippines
- Bangladesh
- Bhutan
- Brunei Darussalam
- Cambodia
- Singapore
- Sri Lanka
- Thailand

- Nepal
- Lao People's Democratic Republic
- Malaysia
- India
- Indonesia
- Myanmar
- Hong Kong
- China

Map of records (Google Earth):

Suppl. material 33

Basis of EOO and AOO: Species Distribution Model

#### Basis (narrative)

Given the relatively high number of records (Koch 1846, Sherriffs 1931, Song and Chai 1991, Prószyński 1992, Song et al. 1999, Jastrzębski 1999, Jackson et al. 2001, Prószyński and Deeleman-Reinhold 2010, Jäger and Praxaysombath 2011, Chetia and Kalita 2012, Yin et al. 2012, Bhat et al. 2013, Karthikeyani and Kannan 2013, Ramakrishnaiah et al. 2016, Roy et al. 2016, Saha et al. 2016, Betz and Tscharntke 2017, Karthikeyani et al. 2017) it was possible to perform species distribution modelling (see methods for details).

Min Elevation/Depth (m): 0

Max Elevation/Depth (m): 2157

#### Range description

This is a well-recorded species especially in India and the most recent records are from 2016 (Koch 1846, Sherriffs 1931, Song and Chai 1991, Prószyński 1992, Song et al. 1999, Jastrzębski 1999, Jackson et al. 2001, Prószyński and Deeleman-Reinhold 2010, Jäger and Praxaysombath 2011, Chetia and Kalita 2012, Yin et al. 2012, Bhat et al. 2013, Karthikeyani and Kannan 2013, Ramakrishnaiah et al. 2016, Roy et al. 2016, Saha et al. 2016, Betz and Tscharntke 2017, Karthikeyani et al. 2017). This species should be present across the Indomalayan realm, from India to the Philippines.

#### Extent of occurrence

EOO (km2): 18383386

Trend: Stable

Justification for trend

Being a widespread species present in multiple habitat types we assume the trend to be stable.

Causes ceased?: Yes

Causes understood?: Yes

Causes reversible?: Yes

#### Area of occupancy

AOO (km2): 5935576

Trend: Stable

Justification for trend

Being a widespread species present in multiple habitat types we assume the trend to be stable.

Causes ceased?: Yes

Causes understood?: Yes

Causes reversible?: Yes

## Locations

Number of locations: Not applicable

Justification for number of locations

No known threats to this species.

Trend: Stable

#### Population

Number of individuals: Unknown

Trend: Stable

Justification for trend

Inferred from AOO and habit trends.

Causes ceased?: Yes

Causes understood?: Yes

Causes reversible?: Yes

**Population Information (Narrative)** 

No population size estimates exist, but the number of records and large distribution suggest this is a common and widespread species.

#### **Subpopulations**

Number of subpopulations: Unknown

Trend: Stable

#### Habitat

System: Terrestrial

Habitat specialist: No

Habitat (narrative)

Often found on bushes and tall grasses in natural areas (Peter 2009), but also common in agroecosystems like tea, rice and cashew plantations (Bhat et al. 2013, Betz and Tscharntke 2017, Roy et al. 2016, Saha et al. 2016) and within semi-urban settings (Ramakrishnaiah et al. 2016) and houses (Sherriffs 1931).

Trend in extent, area or quality?: Stable

Justification for trend

Able to live in various habitat types, from farmlands to houses.

Habitat importance: Major Importance

Habitats:

- 1.5. Forest Subtropical/Tropical Dry
- 1.6. Forest Subtropical/Tropical Moist Lowland
- 14.1. Artificial/Terrestrial Arable Land

- 14.3. Artificial/Terrestrial - Plantations - 14.5. Artificial/Terrestrial - Urban Areas

# Ecology

Generation length (yr): 1

Dependency of single sp?: No

Ecology and traits (narrative)

*C. viduus* is a medium-sized jumping spider with remarkable sexual dimorfism. This species forages usually on leaf surfaces. *C. viduus* is known to feed on small insects (thrips, flies) and to make a retreat between leaves with thick layers of silk. Specimens of *C. viduus* have been observed to occasionally feed on nectar (Jackson et al. 2001). Males are noted to be more active than females, which occur especially on sunny days (Peter 2009).

# Threats

Threat type: Past

Threats:

- 12. Other options - Other threat

Justification for threats

No known threats.

## Conservation

Conservation action type: In Place

**Conservation actions:** 

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

## Justification for conservation actions

There are numerous protected areas within the predicted range of this species (UNEP-WCMC and IUCN 2017).

### Other

Use type: International

Use and trade:

- 18. Unknown

Ecosystem service type: Important

Ecosystem services:

- 12. Biocontrol

Justification for ecosystem services

In agroecosystems *C. viduus* probably plays an important role providing ecosystem services for humans by preying on pests (Bhat et al. 2013, Saha et al. 2016, Betz and Tscharntke 2017).

Research needed:

- 3.1. Monitoring Population trends
- 3.4. Monitoring Habitat trends

Justification for research needed

Monitoring is needed to confirm current population and habitat trends.

# Corythalia tropica (Mello-Leitão, 1939)

## Species information

#### Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Arachnida	Araneae	Salticidae

#### Region for assessment:

- Global

# Geographic range

Biogeographic realm:

- Neotropical

**Countries:** 

- French Guiana
- Venezuela, Bolivarian Republic of

Map of records (Google Earth):

Suppl. material 34

Basis of EOO and AOO: Unknown

Basis (narrative)

Only three records are known for the species, all from the 1940s (De Mello-Leitao 1939, Crane 1948, Caporiacco 1954).

Min Elevation/Depth (m): 0

Max Elevation/Depth (m): 0

Range description

Only three records are known for the species, all from the 1940s (De Mello-Leitao 1939, Crane 1948, Caporiacco 1954).

# Extent of occurrence

EOO (km2): Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

### Area of occupancy

AOO (km2): Unknown Trend: Unknown Causes ceased?: Unknown Causes understood?: Unknown Causes reversible?: Unknown Extreme fluctuations?: Unknown

#### Locations

Number of locations: Unknown

Trend: Unknown

### Population

Number of individuals: Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

**Population Information (Narrative)** 

No population size estimates exist.

#### **Subpopulations**

Trend: Unknown Extreme fluctuations?: Unknown Severe fragmentation?: Unknown

# Habitat

System: Terrestrial

Habitat specialist: Unknown

Habitat (narrative)

This species was found in relatively open leaf-litter in deciduous seasonal forest, occurring through the semi-evergreen seasonal forest across the lower boundaries of the cloud forest along the well-lighted and intermittently dry road-side (700-1100m) (Crane 1948).

Trend in extent, area or quality?: Unknown

Habitat importance: Major Importance

Habitats:

- 1.5. Forest - Subtropical/Tropical Dry

# Ecology

Size: 5.5 - 6.5 mm

Generation length (yr): 1

Dependency of single sp?: No

Ecology and traits (narrative)

Salticids are cursorial hunters with a significantly acute vision with which they stalk or chase their prey. The courtship and threat display behaviour in *C. tropica* has been well-studied (Crane 1948). Females lay from 13 to 28 eggs and a leaf is used for a cocoon, with edges glued together using silk and bits of earth (Crane 1948).

## Threats

Threat type: Past

Threats:

- 12. Other options - Other threat

Justification for threats

No known threats.

## Conservation

Conservation action type: In Place

### Other

Use type: International

Ecosystem service type: Very important

#### **Research needed:**

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

#### Justification for research needed

Basic research is needed to know the current distribution and population size and trends, ecology and traits of the species, along with possible threats.

# Grayenulla australensis Zabka, 1992

## Species information

#### Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Arachnida	Araneae	Salticidae

#### **Region for assessment:**

- Global

#### Geographic range

#### Biogeographic realm:

- Australasian

#### **Countries:**

- Australia

Map of records (Google Earth):

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Basis of EOO and AOO: Species Distribution Model

Basis (narrative)

Given the relatively high number of records (Harvey et al. 2000, Guthrie and Waldock 2004, Majer et al. 2013, GBIF.org 18th May 2018b) it was possible to perform species distribution modelling (see methods for details).

Min Elevation/Depth (m): 0

Max Elevation/Depth (m): 475

Range description

This species has several records from Western Australia and is predicted to occur mostly throughout the southwestern parts (Harvey et al. 2000, Guthrie and Waldock 2004, Majer et al. 2013, GBIF.org 18th May 2018b).

#### Extent of occurrence

EOO (km2): 1006017

Trend: Stable

Justification for trend

Being a widespread species with no known threats we assume the trend to be stable.

Causes ceased?: Yes

Causes understood?: Yes

Causes reversible?: Yes

## Area of occupancy

AOO (km2): 376224

Trend: Stable
Justification for trend

Being a widespread species with no known threats we assume the trend to be stable.

Causes ceased?: Yes

Causes understood?: Yes

Causes reversible?: Yes

## Locations

Number of locations: Not applicable

Justification for number of locations

No known threats to the species.

Trend: Stable

#### Population

Number of individuals: Unknown

Trend: Stable

Justification for trend

Being a widespread species with no known threats we assume the trend to be stable.

Causes ceased?: Yes

Causes understood?: Yes

Causes reversible?: Yes

**Population Information (Narrative)** 

No population size estimates exist.

#### **Subpopulations**

Number of subpopulations: Unknown

Trend: Stable

## Justification for trend

Being a widespread species with no known threats we assume the trend to be stable.

# Habitat

System: Terrestrial

Habitat specialist: No

Habitat (narrative)

Seven *Grayenulla* species are known from scattered localities within Western Australia and this genus has been found only in coastal areas (Żabka and Gray 2002). This species has been recorded from sandplains, the Jarrah forest, avon wheat and Esperance plains (Guthrie and Waldock 2004).

Trend in extent, area or quality?: Stable

Justification for trend

This species seems not to be restricted to a specific type of habitat, however, an increased risk of fires may affect the extent and quality of habitat. Given the relatively widespread distribution and that the species is not restricted to any certain habitat, the potential fires may not have severe effect on its survival and therefore the trend is assumed to be stable.

Habitat importance: Major Importance

Habitats:

- 1.5. Forest Subtropical/Tropical Dry
- 4.5. Grassland Subtropical/Tropical Dry

# Ecology

Size: 3 mm

Generation length (yr): 1

Dependency of single sp?: Unknown

Ecology and traits (narrative)

Salticids are cursorial hunters with a significantly acute vision, enabling them to stalk or chase their prey. Species from the genus *Grayenulla* have been observed to be limited to

inhabit savannah and semidesert areas, indicating they may live on either the ground or on plants (Żabka and Gray 2002).

## Threats

Threat type: Ongoing

Threats:

- 7.1.1. Natural system modifications - Fire & fire suppression - Increase in fire frequency/intensity

#### Justification for threats

From 150,000 up to nearly 500,000 fires have been reported per year between 2012 and 2017 in Western Australia (World Resources Institute 2014). This species occurs in dry areas, which are vulnerable to fires, and this may be a threat to this species and cause a decline in its AOO. However, as it seems to be relatively widespread and not specialized in any particular habitat, the threat should be minor.

## Conservation

Conservation action type: In Place

#### **Conservation actions:**

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

#### Justification for conservation actions

Toolonga is a large nature reserve inside the predicted range of this species (UNEP-WCMC and IUCN 2017).

## Other

Use type: International

Ecosystem service type: Very important

#### **Research needed:**

- 3.1. Monitoring Population trends
- 3.4. Monitoring Habitat trends

#### Justification for research needed

Monitoring is needed to confirm inferred population and habitat trends.

# Heliophanus capicola Simon, 1901

## Species information

#### Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Arachnida	Araneae	Salticidae

#### **Region for assessment:**

- Global

## Geographic range

Biogeographic realm:

- Afrotropical

#### **Countries:**

- Lesotho
- Swaziland
- Mozambique
- South Africa

Map of records (Google Earth):

Suppl. material 36

Basis of EOO and AOO: Species Distribution Model

## Basis (narrative)

Given the relatively high number of records (Simon 1901,Wesolowska 1986, Wesolowska and Haddad 2014) it was possible to perform species distribution modelling (see methods for details).

Min Elevation/Depth (m): 0

Max Elevation/Depth (m): 3432

#### Range description

This species has been recorded from South Africa and Lesotho (Simon 1901, Wesolowska 1986, Wesolowska and Haddad 2014) and could be present in Swaziland and at the southernmost tip of Mozambique.

## Extent of occurrence

EOO (km2): 1053422

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

#### Area of occupancy

AOO (km2): 966720

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

#### Locations

Number of locations: Unknown

Trend: Unknown

### Population

Number of individuals: Unknown

Trend: Unknown

Causes ceased?: Unknown Causes understood?: Unknown Causes reversible?: Unknown Extreme fluctuations?: Unknown

## **Subpopulations**

Trend: Unknown

Extreme fluctuations?: Unknown

Severe fragmentation?: Unknown

## Habitat

System: Terrestrial

Habitat specialist: Unknown

Habitat (narrative)

In Lesotho the species was sampled from under rocks in alpine grasslands (Wesolowska and Haddad 2014). It is not known whether it occurs in other types of habitat as well.

Trend in extent, area or quality?: Unknown

Habitat importance: Major Importance

Habitats:

- 4.4. Grassland - Temperate

# Ecology

Size: 1.6-1.7 mm

Generation length (yr): 1

Dependency of single sp?: No

Ecology and traits (narrative)

Salticids are cursorial hunters with a significantly acute vision with which they stalk or chase their prey. Otherwise nothing is know about this species.

# Threats

Threat type: Past

#### Threats:

- 12. Other options - Other threat

Justification for threats

No known threats.

## Conservation

Conservation action type: In Place

**Conservation actions:** 

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

# Justification for conservation actions

There are several protected areas inside the range of this species (UNEP-WCMC and IUCN 2017).

## Other

Use type: International

Use and trade:

- 18. Unknown

Ecosystem service type: Very important

### Research needed:

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

## Justification for research needed

Basic research is needed to confirm the estimated distribution in more detail and population size and trends, ecology and traits of the species along with possible threats.

# Helvetia stridulans Ruiz & Brescovit, 2008

# Species information

#### Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Arachnida	Araneae	Salticidae

#### **Region for assessment:**

- Global

# Geographic range

## Biogeographic realm:

- Neotropical

#### **Countries:**

- Brazil

Map of records (Google Earth):

Suppl. material 37

## Basis of EOO and AOO: Unknown

Basis (narrative)

Unknown EOO or AOO.

Min Elevation/Depth (m): 0

Max Elevation/Depth (m): 0

#### Range description

This species is known only from the type locality in Espirito Santo, Brazil (Ruiz and Brescovit 2008).

# Extent of occurrence

EOO (km2): Unknown Trend: Unknown Causes ceased?: Unknown Causes understood?: Unknown Causes reversible?: Unknown Extreme fluctuations?: Unknown

## Area of occupancy

AOO (km2): Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

## Locations

Number of locations: Unknown

Trend: Unknown

#### Population

Number of individuals: Unknown Trend: Unknown Causes ceased?: Unknown Causes understood?: Unknown Causes reversible?: Unknown Extreme fluctuations?: Unknown

# Population Information (Narrative)

No population size estimates exist.

# Subpopulations

Number of subpopulations: Unknown Trend: Unknown

Extreme fluctuations?: Unknown

Severe fragmentation?: Unknown

# Habitat

System: Terrestrial

Habitat specialist: No

Habitat (narrative)

The habitat preference of this species is unknown.

Trend in extent, area or quality?: Unknown

Habitat importance: Major Importance

Habitats:

- 18. Unknown

# Ecology

Size: 3.4 mm

Generation length (yr): 1

Dependency of single sp?: Unknown

Ecology and traits (narrative)

Salticids are cursorial hunters with a significantly acute vision with which they stalk or chase their prey.

# Threats

Threat type: Past

## Threats:

- 12. Other options - Other threat

Justification for threats

No known threats.

## Other

Use type: International

Use and trade:

- 18. Unknown

Ecosystem service type: Very important

Research needed:

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

Justification for research needed

Basic research is needed to know the current distribution and population size and trends, ecology and traits of the species, along with possible threats.

# Jerzego bipartitus (Simon, 1903)

# Species information

Synonyms

Hispo bipartita Simon, 1903

#### Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Arachnida	Araneae	Salticidae

**Region for assessment:** 

- Global

# Geographic range

Biogeographic realm:

- Indomalayan

# **Countries:**

- Sri Lanka
- India

Map of records (Google Earth):

Suppl. material 38

## Basis of EOO and AOO: Unknown

Basis (narrative)

Unknown EOO or AOO.

**Range description** 

This species is known only from the type locality in Sri Lanka (Simon 1903) and from India with no specific locality (Wanless 1981).

# Extent of occurrence

EOO (km2): Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

# Area of occupancy

AOO (km2): Unkown Trend: Unknown Causes ceased?: Unknown Causes understood?: Unknown Causes reversible?: Unknown Extreme fluctuations?: Unknown

## Locations

Number of locations: Unknown

Trend: Unknown

### Population

Number of individuals: Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

**Population Information (Narrative)** 

No population size estimates exist.

#### Subpopulations

Number of subpopulations: Unknown Trend: Unknown Extreme fluctuations?: Unknown Severe fragmentation?: Unknown

# Habitat

System: Terrestrial

Habitat specialist: Unknown

Habitat (narrative)

Unknown preferred habitat.

Trend in extent, area or quality?: Unknown

Habitat importance: Major Importance

Habitats:

- 18. Unknown

# Ecology

Size: 5.6 mm

Generation length (yr): 1

Dependency of single sp?: Unknown

Ecology and traits (narrative)

The habitus of the salticids of the genus *Jerzego* is elongate and flat. A closely related species, *Jerzego corticicola*, was found on tree trunks at the edges of degraded forests. The spiders were either on the surface or in the cracks between the bark flakes. These species were found close to 2 meters above ground, which may indicate that this species is normally a canopy-dweller (Maddison and Piasick 2014).

# Threats

Threat type: Past

Threats:

- 12. Other options - Other threat

Justification for threats

No known threats.

# Other

Use type: International

Use and trade:

- 18. Unknown

Ecosystem service type: Very important

**Research needed:** 

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

Justification for research needed

Basic research is needed to know the current distribution and population size and trends, ecology and traits of the species along with possible threats.

# Menemerus mirabilis Wesolowska, 1999

## Species information

#### Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Arachnida	Araneae	Salticidae

#### Region for assessment:

- Global

## Geographic range

Biogeographic realm:

- Afrotropical

**Countries:** 

- Ethiopia

Map of records (Google Earth):

Suppl. material 39

## Basis of EOO and AOO: Unknown

Basis (narrative)

Unknown EOO or AOO.

Min Elevation/Depth (m): 0

Max Elevation/Depth (m): 0

Range description

This species is known from Addis Ababa in Ethiopia only, recorded in the 1980s (Wesołowska 1999).

# Extent of occurrence

EOO (km2): Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

# Area of occupancy

AOO (km2): Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

# Locations

Number of locations: Unknown

Trend: Unknown

### Population

Number of individuals: Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

Population Information (Narrative)

No population size estimates exist.

#### **Subpopulations**

Number of subpopulations: Unknown

Trend: Unknown

Extreme fluctuations?: Unknown

Severe fragmentation?: Unknown

## Habitat

System: Terrestrial

Habitat specialist: No

Habitat (narrative)

The only records have been made from the urban area (Wesołowska 1999).

Trend in extent, area or quality?: Unknown

Habitat importance: Major Importance

Habitats:

- 14.5. Artificial/Terrestrial - Urban Areas

# Ecology

Size: 3.8 - 5.9 mm

Generation length (yr): 1

Dependency of single sp?: Unknown

Ecology and traits (narrative)

Salticids are cursorial hunters with a significantly acute vision with which they stalk or chase their prey. Ecology and behaviour of the genus *Menemerus* is poorly known, but several species (e.g. the Mediterranean *Menemerus semilimbatus* Hanh, 1829) are known to be synanthropic. Record data of *M. mirabilis* may suggest that it is a synanthrophic species as well (Wesołowska 1999).

# Threats

Threat type: Past

Threats:

- 12. Other options - Other threat

Justification for threats

No known threats.

# Other

Use type: International

Use and trade:

- 18. Unknown

Ecosystem service type: Very important

# **Research needed:**

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

#### Justification for research needed

Basic research is needed to know the current distribution and population size and trends, ecology and traits of the species, along with possible threats.

# Myrmarachne bicolor (L. Koch, 1879)

## Species information

#### Synonyms

Myrmarachne rubra (Ceccarelli 2010).

#### Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Arachnida	Araneae	Salticidae

#### **Region for assessment:**

- Global

## Geographic range

Biogeographic realm:

- Australasian

#### **Countries:**

- Australia

Map of records (Google Earth):

Suppl. material 40

Basis of EOO and AOO: Species Distribution Model

#### Basis (narrative)

Given the relatively high number of records (Ceccarelli 2010, Pekár et al. 2017, GBIF.org 17th May 2018), it was possible to perform species distribution modelling (see methods for details).

Min Elevation/Depth (m): 0

Max Elevation/Depth (m): 1030

**Range description** 

This species has been recorded only from Queensland and Northern Territory in Australia and the most recent records are made in 2010s (Ceccarelli 2010, Pekár et al. 2017, GBIF.org 17th May 2018).

## Extent of occurrence

EOO (km2): 1289479

Trend: Stable

Justification for trend

Being a widespread species with no known threats we assume the trend to be stable.

Causes ceased?: Yes

Causes understood?: Yes

Causes reversible?: Yes

# Area of occupancy

AOO (km2): 157804

Trend: Stable

Justification for trend

Being a widespread species with no known threats we assume the trend to be stable.

Causes ceased?: Yes

Causes understood?: Yes

Causes reversible?: Yes

# Locations

Number of locations: Not applicable

Trend: Unknown

#### Population

Number of individuals: Unknown

Trend: Stable

Justification for trend

Being a widespread species with no known threats we assume the trend to be stable.

Causes ceased?: Yes

Causes understood?: Yes

Causes reversible?: Yes

**Population Information (Narrative)** 

No population size estimates exist.

#### **Subpopulations**

Number of subpopulations: Unknown

Trend: Stable

Justification for trend

Being a widespread species with no known threats we assume the trend to be stable.

## Habitat

System: Terrestrial

Habitat specialist: No

Habitat (narrative)

Records were made from eucalyptus tree trunks (Ceccarelli 2010), picnic areas, open forests, beaches, botanic gardens and a wetland area (Pekár et al. 2017).

Trend in extent, area or quality?: Stable

Justification for trend

Able to live in various habitat types.

## Habitat importance: Major Importance

# Habitats:

- 1.6. Forest Subtropical/Tropical Moist Lowland
- 5. Wetlands (inland)
- 12.2. Marine Intertidal Sandy Shoreline and/or Beaches, Sand Bars, Spits, Etc
- 14.4. Artificial/Terrestrial Rural Gardens

# Ecology

Size: 3.7 - 4.7 mm

Generation length (yr): 1

Dependency of single sp?: No

Ecology and traits (narrative)

Salticids are cursorial hunters with a significantly acute vision with which they stalk or chase their prey. Spiders of the genus *Myrmarachne* are ant-like jumping spiders (Benjamin 2015), which also move similarly to ants (Edmunds 1978). This particular species seems to mimick the ant *Opisthopsis haddoni* Emery, 1893 (Pekár et al. 2017). *Myrmarachne* species feed mainly on small insects, excluding the ant associates (Edmunds 1978). The predatory behaviour of *M. lupata* from Australia has been reported to differ from other salticids in their attacks by lunging instead of leaping and they have also been observed to tap their front legs before attacking. Although mimicking ants, *Myrmarachne* have not been observed to feed on ants but preying on various insects and also eggs of other spiders (Jackson 1986).

# Threats

Threat type: Past

Threats:

- 12. Other options - Other threat

Justification for threats

No known threats.

# Conservation

Conservation action type: In Place

Conservation actions:

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

Justification for conservation actions

At least part of the records are inside a world heritage site called Wet Tropics of Queensland (UNEP-WCMC and IUCN 2017).

## Other

Use type: International

Use and trade:

- 18. Unknown

Ecosystem service type: Very important

**Research needed:** 

- 3.1. Monitoring Population trends
- 3.4. Monitoring Habitat trends

Justification for research needed

Monitoring is needed to confirm the inferred population and habitat trends.

# Myrmarachne paviei (Simon, 1886)

## Species information

#### Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Arachnida	Araneae	Salticidae

## Region for assessment:

- Global

# Geographic range

Biogeographic realm:

- Indomalayan

**Countries:** 

- Cambodia

Map of records (Google Earth):

Suppl. material 41

Basis of EOO and AOO: Unknown

Basis (narrative)

Unknown EOO or AOO.

Min Elevation/Depth (m): 0

Max Elevation/Depth (m): 0

Range description

Known only from the type locality in Thepong, Cambodia, recorded prior to 1886 (Simon 1886).

# Extent of occurrence

EOO (km2): Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

# Area of occupancy

AOO (km2): Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

## Locations

Number of locations: Unknown

Trend: Unknown

# Population

Number of individuals: Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

**Population Information (Narrative)** 

No population size estimates exist.

#### **Subpopulations**

Number of subpopulations: Unknown Trend: Unknown Extreme fluctuations?: Unknown Severe fragmentation?: Unknown

## Habitat

System: Terrestrial

Habitat specialist: Unknown

Habitat (narrative)

Cambodia is mainly covered with tropical and subtropical dry broadleaf forests (Olson et al. 2001). However, the preferred habitat of this species is unknown.

Trend in extent, area or quality?: Unknown

Habitat importance: Major Importance

Habitats:

- 18. Unknown

# Ecology

Size: 5.7 mm

Generation length (yr): 1

Dependency of single sp?: Unknown

Ecology and traits (narrative)

Salticids are cursorial hunters with a significantly acute vision with which they stalk or chase their prey. Spiders of the genus *Myrmarachne* are ant-like jumping spiders (Benjamin 2015), which also move similarly to ants (Edmunds 1978). *Myrmarachne* species feed mainly on small insects, excluding the ant associates (Edmunds 1978). The predatory behaviour of *M. lupata* from Australia has been reported to differ from other salticids in their attacks by lunging instead of leaping and they have also been observed to tap their front legs before attacking. Although mimicking ants, *Myrmarachne* have not been observed to feed on ants but preying on various insects and also eggs of other spiders (Jackson 1986).

# Threats

Threat type: Past

Threats:

- 12. Other options - Other threat

Justification for threats

No known threats.

# Other

Use type: International

Use and trade:

- 18. Unknown

Ecosystem service type: Very important

Research needed:

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

Justification for research needed

Basic research is needed to know the current distribution and population size and trends, ecology and traits of the species, along with possible threats.

# Noegus petrusewiczi Caporiacco, 1947

# Species information

#### Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Arachnida	Araneae	Salticidae

#### Region for assessment:

- Global

# Geographic range

Biogeographic realm:

- Neotropical

#### **Countries:**

- Guyana

Map of records (Google Earth):

Suppl. material 42

Basis of EOO and AOO: Unknown

Basis (narrative)

Unknown EOO and AOO.

Min Elevation/Depth (m): 0

Max Elevation/Depth (m): 0

Range description

Only known from Tumatumari, Guyana, recorded prior to 1947 (Caporiacco 1947).

# Extent of occurrence

EOO (km2): Unknown Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

# Area of occupancy

AOO (km2): Unknown Trend: Unknown Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

## Locations

Number of locations: Unknown

Trend: Unknown

### Population

Number of individuals: Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

**Population Information (Narrative)** 

No population size estimates exist.

## **Subpopulations**

Number of subpopulations: Unknown

Trend: Unknown

Extreme fluctuations?: Unknown

Severe fragmentation?: Unknown

# Habitat

System: Terrestrial Habitat specialist: Unknown

## Habitat (narrative)

The type locality is located in a region of tropical moist broadleaf forest (Olson et al. 2001). Yet, the species habitat is unknown.

Trend in extent, area or quality?: Unknown

Habitat importance: Major Importance

# Habitats:

- 18. Unknown

# Ecology

Size: 5.5 mm

Generation length (yr): 1

Dependency of single sp?: No

Ecology and traits (narrative)

Salticids are cursorial hunters with a significantly acute vision with which they stalk or chase their prey. Otherwise, the ecology of this species is unknown.

# Threats

Threat type: Past

Threats:

- 12. Other options - Other threat

Justification for threats

No known threats.

# Other

Use type: International

Use and trade:

- 18. Unknown

Ecosystem service type: Very important

Research needed:

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

#### Justification for research needed

Basic research is needed to know the current distribution and population size and trends, ecology and traits of the species, along with possible threats.

# Parahelpis abnormis (Zabka, 2002)

# Species information

#### Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Arachnida	Araneae	Salticidae

#### Region for assessment:

- Global

## Geographic range

Biogeographic realm:

- Australasian

#### Countries:

- Australia

Map of records (Google Earth):

Suppl. material 43

Basis of EOO and AOO: Unknown

Basis (narrative)

Unknown EOO or AOO.

Min Elevation/Depth (m): 0

Max Elevation/Depth (m): 0

## Range description

This species is known only from the type locality in Queensland, Australia, recorded in 1998 (Zabka 2002).

# Extent of occurrence

EOO (km2): Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

# Area of occupancy

AOO (km2): Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

# Locations

Number of locations: Unknown

Trend: Unknown

# Population

Number of individuals: Unknown Trend: Unknown Causes ceased?: Unknown Causes understood?: Unknown Causes reversible?: Unknown Extreme fluctuations?: Unknown Population Information (Narrative) No population size estimates exist.

#### Subpopulations

Number of subpopulations: Unknown

Trend: Unknown

Extreme fluctuations?: Unknown

Severe fragmentation?: Unknown

#### Habitat

System: Terrestrial

Habitat specialist: Unknown

Habitat (narrative)

The single known specimen was recorded from rainforest (Zabka 2002).

Trend in extent, area or quality?: Unknown

Habitat importance: Major Importance

Habitats:

- 1.6. Forest - Subtropical/Tropical Moist Lowland

## Ecology

Size: 5.35 mm Generation length (yr): 1

Dependency of single sp?: Unknown

## Ecology and traits (narrative)

Salticids are cursorial hunters with a significantly acute vision with which they stalk or chase their prey. Otherwise the ecology of this species is unknown.

# Threats

Threat type: Past

## Threats:

- 12. Other options - Other threat

Justification for threats

No known threats.

# Other

Use type: International

Use and trade:

- 18. Unknown

Ecosystem service type: Very important

## Research needed:

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

# Justification for research needed

Basic research is needed to know the current distribution and population size and trends, ecology and traits of the species, along with possible threats.

# Pelegrina aeneola (Curtis, 1892)

## Species information

#### Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Arachnida	Araneae	Salticidae

#### Region for assessment:

- Global

## Geographic range

#### Biogeographic realm:

- Nearctic

#### **Countries:**

- Mexico
- Canada
- United States

Map of records (Google Earth):

Suppl. material 44

Basis of EOO and AOO: Species Distribution Model

Basis (narrative)

Given the relatively high number of records (Curtis 1892, Banks 1895, Peckham and Peckham 1909, Chamberlin and Gertsch 1929, Chamberlin and Ivie 1941, Hatley 1978, Crawford and Edwards 1986, Jennings et al. 1989, Ehmann 1994, Crawford et al. 1995, Ehmann and Macmahon 1996, Maddison 1996, Halaj et al. 1997, Halaj et al. 1998, Bajwa and AliNiazee 2001, Horton et al. 2001, Horton et al. 2002, Heikkinen and MacMahon 2004, Copley 2008, Pinzón and Spence 2010, Huber 2012, Slowik and Blagoev 2012, Miliczky et al. 2014, GBIF.org 31th July 2017b) it was possible to perform species distribution modelling (see methods for details).

Min Elevation/Depth (m): 0

Max Elevation/Depth (m): 3812

# Range description

This species should be present across the western parts of USA, Canada and northernmost Mexico (Curtis 1892, Banks 1895, Peckham and Peckham 1909, Chamberlin and Gertsch 1929, Chamberlin and Ivie 1941, Hatley 1978, Crawford and Edwards 1986, Jennings et al. 1989, Ehmann 1994, Crawford et al. 1995, Ehmann and Macmahon 1996, Maddison 1996, Halaj et al. 1997, Halaj et al. 1998, Bajwa and AliNiazee 2001, Horton et al. 2001, Horton et al. 2002, Heikkinen and MacMahon 2004, Copley 2008, Pinzón and Spence 2010, Huber 2012, Slowik and Blagoev 2012, Miliczky et al. 2014, GBIF.org 31th July 2017b).

# Extent of occurrence

EOO (km2): 5115438

Trend: Stable

Justification for trend

Being a widespread species with no known threats we assume the trend to be stable.

Causes ceased?: Yes

Causes understood?: Yes

Causes reversible?: Yes

## Area of occupancy

AOO (km2): 3636444

Trend: Stable

Justification for trend

Being a widespread species with no known threats we assume the trend to be stable.

Causes ceased?: Yes

Causes understood?: Yes

Causes reversible?: Yes

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## Locations

Number of locations: Not applicable

Justification for number of locations

No known threats to the species.

Trend: Stable

### Population

Number of individuals: Unknown

Trend: Stable

Causes ceased?: Yes

Causes understood?: Yes

Causes reversible?: Yes

**Population Information (Narrative)** 

No population size estimates exist. Being a widespread species with no known threats we assume the trend to be stable.

### **Subpopulations**

Number of subpopulations: Unknown

Trend: Stable

Justification for trend

Being a widespread species with no known threats we assume the trend to be stable.

## Habitat

System: Terrestrial

Habitat specialist: No

Habitat (narrative)

This species is known from a variety of habitats, such as mixed wood forest, deciduous forest, aspen, lodgepole pine, firs, steppes and even open snowfields (Curtis 1892, Ehmann 1994, Ehmann and Macmahon 1996, Heikkinen and MacMahon 2004). *P. aeneola* appears to be common also in apple and pear orchards (Bajwa and AliNiazee 2001, Horton et al. 2001, Horton et al. 2002).

Trend in extent, area or quality?: Stable

Justification for trend

This species lives in various habitat types and seems to be tolerant to human disturbance.

Habitat importance: Major Importance

Habitats:

- 1.4. Forest Temperate
- 3.4. Shrubland Temperate
- 4.4. Grassland Temperate
- 5.4. Wetlands (inland) Bogs, Marshes, Swamps, Fens, Peatlands
- 14.3. Artificial/Terrestrial Plantations
- 14.5. Artificial/Terrestrial Urban Areas

## Ecology

Size: 4.2 - 6.1 mm

Generation length (yr): 1

Dependency of single sp?: No

Ecology and traits (narrative)

Salticids are cursorial hunters with a significantly acute vision with which they stalk or chase their prey. *P. aeneola* makes a retreat in, for example, rolled leafs. They also make tube-like web retreats among dead leaves with openings often at both ends. If the spider is disturbed it holds the sheets together. Mature individuals have been observed in April, males being present until June and females until September. Females lay about fifty eggs in May and not more than two cocoons. The egg-cocoon of *P. aeneola* is flat with yellowish eggs which are kept in the silken tube retreat. Hatchlings stay inside until they molt for the second time. Juveniles are found throughout the year (Curtis 1892).

# Threats

Threat type: Past

### Threats:

- 12. Other options - Other threat

Justification for threats

No known threats.

## Conservation

Conservation action type: In Place

**Conservation actions:** 

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

### Justification for conservation actions

There are several protected areas within the range of this species (UNEP-WCMC and IUCN 2017).

## Other

Use type: International

Use and trade:

- 18. Unknown

Ecosystem service type: Very important

Ecosystem services:

- 12. Biocontrol

### Justification for ecosystem services

In orchards *P. aeneola* probably plays an important role providing ecosystem services for humans by preying on pest insects.

### Research needed:

- 3.1. Monitoring - Population trends

- 3.4. Monitoring - Habitat trends

Justification for research needed

Monitoring is needed to confirmed inferred population and habitat trends.

# Pharacocerus fagei Berland & Millot, 1941

# Species information

#### Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Arachnida	Araneae	Salticidae

### Region for assessment:

- Global

## Geographic range

Biogeographic realm:

- Afrotropical

### Countries:

- Guinea
- Guinea-Bissau
- Mali
- Senegal
- Sierra Leone
- Liberia
- Burkina Faso
- Côte d'Ivoire
- Ghana

### Map of records (Google Earth):

Suppl. material 45

Basis of EOO and AOO: Species Distribution Model

Basis (narrative)

Given the relatively high number of records, although all pre-1940 (Berland and Millot 1941) it was possible to perform species distribution modelling (see methods for details).

Min Elevation/Depth (m): 0

Max Elevation/Depth (m): 1483

### Range description

This species has been recorded from Mali, Guinea and Ivory Coast (Berland and Millot 1941) and suitable habitat is predicted in other West African countries as well. Yet, it is not found for almost 80 years, which might be due to undersampling.

### Extent of occurrence

EOO (km2): 1108152

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

### Area of occupancy

AOO (km2): 533740

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

### Locations

Number of locations: Unknown

Trend: Unknown

# Population

Number of individuals: Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

Population Information (Narrative)

No population size estimates exist.

## **Subpopulations**

Number of subpopulations: Unknown

Trend: Unknown

Extreme fluctuations?: Unknown

Severe fragmentation?: Unknown

## Habitat

System: Terrestrial

Habitat specialist: Unknown

### Habitat (narrative)

The habitats within the predicted range of this species are mainly tropical and subtropical moist broadlead forests and grasslands, shrublands and savanna (Olson et al. 2001). With no reported habitat data only assumptions can be made and therefore the habitat of this species remains unknown.

Trend in extent, area or quality?: Unknown

Habitat importance: Major Importance

### Habitats:

- 18. Unknown

# Ecology

Size: 6 mm

Generation length (yr): 1

Dependency of single sp?: Unknown

Ecology and traits (narrative)

Salticids are cursorial hunters with a significantly acute vision with which they stalk or chase their prey. Otherwise the ecology of this species is unknown.

## Threats

Threat type: Past

Threats:

- 12. Other options - Other threat

Justification for threats

No known threats.

## Conservation

Conservation action type: In Place

### **Conservation actions:**

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

### Justification for conservation actions

At least part of the species range is inside protected areas (UNEP-WCMC and IUCN 2017).

## Other

Use type: International

Use and trade:

- 18. Unknown

Ecosystem service type: Very important

Research needed:

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

Justification for research needed

Basic research is needed to know the current distribution and population size and trends, ecology and traits of the species, along with possible threats.

# Phidippus workmani Peckham & Peckham, 1901

## Species information

### Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Arachnida	Araneae	Salticidae

### Region for assessment:

- Global

## Geographic range

Biogeographic realm:

- Nearctic

Countries:

- United States

Map of records (Google Earth):

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Basis of EOO and AOO: Species Distribution Model

**Basis (narrative)** 

Given the relatively high number of records (Peckham and Peckham 1909, Richman and Roth 1976, Edwards 1978, Edwards 2004) it was possible to perform species distribution modelling (see methods for details).

Min Elevation/Depth (m): 0

Max Elevation/Depth (m): 2230

**Range description** 

The latest record is from the 1990s (Edwards 2004) and there are several records from the SE parts of the United States, particularly in Florida and Georgia (Peckham and Peckham 1909, Richman and Roth 1976, Edwards 1978).

### Extent of occurrence

EOO (km2): 3549386

Trend: Stable

Justification for trend

Being a widespread species with no known theats we assume the trend to be stable.

Causes ceased?: Yes

Causes understood?: Yes

Causes reversible?: Yes

### Area of occupancy

AOO (km2): 222180

Trend: Stable

Justification for trend

Being a widespread species with no known theats we assume the trend to be stable.

Causes ceased?: Yes

Causes understood?: Yes

Causes reversible?: Yes

## Locations

Number of locations: Not applicable

Justification for number of locations

No known threats to the species.

Trend: Stable

### Population

Number of individuals: Unknown

Trend: Stable

Causes ceased?: Yes

Causes understood?: Yes

Causes reversible?: Yes

**Population Information (Narrative)** 

No population size estimates exist. Being a widespread species with no known theats we assume the trend to be stable.

### **Subpopulations**

Number of subpopulations: Unknown

Trend: Stable

Justification for trend

Being a widespread species with no known theats we assume the trend to be stable.

## Habitat

System: Terrestrial

Habitat specialist: No

Habitat (narrative)

This species has been recorded from timbered sandpine scrubs (Edwards 1978), xeric woods from dead barks, okra from shrubs, turkey oak and wire grass (Edwards 2004).

Trend in extent, area or quality?: Stable

Justification for trend

Xeric habitats have actually been reported to be increasing across the species range (United States Department of Agriculture 2003).

Habitat importance: Major Importance

Habitats:

- 3.4. Shrubland - Temperate - 3.5. Shrubland - Subtropical/Tropical Dry

### Ecology

Size: 5.9 - 8.6 mm

Generation length (yr): 1

Dependency of single sp?: No

Ecology and traits (narrative)

Salticids are cursorial hunters with a significantly acute vision with which they stalk or chase their prey. This particular species has been collected from xeric habitats, scrub or sandhill habitats. It was observed in the early stages of succession on woody herbs and small scrub oaks. Mature individuals are present in summer, females until fall, laying about 30 eggs (Edwards 2004).

### Threats

Threat type: Past

Threats:

- 12. Other options - Other threat

Justification for threats

No known threats.

# Conservation

Conservation action type: In Place

**Conservation actions:** 

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

Justification for conservation actions

Part of the range of this species is protected (UNEP-WCMC and IUCN 2017).

## Other

Use type: International

Use and trade:

- 18. Unknown

Ecosystem service type: Very important

**Research needed:** 

- 3.1. Monitoring Population trends
- 3.4. Monitoring Habitat trends

Justification for research needed

Monitoring is needed to confirm inferred population and habitat trends.

# Plexippus clemens (O. Pickard-Cambridge, 1872)

# Species information

### Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Arachnida	Araneae	Salticidae

### Region for assessment:

- Global

## Geographic range

Biogeographic realm:

- Palearctic

**Countries:** 

- Saudi Arabia
- Afghanistan
- Lebanon
- Cyprus
- Syrian Arab Republic
- Iraq
- United Arab Emirates
- Iran, Islamic Republic of
- Oman
- Pakistan
- Israel
- Jordan
- Viet Nam
- Bangladesh
- Bhutan
- Thailand
- Nepal
- Lao People's Democratic Republic
- Yemen
- Turkey
- Azerbaijan
- India
- Myanmar
- Djibouti
- Eritrea
- Ethiopia
- Somalia
- Sudan
- Uganda
- Kenya
- Egypt
- China

Map of records (Google Earth):

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Basis of EOO and AOO: Species Distribution Model

Basis (narrative)

Given the relatively high number of records (Pickard-Cambridge 1872, Prószyński 1984, Żabka 1990, Song et al. 1999, Peng and Li 2003, Prószyński 2003, Wesołowska and van Harten 2007, Logunov 2010, Coşar et al. 2014, El-Hennawy et al. 2015) it was possible to perform species distribution modelling (see methods for details).

Min Elevation/Depth (m): 0

Max Elevation/Depth (m): 4684

Range description

This species should be present across northeastern Africa and southern Asia (Pickard-Cambridge 1872, Prószyński 1984, Żabka 1990, Song et al. 1999, Peng and Li 2003, Prószyński 2003, Wesołowska and van Harten 2007, Logunov 2010, Coşar et al. 2014, El-Hennawy et al. 2015).

### Extent of occurrence

EOO (km2): 27505132

Trend: Stable

Justification for trend

Being a widespread species with no known threats we assume the trend to be stable.

Causes ceased?: Yes

Causes understood?: Yes

Causes reversible?: Yes

### Area of occupancy

AOO (km2): 12340052

Trend: Stable

Justification for trend

Being a widespread species with no known threats we assume the trend to be stable.

Causes ceased?: Yes

Causes understood?: Yes

Causes reversible?: Yes

### Locations

Number of locations: Not applicable

Justification for number of locations

No known threats to the species.

Trend: Stable

### Population

Number of individuals: Unknown

Trend: Stable

Causes ceased?: Yes

Causes understood?: Yes

Causes reversible?: Yes

**Population Information (Narrative)** 

No population size estimates exist. This species is relatively well-recorded and widespread from East Africa to Asia and therefore population trend should be stable.

### **Subpopulations**

Number of subpopulations: Unknown

Trend: Stable

Justification for trend

Being a widespread species with no known threats we assume the trend to be stable.

### Habitat

System: Terrestrial

Habitat specialist: No

Habitat (narrative)

This species has been recorded on short reeds and in reedclump reeds near marsh streams (Logunov 2010), on low plants on the plains (Pickard-Cambridge 1872) and from tomato cultivations (EI-Hennawy et al. 2015).

Trend in extent, area or quality?: Stable

Justification for trend

This species seems to be able to inhabit different kinds of habitats including modified by humans.

Habitat importance: Major Importance

Habitats:

- 4.4. Grassland Temperate
- 4.5. Grassland Subtropical/Tropical Dry
- 14.1. Artificial/Terrestrial Arable Land
- 14.3. Artificial/Terrestrial Plantations

# Ecology

Size: 4.8 - 5.6 mm

Generation length (yr): 1

Dependency of single sp?: No

Ecology and traits (narrative)

Salticids are cursorial hunters with a significantly acute vision with which they stalk or chase their prey. A related species, *P. paykulli*, has been observed to build a nest which it uses in prey capture and detaining the prey. In mating behaviour males use tactics from visual displays to vibratory displays depending on the maturity and the location of the female (Jackson and Macnab 1989).

# Threats

Threat type: Past

Threats:

- 12. Other options - Other threat

Justification for threats

No known threats.

## Conservation

Conservation action type: In Place

**Conservation actions:** 

- 1.1. Land/water protection - Site/area protection

- 1.2. Land/water protection - Resource & habitat protection

Justification for conservation actions

There are several protected areas within the range of this species (UNEP-WCMC and IUCN 2017).

## Other

Use type: International

Use and trade:

- 18. Unknown

Ecosystem service type: Very important

**Ecosystem services:** 

- 12. Biocontrol

Justification for ecosystem services

In cultivations *P. clemens* probably plays an important role providing ecosystem services for humans by preying on pests.

Research needed:

- 3.1. Monitoring Population trends
- 3.4. Monitoring Habitat trends

Justification for research needed

Monitoring is needed to confirm inferred population and habitat trends.

# Pristobaeus clarus (Roewer, 1938)

# Species information

### Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Arachnida	Araneae	Salticidae

### **Region for assessment:**

- Global

## Geographic range

Biogeographic realm:

- Indomalayan

## **Countries:**

- Indonesia

Map of records (Google Earth):

Suppl. material 48

Basis of EOO and AOO: Unknown

Basis (narrative)

Unknown EOO or AOO.

Min Elevation/Depth (m): 0

Max Elevation/Depth (m): 0

Range description

Only known from the type locality of Noemi in New Guinea, recorded on 1929 (Roewer 1938).

### Extent of occurrence

EOO (km2): Unknown Trend: Unknown Causes ceased?: Unknown Causes understood?: Unknown Causes reversible?: Unknown Extreme fluctuations?: Unknown

### Area of occupancy

AOO (km2): Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

### Locations

Number of locations: Unknown

Trend: Unknown

### Population

Number of individuals: Unknown Trend: Unknown Causes ceased?: Unknown Causes understood?: Unknown Causes reversible?: Unknown Extreme fluctuations?: Unknown

## Population Information (Narrative)

No population size estimates exist.

## **Subpopulations**

Number of subpopulations: Unknown

Trend: Unknown

Extreme fluctuations?: Unknown

Severe fragmentation?: Unknown

## Habitat

System: Terrestrial

Habitat specialist: Unknown

Habitat (narrative)

The type locality is located within the ecoregion of tropical and subtropical moist broadleaf forests (Olson et al. 2001). Otherwise the preferred habitat of this species is unknown.

Trend in extent, area or quality?: Unknown

Habitat importance: Major Importance

Habitats:

- 18. Unknown

# Ecology

Size: 6.5 mm

Generation length (yr): 1

Dependency of single sp?: Unknown

Ecology and traits (narrative)

Salticids are cursorial hunters with a significantly acute vision with which they stalk or chase their prey. Otherwise the ecology of this species is unknown.

## Threats

Threat type: Past

Threats:

- 12. Other options - Other threat

Justification for threats

No known threats.

### Other

Use type: International

Use and trade:

- 18. Unknown

Ecosystem service type: Very important

**Research needed:** 

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

Justification for research needed

Basic research is needed to know the current distribution and population size and trends, ecology and traits of the species, along with possible threats.

# Rhene cancer Wesolowska & Cumming, 2008

## Species information

#### Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Arachnida	Araneae	Salticidae

Region for assessment:

- Global

# Geographic range

Biogeographic realm:

- Afrotropical

## **Countries:**

- Zimbabwe

Map of records (Google Earth):

Suppl. material 49

### Basis of EOO and AOO: Unknown

Basis (narrative)

Unknown EOO and AOO.

Min Elevation/Depth (m): 0

Max Elevation/Depth (m): 0

Range description

*Rhene cancer* has been found only once in the urban area of Harare, Zimbawe, in 2000 (Wesołowska and Cumming 2008).

## Extent of occurrence

EOO (km2): Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

### Area of occupancy

AOO (km2): Unknown Trend: Unknown Causes ceased?: Unknown Causes understood?: Unknown Causes reversible?: Unknown Extreme fluctuations?: Unknown

### Locations

Number of locations: Unknown

Trend: Unknown

### Population

Number of individuals: Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

**Population Information (Narrative)** 

No population size estimates exist.

### Subpopulations

Number of subpopulations: Unknown Trend: Unknown Extreme fluctuations?: Unknown Severe fragmentation?: Unknown

# Habitat

System: Terrestrial

Habitat specialist: Unknown

Habitat (narrative)

The single recorded specimen was found on a *Jacaranda mimosifolia* (a south American species) tree trunk, 1.3 m up, scuttling across the bark, away from the sun (Wesołowska and Cumming 2008). The native habitat is unknown.

Trend in extent, area or quality?: Unknown

Habitat importance: Major Importance

Habitats:

- 14.4. Artificial/Terrestrial - Rural Gardens

# Ecology

Size: 4.4 mm

Generation length (yr): 1

Ecology and traits (narrative)

Salticids are cursorial hunters with a significantly acute vision with which they stalk or chase their prey. The spiders of the genus *Rhene* are small beetle-like jumping spiders (Barrion and Litsinger 1995). The adult male of this species was found in spring at the end of the cold-dry season (Wesołowska and Cumming 2008).

## Threats

Threat type: Past

Threats:

- 12. Other options - Other threat

Justification for threats

No known threats.

### Other

Use type: International

Use and trade:

- 18. Unknown

Ecosystem service type: Very important

**Research needed:** 

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

Justification for research needed

Basic research is needed to know the current distribution and population size and trends, ecology and traits of the species, along with possible threats.

# Rhene hinlalakea Barrion & Litsinger, 1995

## Species information

#### Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Arachnida	Araneae	Salticidae

### Region for assessment:

- Global

### Geographic range

Biogeographic realm:

- Indomalayan

### **Countries:**

- Philippines

## Map of records (Google Earth):

Suppl. material 50

Basis of EOO and AOO: Unknown

Basis (narrative)

Unknown EOO or AOO.

Min Elevation/Depth (m): 0

Max Elevation/Depth (m): 0

Range description

This species is known only from the type locality in San Antonio village, Ormoc, Leyte Island, Philippines and has been collected only once in 1985 (Barrion and Litsinger 1995).

# Extent of occurrence

EOO (km2): Unknown Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

# Area of occupancy

AOO (km2): Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

# Locations

Number of locations: Unknown

Trend: Unknown

### Population

Number of individuals: Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

**Population Information (Narrative)** 

No population size estimates exist.

### **Subpopulations**

Number of subpopulations: Unknown

Trend: Unknown

Extreme fluctuations?: Unknown

Severe fragmentation?: Unknown

### Habitat

System: Terrestrial

Habitat specialist: Unknown

### Habitat (narrative)

This species was collected only once and the habitat description mentioned "drained and weedy lowland rice." This habitat is increasing in area and extent (Barrion and Litsinger 1995). However, it is unknown if this is its preferred habitat rather than a habitat type on which it was incidentally discovered.

Trend in extent, area or quality?: Unknown

Habitat importance: Suitable

Habitats:

- 14.3. Artificial/Terrestrial - Plantations

# Ecology

Size: 6.85 mm

Generation length (yr): 1

Dependency of single sp?: Unknown

Ecology and traits (narrative)

Salticids are cursorial hunters with a significantly acute vision with which they stalk or chase their prey. The spiders of the genus *Rhene* are small beetle-like jumping spiders (Barrion and Litsinger 1995). More research is needed on this species to know anything else about its ecology.

## Threats

Threat type: Past

Threats:

- 12. Other options - Other threat

Justification for threats

No known threats.

## Conservation

Conservation action type: In Place

## Other

Use type: International

Use and trade:

- 18. Unknown

Ecosystem service type: Very important

Research needed:

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

Justification for research needed

Basic research is needed to know the current distribution and population size and trends, ecology and traits of the species, along with possible threats.

# Rhene ipis Fox, 1937

## Species information

### Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Arachnida	Araneae	Salticidae

### Region for assessment:

- Global

## Geographic range

Biogeographic realm:

- Palearctic

**Countries:** 

- China

Map of records (Google Earth):

Suppl. material 51

Basis of EOO and AOO: Unknown

Basis (narrative)

Unknown EOO and AOO.

Min Elevation/Depth (m): 0

Max Elevation/Depth (m): 0

Range description

This species has been recorded only from three localities in Szechwan (Sichuan) Province, China, recorded in 1929 (Fox 1937).

# Extent of occurrence

EOO (km2): Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

# Area of occupancy

AOO (km2): Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

## Locations

Number of locations: Unknown Trend: Unknown

### Population

Number of individuals: Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

**Population Information (Narrative)** 

No population size estimates exist.

### **Subpopulations**

Number of subpopulations: Unknown

Trend: Unknown

Extreme fluctuations?: Unknown

Severe fragmentation?: Unknown

#### Habitat

System: Terrestrial

Habitat specialist: Unknown

Habitat (narrative)

Specimens were collected at the altitude of 3500 ft (Fox 1937), otherwise the preferred habitat of this species is unknown.

Trend in extent, area or quality?: Unknown

Habitat importance: Major Importance

Habitats:

- 18. Unknown

# Ecology

Size: 5.7 mm

Generation length (yr): 1

Dependency of single sp?: Unknown

Ecology and traits (narrative)

Salticids are cursorial hunters with a significantly acute vision with which they stalk or chase their prey. The spiders of the genus *Rhene* are small beetle-like jumping spiders (Barrion and Litsinger 1995).

# Threats

Threat type: Past

Threats:

- 12. Other options - Other threat

Justification for threats

No known threats.

# Other

Use type: International

Use and trade:

- 18. Unknown

Ecosystem service type: Very important

Research needed:

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

# Justification for research needed

Basic research is needed to know the current distribution and population size and trends, ecology and traits of the species, along with possible threats.

# Salticus tricinctus (C. L. Koch, 1846)

### Species information

### Synonyms

*Calliethera tricincta* C. L. Koch, 1846; *Calliethera tenuimana* Simon, 1889; *Salticus tenuimanus* (Simon, 1989); *Salticus marenzelleri* Nosek, 1905; *Salticus simillimus* Denis, 1958

### Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Arachnida	Araneae	Salticidae

#### Region for assessment:

- Global

### Geographic range

#### Biogeographic realm:

- Palearctic

### **Countries:**

- Uzbekistan
- Palestinian Territory, Occupied
- Afghanistan
- Cyprus
- Syrian Arab Republic
- Tajikistan
- Turkmenistan
- Iraq
- Iran, Islamic Republic of
- Israel
- Jordan
- Kazakhstan
- Kyrgyzstan
- Georgia
- Turkey
- Armenia

- Azerbaijan
- Egypt
- Russian Federation
- China

Basis of EOO and AOO: Species Distribution Model

### Basis (narrative)

Given the relatively high number of records (Koch 1846, Pickard-Cambridge 1876, Simon 1889, Nosek 1905, Denis 1958, Logunov 1992, Wesolowska 1996, Logunov and Rakov 1998, Logunov and Guseinov 2002, Prószyński 2003, Marusik et al. 2004, Abdurakhmanov and Alieva 2009, Topchiyeva et al. 2011, Logunov et al. 2013, Logunov 2015) it was possible to perform species distribution modelling (see methods for details, Suppl. material 52).

Min Elevation/Depth (m): 0

Max Elevation/Depth (m): 5401

### **Range description**

This species is relatively well-recorded and should be widespread throughout southwest and central Asia (Koch 1846, Pickard-Cambridge 1876, Simon 1889, Nosek 1905, Denis 1958, Logunov 1992, Wesolowska 1996, Logunov and Rakov 1998, Logunov and Guseinov 2002, Prószyński 2003, Marusik et al. 2004, Abdurakhmanov and Alieva 2009, Topchiyeva et al. 2011, Logunov et al. 2013, Logunov 2015).

## Extent of occurrence

EOO (km2): 5834558

Trend: Stable

Justification for trend

Being a widespread species with no known threats we assume the trend to be stable.

Causes ceased?: Yes

Causes understood?: Yes

Causes reversible?: Yes

## Area of occupancy

AOO (km2): 3317740

#### Trend: Stable

Justification for trend

Being a widespread species with no known threats we assume the trend to be stable.

Causes ceased?: Yes

Causes understood?: Yes

Causes reversible?: Yes

### Locations

Number of locations: Not applicable

Justification for number of locations

No known threats to the species.

Trend: Stable

### Population

Number of individuals: Unknown

Trend: Stable

Causes ceased?: Yes

Causes understood?: Yes

Causes reversible?: Yes

**Population Information (Narrative)** 

No population size estimates exist. Being a widespread species with no known threats we assume the trend to be stable.

### **Subpopulations**

Number of subpopulations: Unknown

Trend: Stable

Justification for trend

Being a widespread species with no known threats we assume the trend to be stable.

# Habitat

System: Terrestrial

Habitat specialist: No

Habitat (narrative)

Known from dry habitats such as sandy deserts (Wesolowska 1996), semideserts (Logunov and Guseinov 2002), shrubs and subalpine meadows under stones and gravely bank (Marusik et al. 2004) and even from habitats close to the water (Logunov 2015).

Trend in extent, area or quality?: Stable

Habitat importance: Major Importance

Habitats:

- 3.4. Shrubland Temperate
- 4.4. Grassland Temperate
- 8.2. Desert Temperate

# Ecology

Size: 5 - 6 mm

Generation length (yr): 1

Dependency of single sp?: No

Ecology and traits (narrative)

Salticids are cursorial hunters with a significantly acute vision with which they stalk or chase their prey. The hunting behaviour of a species of the same genus, *Salticus scenicus*, has been studied. It detects its prey with its lateral eyes and then orientates towards a moving prey. When the spider starts to approach its prey its stalking velocity declines gradually (Almquist 2006).

# Threats

Threat type: Past
#### Threats:

- 12. Other options - Other threat

Justification for threats

No known threats.

#### Conservation

Conservation action type: In Place

**Conservation actions:** 

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

#### Justification for conservation actions

There are several protected areas within the predicted range of this species (UNEP-WCMC and IUCN 2017).

#### Other

Use type: International

Use and trade:

- 18. Unknown

Ecosystem service type: Very important

**Research needed:** 

- 3.1. Monitoring Population trends
- 3.4. Monitoring Habitat trends

Justification for research needed

Monitoring is needed to confirm inferred population and habitat trends.

# Sidusa cambridgei (Chickering, 1946)

## Species information

#### Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Arachnida	Araneae	Salticidae

#### Region for assessment:

- Global

## Geographic range

#### Biogeographic realm:

- Neotropical

#### **Countries:**

- Haiti
- Dominican Republic
- Panama
- Costa Rica

Map of records (Google Earth):

Suppl. material 53

Basis of EOO and AOO: Species Distribution Model

Basis (narrative)

Given the relatively high number of records (Bryant 1943, Chickering 1946, De los Santos and Alayón 2012) it was possible to perform species distribution modelling (see methods for details).

Min Elevation/Depth (m): 0

Max Elevation/Depth (m): 3732

#### Range description

This species has been recorded from the Dominican Republic in 1938 and Boquete, Panama in 1939 (Bryant 1943, Chickering 1946, De los Santos and Alayón 2012). The SDMs predict the existence of adequate habitat also in Costa Rica and Haiti.

## Extent of occurrence

EOO (km2): 669596 Trend: Unknown Causes ceased?: Unknown Causes understood?: Unknown Causes reversible?: Unknown Extreme fluctuations?: Unknown

## Area of occupancy

AOO (km2): 92032

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

## Locations

Number of locations: Unknown

Trend: Unknown

## Population

Number of individuals: Unknown Trend: Unknown Causes ceased?: Unknown Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

Population Information (Narrative)

No population size estimates exist.

## **Subpopulations**

Number of subpopulations: Unknown

Trend: Unknown

Extreme fluctuations?: Unknown

Severe fragmentation?: Unknown

#### Habitat

System: Terrestrial

Habitat specialist: Unknown

#### Habitat (narrative)

The most widespread habitat in Costa Rica, Panama and Hispaniola island is tropical and subtropical moist and dry broadleaf forest (Olson et al. 2001). Otherwise the preferred habitat of this species is unknown.

Trend in extent, area or quality?: Unknown

Habitat importance: Major Importance

Habitats:

- 18. Unknown

## Ecology

Size: 4.58 mm

Generation length (yr): 1

Dependency of single sp?: No

#### Ecology and traits (narrative)

Salticids are cursorial hunters with a significantly acute vision with which they stalk or chase their prey. Ecology of this particular species is unknown.

## Threats

Threat type: Past

#### Threats:

- 12. Other options - Other threat

Justification for threats

No known threats.

#### Other

Use type: International

Use and trade:

- 18. Unknown

Ecosystem service type: Very important

#### **Research needed:**

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

#### Justification for research needed

Since the available data is scarce and almost 100 years old, more basic research is needed to know the current distribution in more detail. More information is also required on population size and trends, ecology and traits of the species, along with possible threats.

# Synagelides gosainkundicus Bohdanowicz, 1987

## Species information

#### Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Arachnida	Araneae	Salticidae

#### **Region for assessment:**

- Global

## Geographic range

#### Biogeographic realm:

- Palearctic

**Countries:** 

- Nepal

Map of records (Google Earth):

Suppl. material 54

## Basis of EOO and AOO: Unknown

Basis (narrative)

Unknown EOO or AOO.

Min Elevation/Depth (m): 0

Max Elevation/Depth (m): 0

#### Range description

Known only from the type locality in Rasuwa District in Nepal, recorded in 1973 (Bohdanowicz 1987).

## Extent of occurrence

EOO (km2): Unknown Trend: Unknown Causes ceased?: Unknown Causes understood?: Unknown Causes reversible?: Unknown Extreme fluctuations?: Unknown

## Area of occupancy

AOO (km2): Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

## Locations

Number of locations: Unknown

Trend: Unknown

#### Population

Number of individuals: Unknown Trend: Unknown Causes ceased?: Unknown Causes understood?: Unknown Causes reversible?: Unknown Extreme fluctuations?: Unknown

## Population Information (Narrative)

No population size estimates exist.

## Subpopulations

Number of subpopulations: Unknown

Trend: Unknown

Extreme fluctuations?: Unknown

Severe fragmentation?: Unknown

## Habitat

System: Terrestrial

Habitat specialist: Unknown

Habitat (narrative)

The type locality suggests this species may prefer mountainous habitats at high altitudes (Bohdanowicz 1987). Otherwise the preferred habitat type of this species remains unknown.

Trend in extent, area or quality?: Unknown

Habitat importance: Major Importance

Habitats:

- 18. Unknown

## Ecology

Size: Unknown

Generation length (yr): 1

Dependency of single sp?: Unknown

#### Ecology and traits (narrative)

Salticids are cursorial hunters with a significantly acute vision with which they stalk or chase their prey. Otherwise the ecology of this particular species is unknown.

## Threats

Threat type: Past

Threats:

- 12. Other options - Other threat

Justification for threats

No known threats.

## Conservation

Conservation action type: In Place

**Conservation actions:** 

- 1.1. Land/water protection Site/area protection
- 2.1. Land/water management Site/area management

Justification for conservation actions

The type locality for this species is inside the Lang Tang National Park in Nepal and it is managed by the Department of National Parks and Wildlife Conservation (DNPWC)(UNEP-WCMC and IUCN 2017).

#### Other

Use type: International

Use and trade:

- 18. Unknown

Ecosystem service type: Very important

Research needed:

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

#### Justification for research needed

Basic research is needed to know the current distribution and population size and trends, ecology and traits of the species, along with possible threats.

## Synemosyna aurantiaca (Mello-Leitão, 1917)

## Species information

#### Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Arachnida	Araneae	Salticidae

#### Region for assessment:

- Global

## Geographic range

Biogeographic realm:

- Neotropical

#### Countries:

- Brazil
- Colombia
- Argentina

Map of records (Google Earth):

Suppl. material 55

Basis of EOO and AOO: Unknown

**Basis (narrative)** 

Unknown EOO or AOO. The very few records are widespread throughout South America.

Min Elevation/Depth (m): 0

Max Elevation/Depth (m): 0

#### **Range description**

This species is known from Colombia, Brazil and Argentina, always from areas relatively close to the coast. In Colombia, it was reported in Magdalena, Tayrona National Park in 1991 (Cutler and Müller 1991). In Brazil, it was reported in Pinheiro in 1966 (Galiano 1966). In Argentina, it was reported in an island of the Parana Delta in 1966 (Galiano 1966).

## Extent of occurrence

EOO (km2): Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

## Area of occupancy

AOO (km2): Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

## Locations

Number of locations: Unknown

Trend: Unknown

## Population

Number of individuals: Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

Population Information (Narrative)

No population size estimates exist.

## **Subpopulations**

Number of subpopulations: Unknown

Trend: Unknown

Extreme fluctuations?: Unknown

Severe fragmentation?: Unknown

## Habitat

System: Terrestrial

Habitat specialist: Unknown

Habitat (narrative)

This species was found on the herb layer in drought deciduous forest in Colombia (Cutler and Müller 1991). For Brazil and Argentina no habitat data have been reported.

Trend in extent, area or quality?: Unknown

Habitat importance: Major Importance

Habitats:

- 1.5. Forest - Subtropical/Tropical Dry

## Ecology

Size: 6 mm

Generation length (yr): 1

Dependency of single sp?: Unknown

#### Ecology and traits (narrative)

Salticids are cursorial hunters with a significantly acute vision with which they stalk or chase their prey.

#### Threats

Threat type: Past

Threats:

- 12. Other options - Other threat

Justification for threats

No known threats to the species.

#### Conservation

Conservation action type: In Place

**Conservation actions:** 

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

Conservation action type: Needed

Justification for conservation actions

At least part of the species range is inside protected areas, namely the Delta del Parana UNESCO-MAB Biosphere Reserve in Argentina and Tayrona Natural National Park in Colombia (UNEP-WCMC and IUCN 2017).

#### Other

Use type: International

Use and trade:

- 18. Unknown

Ecosystem service type: Very important

Research needed:

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

## Justification for research needed

Basic research is needed to know the current distribution and population size and trends, ecology and traits of the species, along with possible threats.

## Tauala minutus Wanless, 1988

## Species information

#### Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Arachnida	Araneae	Salticidae

#### Region for assessment:

- Global

## Geographic range

Biogeographic realm:

- Australasian

**Countries:** 

- Australia

Basis of EOO and AOO: Unknown

Basis (narrative)

Unknown EOO or AOO (Suppl. material 56).

Min Elevation/Depth (m): 0

Max Elevation/Depth (m): 0

#### Range description

Known only from the type locality Murray Island, between Australia and Papua New Guinea, recorded in 1974 (Wanless 1988).

## Extent of occurrence

EOO (km2): Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

## Area of occupancy

AOO (km2): Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

#### Locations

Number of locations: Unknown

Justification for number of locations

Unknown.

Trend: Unknown

#### Population

Number of individuals: Unknown

Trend: Unknown Causes ceased?: Unknown Causes understood?: Unknown Causes reversible?: Unknown Extreme fluctuations?: Unknown Population Information (Narrative) No population size estimates exist.

## **Subpopulations**

Number of subpopulations: Unknown Trend: Unknown Extreme fluctuations?: Unknown Severe fragmentation?: Unknown

#### Habitat

System: Terrestrial

Habitat specialist: Unknown

Habitat (narrative)

This species was found from tropical forest litter only (Wanless 1988).

Trend in extent, area or quality?: Unknown

Habitat importance: Major Importance

Habitats:

- 1.6. Forest - Subtropical/Tropical Moist Lowland

## Ecology

Size: 2.5 - 3.6 mm Generation length (yr): 1 Dependency of single sp?: Unknown

#### Ecology and traits (narrative)

Salticids are cursorial hunters with a significantly acute vision with which they stalk or chase their prey. Otherwise, the ecology of this species is unknown.

## Threats

Threat type: Past

#### Threats:

- 12. Other options - Other threat

Justification for threats

No known threats.

#### Other

Use type: International

Use and trade:

- 18. Unknown

Ecosystem service type: Very important

#### **Research needed:**

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

#### Justification for research needed

Basic research is needed to know the current distribution and population size and trends, ecology and traits of the species, along with possible threats.

# Thyene australis Peckham & Peckham, 1903

## Species information

#### Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Arachnida	Araneae	Salticidae

#### Region for assessment:

- Global

## Geographic range

#### Biogeographic realm:

- Afrotropical

#### **Countries:**

- Zambia
- Zimbabwe
- Rwanda
- Burundi
- Congo, The Democratic Republic of the
- Tanzania, United Republic of
- Uganda
- Kenya
- South Africa

Map of records (Google Earth):

Suppl. material 57

Basis of EOO and AOO: Species Distribution Model

#### Basis (narrative)

Given the relatively high number of records (Peckham and Peckham 1903, De Lessert 1927, Wesołowska and Cumming 2008) it was possible to perform species distribution modelling (see methods for details).

Min Elevation/Depth (m): 14

#### Max Elevation/Depth (m): 3543

#### **Range description**

This species has been observed 19 times between 1999 and 2007 in Zimbabwe and it is also known from Congo and South Africa (Wesołowska and Cumming 2008). The species distribution model predicts there is suitable habitat also in several other African countries.

#### Extent of occurrence

EOO (km2): 3072042

Trend: Stable

Justification for trend

Widespread species with no known threats.

Causes ceased?: Yes

Causes understood?: Yes

Causes reversible?: Yes

#### Area of occupancy

AOO (km2): 543776

Trend: Stable

Justification for trend

Widespread species with no known threats.

Causes ceased?: Yes

Causes understood?: Yes

Causes reversible?: Yes

#### Locations

Number of locations: Not applicable

Justification for number of locations

No known threats to the species.

Trend: Stable

Justification for trend

Widespread species with no known threats.

## Population

Number of individuals: Unknown

Trend: Stable

Justification for trend

Widespread species with no known threats.

Causes ceased?: Yes

Causes understood?: Yes

Causes reversible?: Yes

**Population Information (Narrative)** 

No population size estimates exist.

#### **Subpopulations**

Number of subpopulations: Unknown

Trend: Stable

Justification for trend

Widespread species with no known threats.

## Habitat

System: Terrestrial

Habitat specialist: Unknown

Habitat (narrative)

This species has been reported mainly on tall trees of several species including on the leaves of *Erythrina* trees and less commonly on shrubs & grasses (Wesołowska and Cumming 2008).

Trend in extent, area or quality?: Stable

Justification for trend

This species is not restricted to any particular habitats and can be found not only from forests but also from shrubs and grasslands.

Habitat importance: Major Importance

Habitats:

- 1.5. Forest - Subtropical/Tropical Dry

Habitat importance: Suitable

Habitats:

- 3.5. Shrubland - Subtropical/Tropical Dry

- 4.5. Grassland - Subtropical/Tropical Dry

#### Ecology

Size: 5.7 - 6.8 mm

Generation length (yr): 1

Dependency of single sp?: Unknown

Ecology and traits (narrative)

Salticids in general are cursorial hunters with a significantly acute vision with which they stalk or chase their prey. Adults of this species have been reported to balloon down from tall trees. According to Wesołowska and Cumming (2008), this species was commonly observed on Acacia trees. This species tends to slither rapidly backwards whilst facing forwards when it is threatened. *T. australensis* builds a dense opaque retreat on the ventral surface of leafs. In middle winter the spiderlings were observed ballooning from a tree and immatures occurred from June to September. Adults were present during the hot-wet season (Januray-May) (Wesołowska and Cumming 2008).

## Threats

Threat type: Past

Threats:

- 12. Other options - Other threat

Justification for threats

No known threats.

## Conservation

Conservation action type: In Place

**Conservation actions:** 

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

Justification for conservation actions

There are several protected areas, namely Magaliesberg Biosphere Reserve in South Africa and Okapi Wildlife Reserve in Congo where the species is likely to occur (UNEP-WCMC and IUCN 2017).

## Other

Use type: International

Ecosystem service type: Very important

#### Research needed:

- 3.1. Monitoring Population trends
- 3.4. Monitoring Habitat trends

#### Justification for research needed

Monitoring is needed to confirm inferred population and habitat trends.

# Titanattus paganus Chickering, 1946

## Species information

#### Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Arachnida	Araneae	Salticidae

Region for assessment:

- Global

## Geographic range

Biogeographic realm:

- Neotropical

#### **Countries:**

- Panama

Map of records (Google Earth):

Suppl. material 58

#### Basis of EOO and AOO: Unknown

Basis (narrative)

Unknown EOO or AOO.

Min Elevation/Depth (m): 0

Max Elevation/Depth (m): 0

Range description

Collected from the Canal zone forest reserve in the island of Gatun Lake in 1939 and 1934 (Chickering 1946).

#### Extent of occurrence

EOO (km2): Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

## Area of occupancy

AOO (km2): Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

#### Locations

Number of locations: Unknown

Trend: Unknown

## Population

Number of individuals: Unknown

Trend: Unknown

Causes ceased?: Unknown

Causes understood?: Unknown

Causes reversible?: Unknown

Extreme fluctuations?: Unknown

**Population Information (Narrative)** 

No population size estimates exist.

#### **Subpopulations**

Number of subpopulations: Unknown Trend: Unknown Extreme fluctuations?: Unknown Severe fragmentation?: Unknown

## Habitat

System: Terrestrial

Habitat specialist: No

Habitat (narrative)

All specimens were collected in tropical forest, but it is unknown whether it occupies other habitat types (Chickering 1946).

Trend in extent, area or quality?: Unknown

Habitat importance: Major Importance

Habitats:

- 1.6. Forest - Subtropical/Tropical Moist Lowland

## Ecology

Size: 3.78 mm

Generation length (yr): 1

Dependency of single sp?: Unknown

Ecology and traits (narrative)

Salticids are cursorial hunters with a significantly acute vision with which they stalk or chase their prey. Otherwise, the ecology of the species is unknown.

## Threats

Threat type: Past

Threats:

- 12. Other options - Other threat

Justification for threats

No known threats.

## Other

Use type: International

Use and trade:

- 18. Unknown

Ecosystem service type: Very important

Research needed:

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

Justification for research needed

Basic research is needed to know the current distribution and population size and trends, ecology and traits of the species, along with possible threats.

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## Supplementary materials

#### Suppl. material 1: Distribution of Oecobius rivula Shear, 1970 doi

Authors: Cardoso, P. Data type: Distribution Filename: Oecobius rivula Shear, 1970.kml - <u>Download file</u> (4.04 kb)

# Suppl. material 2: Distribution of *Oecobius trimaculatus* O. Pickard-Cambridge, 1872

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#### Suppl. material 3: Distribution of Caecoonops cubitermitis Benoit, 1964 doi

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#### Suppl. material 4: Distribution of Oonopinus aurantiacus Simon, 1893 doi

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#### Suppl. material 5: Distribution of Oonops tectulus Chickering, 1970 doi

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#### Suppl. material 6: Distribution of Scaphidysderina napo Platnick & Dupérré, 2011 doi

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#### Suppl. material 7: Distribution of Scaphiella tena Platnick & Dupérré, 2010 doi

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#### Suppl. material 8: Distribution of Tapinesthis inermis (Simon, 1882) doi

Authors: Cardoso, P. Data type: Distribution Filename: Tapinesthis inermis (Simon, 1882).kml - <u>Download file</u> (132.16 kb)

#### Suppl. material 9: Distribution of Xyccarph myops Brignoli, 1978 doi

Authors: Cardoso, P. Data type: Distribution Filename: Xyccarph myops Brignoli, 1978.kml - <u>Download file</u> (11.40 kb)

#### Suppl. material 10: Distribution of Maoriata magna (Forster, 1956) doi

Authors: Cardoso, P. Data type: Distribution Filename: Maoriata magna (Forster, 1956).kml - <u>Download file</u> (256.97 kb)

# Suppl. material 11: Distribution of *Tasmanoonops hickmani* Forster & Platnick, 1985

Authors: Cardoso, P. Data type: Distribution Filename: Tasmanoonops hickmani Forster & Platnick, 1985.kml - Download file (4.04 kb)

#### Suppl. material 12: Distribution of Hamataliwa cordata Zhang, Zhu & Song, 2005 doi

Authors: Cardoso, P. Data type: Distribution Filename: Hamataliwa cordata Zhang, Zhu & Song, 2005.kml - <u>Download file</u> (3.94 kb)

#### Suppl. material 13: Distribution of Boagrius pumilus Simon, 1893 doi

Authors: Cardoso, P. Data type: Distribution Filename: Boagrius pumilus.kml - <u>Download file</u> (17.50 kb)

#### Suppl. material 14: Distribution of Philodromus gertschi Schick, 1965 doi

Authors: Cardoso, P. Data type: Distribution Filename: Philodromus gertschi Schick, 1965.kml - <u>Download file</u> (17.08 kb)

#### Suppl. material 15: Distribution of Suemus tibelliformis Simon, 1909 doi

Authors: Cardoso, P.

Data type: Distribution Filename: Suemus tibelliformis Simon, 1909.kml - Download file (3.95 kb)

#### Suppl. material 16: Distribution of Belisana anhuiensis (Xu & Wang, 1984) doi

Authors: Cardoso, P. Data type: Distribution Brief description: Only the southern record representing the type locality is considered relevant. Filename: Belisana anhuiensis (Xu & Wang, 1984).kml - Download file (7.40 kb)

#### Suppl. material 17: Distribution of Carapoia fowleri Huber, 2000 doi

Authors: Cardoso, P. Data type: Distribution Filename: Carapoia fowleri Huber, 2000.kml - <u>Download file</u> (64.34 kb)

#### Suppl. material 18: Distribution of Modisimus cuadro Huber & Fischer, 2010 doi

Authors: Cardoso, P. Data type: Distribution Filename: Modisimus cuadro Huber & Fischer, 2010.kml - Download file (29.93 kb)

#### Suppl. material 19: Distribution of Pholcus jixianensis Zhu & Yu, 1983 doi

Authors: Cardoso, P. Data type: Distribution Filename: Pholcus jixianensis.kml - Download file (3.95 kb)

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Authors: Cardoso, P. Data type: Distribution Filename: Smeringopus natalensis Lawrence, 1947.kml - Download file (38.14 kb)

#### Suppl. material 21: Distribution of Spermophora jocquei Huber, 2003 doi

Authors: Cardoso, P. Data type: Distribution Filename: Spermophora jocquei Huber, 2003.kml - <u>Download file</u> (4.04 kb)

#### Suppl. material 22: Distribution of Charminus camerunensis Thorell, 1899 doi

Authors: Cardoso, P. Data type: Distribution Filename: Charminus camerunensis Thorell, 1899.kml - Download file (103.82 kb)

#### Suppl. material 23: Distribution of Dolomedes mendigoetmopasi Barrion, 1995 doi

Authors: Cardoso, P.

Data type: Distribution Filename: Dolomedes mendigoetmopasi.kml - Download file (14.32 kb)

#### Suppl. material 24: Distribution of Dolomedes tenebrosus Hentz, 1844 doi

Authors: Cardoso, P. Data type: Distribution Filename: Dolomedes tenebrosus.kml - Download file (669.42 kb)

#### Suppl. material 25: Distribution of Hygropoda longitarsis (Thorell, 1877) doi

Authors: Cardoso, P. Data type: Distribution Filename: Hygropoda longitarsis (Thorell, 1877).kml - <u>Download file</u> (7.49 kb)

#### Suppl. material 26: Distribution of Prodidomus woodleigh Platnick & Baehr, 2006 doi

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#### Suppl. material 27: Distribution of Theuma aprica Simon, 1893 doi

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# Suppl. material 28: Distribution of *Afraflacilla datuntata* (Logunov & Zamanpoore, 2005) doi

Authors: Cardoso, P. Data type: Distribution Filename: Afraflacilla datuntata.kml - <u>Download file</u> (3.94 kb)

#### Suppl. material 29: Distribution of Attulus zaisanicus (Logunov, 1998) doi

Authors: Cardoso, P. Data type: Distribution Filename: Attulus zaisanicus.kml - <u>Download file</u> (3.94 kb)

#### Suppl. material 30: Distribution of Bathippus latericius (Thorell, 1881) doi

Authors: Cardoso, P. Data type: Distribution Filename: Bathippus latericius (Thorell, 1881).kml - <u>Download file</u> (4.11 kb)

#### Suppl. material 31: Distribution of Bathippus rechingeri Kulczyn'ski, 1910 doi

Authors: Cardoso, P. Data type: Distribution

Filename: Bathippus rechingeri Kulczyn'ski, 1910.kml - Download file (4.04 kb)

#### Suppl. material 32: Distribution of Brettus celebensis (Merian, 1911) doi

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Authors: Cardoso, P. Data type: Distribution Filename: Carrhotus viduus.kml - Download file (390.57 kb)

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Authors: Cardoso, P. Data type: Distribution Filename: Corythalia tropica.kml - <u>Download file</u> (10.86 kb)

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Authors: Cardoso, P. Data type: Distribution Filename: Grayenulla australensis Zabka, 1992.kml - <u>Download file</u> (25.09 kb)

#### Suppl. material 36: Distribution of Heliophanus capicola Simon, 1901 doi

Authors: Cardoso, P. Data type: Distribution Filename: Heliophanus capicola Simon, 1901.kml - <u>Download file</u> (276.31 kb)

#### Suppl. material 37: Distribution of Helvetia stridulans Ruiz & Brescovit, 2008 doi

Authors: Cardoso, P. Data type: Distribution Filename: Helvetia stridulans Ruiz & Brescovit, 2008.kml - Download file (4.13 kb)

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Authors: Cardoso, P. Data type: Distribution Filename: Jerzego bipartitus.kml - <u>Download file</u> (7.39 kb)

#### Suppl. material 39: Distribution of Menemerus mirabilis Wesolowska, 1999 doi

Authors: Cardoso, P. Data type: Distribution Filename: Menemerus mirabilis Wesolowska, 1999.kml - <u>Download file</u> (17.71 kb)

#### Suppl. material 40: Distribution of Myrmarachne bicolor (L. Koch, 1879) doi

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#### Suppl. material 42: Distirbution of Noegus petrusewiczi Caporiacco, 1947 doi

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Authors: Cardoso, P. Data type: Distribution Filename: Parahelpis abnormis (Zabka, 2002).kml - <u>Download file</u> (4.04 kb)

#### Suppl. material 44: Distribution of Pelegrina aeneola (Curtis, 1892) doi

Authors: Cardoso, P. Data type: Distribution Filename: Pelegrina aeneola (Curtis, 1892).kml - <u>Download file</u> (148.04 kb)

#### Suppl. material 45: Distribution of Pharacocerus fagei Berland & Millot, 1941 doi

Authors: Cardoso, P. Data type: Distribution Filename: Pharacocerus fagei.kml - <u>Download file</u> (532.06 kb)

#### Suppl. material 46: Distribution of *Phidippus workmani* Peckham & Peckham, 1901 doi

Authors: Cardoso, P. Data type: Distribution Filename: Phidippus workmani.kml - <u>Download file</u> (98.06 kb)

# Suppl. material 47: Distribution of *Plexippus clemens* (O. Pickard-Cambridge, 1872)

Authors: Cardoso, P. Data type: Distribution Filename: Plexippus clemens.kml - <u>Download file</u> (526.13 kb)

#### Suppl. material 48: Distribution of Pristobaeus clarus (Roewer, 1938) doi

Authors: Cardoso, P. Data type: Distribution Filename: Pristobaeus clarus .kml - <u>Download file</u> (4.11 kb)

#### Suppl. material 49: Distribution of Rhene cancer Wesolowska & Cumming, 2008 doi

Authors: Cardoso, P. Data type: Distribution Filename: Rhene cancer Wesolowska & Cumming, 2008.kml - Download file (4.04 kb)

#### Suppl. material 50: Distribution of Rhene hinlalakea Barrion & Litsinger, 1995 doi

Authors: Cardoso, P. Data type: Distribution Filename: Rhene hinlalakea Barrion & Litsinger, 1995.kml - Download file (3.95 kb)

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Authors: Cardoso, P. Data type: Distribution Filename: Rhene ipis.kml - <u>Download file</u> (10.93 kb)

#### Suppl. material 52: Distribution of Salticus tricinctus C. L. Koch, 1846 doi

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#### Suppl. material 54: Distribution of *Synagelides gosainkundicus* Bohdanowicz, 1987 doi

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#### Suppl. material 55: Distribution of Synemosyna aurantiaca (Mello-Leitão, 1917) doi

Authors: Cardoso, P. Data type: Distribution Filename: Synemosyna aurantiaca (Mello-Leitão, 1917).kml - <u>Download file</u> (11.42 kb)

#### Suppl. material 56: Distribution of Tauala minutus Wanless, 1988 doi

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#### Suppl. material 57: Distribution of Thyene australis Peckham & Peckham, 1903 doi

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#### Suppl. material 58: Distribution of Titanattus paganus Chickering, 1946 doi

Authors: Cardoso, P. Data type: Distribution Filename: Titanattus paganus Chickering, 1946.kml - <u>Download file</u> (7.58 kb)