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
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 were divided taxonomically at the family level, and the families were ordered alphabetically. In this publication, we present the conservation profiles of 58 species belonging to the families 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 been 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 were divided taxonomically to the family level, and those families were ordered alphabetically. In this publication we present the conservation profiles of 58 species belonging to the families alphabetically arranged between Oecobiidae and Salticidae, which encompassed Oecobiidae, Oonopidae, Orsolobidae, Oxyopidae, Palpimanidae, Philodromidae, Plocidae, Pinyicidae, 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 georeferenced 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 exigus 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
Threat type: Threats

Use type: Use and trade

Ecosystem service type: Research needed

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 & Dupéré, 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
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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 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

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 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

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
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 legs 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| Arthropod| Arachnida| 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 Shubby 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 Nghê, 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
Species conservation profiles of a random sample of world spiders III: ...

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**

AAO (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 *Euprostenops 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. Mayotte is the oldest and smallest island (377km²) 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 surrounding 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 Afraflicilla (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, Afrallacilla 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 | Salticida |

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 conclusions 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 Duludo 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 dimorphism. 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):
Suppl. material 35

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 (Zabka 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): 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

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
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 synanthropic 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 mimic 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
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 leaves. 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 broadleaf 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):

Suppl. material 46
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 threats 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 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)

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):

Suppl. material 47
Basis of EOO and AOO: Species Distribution Model

Basis (narrative)

Given the relatively high number of records (Pickard-Cambridge 1872, Prószynski 1984, Żabka 1990, Song et al. 1999, Peng and Li 2003, Prószynski 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, Prószynski 1984, Żabka 1990, Song et al. 1999, Peng and Li 2003, Prószynski 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 (El-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, Zimbabwe, 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 tricinta* C. L. Koch, 1846; *Calliethera tenuimana* Simon, 1889; *Salticus tenuimanus* (Simon, 1889); *Salticus marenzelleri* Nosek, 1905; *Salticus similimus* 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
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 Wesolowska 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 leaves. 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 (January-May) (Wesolowska 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
Species conservation profiles of a random sample of world spiders III: ...

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**

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

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

Authors: Cardoso, P.  
Data type: Distribution  
Filename: Oecobius trimaculatus.kml - Download file (10.85 kb)

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

Authors: Cardoso, P.  
Data type: Distribution  
Filename: Caecoonops cubitermitis Benoit, 1964.kml - Download file (4.03 kb)

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

Authors: Cardoso, P.  
Data type: Distribution  
Filename: Oonopinus aurantiacus Simon, 1893.kml - Download file (44.67 kb)

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

Authors: Cardoso, P.  
Data type: Distribution  
Filename: Oonops tectulus Chickering, 1970.kml - Download file (4.04 kb)

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

Authors: Cardoso, P.  
Data type: Distribution  
Filename: Scaphidysderina napo Platnick & Dupérré, 2011.kml - Download file (4.23 kb)

**Suppl. material 7: Distribution of *Scaphiella tena* Platnick & Dupérré, 2010**
Suppl. material 8: Distribution of *Tapinesthis inermis* (Simon, 1882)  
Authors: Cardoso, P.  
Data type: Distribution  
Filename: Tapinesthis inermis (Simon, 1882).kml - Download file (132.16 kb)

Suppl. material 9: Distribution of *Xyccarph myops* Brignoli, 1978  
Authors: Cardoso, P.  
Data type: Distribution  
Filename: Xyccarph myops Brignoli, 1978.kml - Download file (11.40 kb)

Suppl. material 10: Distribution of *Maoriata magna* (Forster, 1956)  
Authors: Cardoso, P.  
Data type: Distribution  
Filename: Maoriata magna (Forster, 1956).kml - Download file (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  
Authors: Cardoso, P.  
Data type: Distribution  
Filename: Hamataliwa cordata Zhang, Zhu & Song, 2005.kml - Download file (3.94 kb)

Suppl. material 13: Distribution of *Boagrius pumilus* Simon, 1893  
Authors: Cardoso, P.  
Data type: Distribution  
Filename: Boagrius pumilus.kml - Download file (17.50 kb)

Suppl. material 14: Distribution of *Philodromus gertschi* Schick, 1965  
Authors: Cardoso, P.  
Data type: Distribution  
Filename: Philodromus gertschi Schick, 1965.kml - Download file (17.08 kb)

Suppl. material 15: Distribution of *Suemus tibelliformis* Simon, 1909  
Authors: Cardoso, P.
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](3.95 kb)

Suppl. material 17: Distribution of *Carapoia fowleri* Huber, 2000 [doi]
Authors: Cardoso, P.
Data type: Distribution
Filename: Carapoia fowleri Huber, 2000.kml - [Download file](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)

Suppl. material 20: Distribution of *Smeringopus natalensis* Lawrence, 1947 [doi]
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 - [Download file](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.
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 - Download file (7.49 kb)

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

Authors: Cardoso, P.
Data type: Distribution
Filename: Prodidomus woodleigh Platnick & Baehr, 2006.kml - Download file (15.62 kb)

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

Authors: Cardoso, P.
Data type: Distribution
Filename: Theuma aprica Simon, 1893.kml - Download file (4.04 kb)

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

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

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

Authors: Cardoso, P.
Data type: Distribution
Filename: Attulus zaisanicus.kml - Download file (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 - Download file (4.11 kb)

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

Authors: Cardoso, P.
Data type: Distribution
Suppl. material 32: Distribution of *Brettus celebensis* (Merian, 1911) [doi]

Authors: Cardoso, P.
Data type: Distribution
Filename: Brettus celebensis (Merian, 1911).kml - Download file (4.04 kb)

Suppl. material 33: Distribution of *Carrhotus viduus* (C. L. Koch, 1846) [doi]

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

Suppl. material 34: Distribution of *Corythalia tropica* (Mello-Leitão, 1939) [doi]

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

Suppl. material 35: Distribution of *Grayenulla australensis* Zabka, 1992 [doi]

Authors: Cardoso, P.
Data type: Distribution
Filename: Grayenulla australensis Zabka, 1992.kml - Download file (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 - Download file (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)

Suppl. material 38: Distribution of *Jerzego bipartitus* (Simon, 1903) [doi]

Authors: Cardoso, P.
Data type: Distribution
Filename: Jerzego bipartitus.kml - Download file (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 - Download file (17.71 kb)
Suppl. material 40: Distribution of *Myrmarachne bicolor* (L. Koch, 1879) [doi]

Authors: Cardoso, P.
Data type: Distribution
Filename: Myrmarachne bicolor.kml - Download file (87.60 kb)

Suppl. material 41: Distribution of *Myrmarachne paviei* (Simon, 1886) [doi]

Authors: Cardoso, P.
Data type: Distribution
Filename: Myrmarachne paviei (Simon, 1886).kml - Download file (3.95 kb)

Suppl. material 42: Distribution of *Noegus petrusewiczii* Caporiacco, 1947 [doi]

Authors: Cardoso, P.
Data type: Distribution
Filename: Noegus petrusewiczii Caporiacco, 1947.kml - Download file (4.03 kb)

Suppl. material 43: Distribution of *Parahelpis abnormis* (Zabka, 2002) [doi]

Authors: Cardoso, P.
Data type: Distribution
Filename: Parahelpis abnormis (Zabka, 2002).kml - Download file (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 - Download file (148.04 kb)

Suppl. material 45: Distribution of *Pharacocerus fagei* Berland & Millot, 1941 [doi]

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

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

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

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

Authors: Cardoso, P.
Data type: Distribution
Filename: Plexippus clemens.kml - Download file (526.13 kb)
Suppl. material 48: Distribution of *Pristobaeus clarus* (Roewer, 1938)  
Authors: Cardoso, P.  
Data type: Distribution  
Filename: Pristobaeus clarus.kml - [Download file](#) (4.11 kb)

Suppl. material 49: Distribution of *Rhene cancer* Wesolowska & Cumming, 2008  
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  
Authors: Cardoso, P.  
Data type: Distribution  
Filename: Rhene hinlalakea Barrion & Litsinger, 1995.kml - [Download file](#) (3.95 kb)

Suppl. material 51: Distribution of *Rhene ipis* Fox, 1937  
Authors: Cardoso, P.  
Data type: Distribution  
Filename: Rhene ipis.kml - [Download file](#) (10.93 kb)

Suppl. material 52: Distribution of *Salticus tricinctus* C. L. Koch, 1846  
Authors: Cardoso, P.  
Data type: Distribution  
Filename: Salticus tricinctus.kml - [Download file](#) (145.46 kb)

Suppl. material 53: Distribution of *Sidusa cambridgei* (Chickering, 1946)  
Authors: Cardoso, P.  
Data type: Distribution  
Filename: Sidusa cambridgei.kml - [Download file](#) (133.61 kb)

Suppl. material 54: Distribution of *Synagelides gosainkundicus* Bohdanowicz, 1987  
Authors: Cardoso, P.  
Data type: Distribution  
Filename: Synagelides gosainkundicus Bohdanowicz, 1987.kml - [Download file](#) (3.94 kb)

Suppl. material 55: Distribution of *Synemosyna aurantiaca* (Mello-Leitão, 1917)  
Authors: Cardoso, P.  
Data type: Distribution  
Filename: Synemosyna aurantiaca (Mello-Leitão, 1917).kml - [Download file](#) (11.42 kb)
Suppl. material 56: Distribution of *Tauala minutus* Wanless, 1988 doi

Authors: Cardoso, P.
Data type: Distribution
Filename: Tauala minutus Wanless, 1988.kml - Download file (4.11 kb)

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

Authors: Cardoso, P.
Data type: Distribution
Filename: Thyene australis Peckham & Peckham, 1903.kml - Download file (64.33 kb)

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

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