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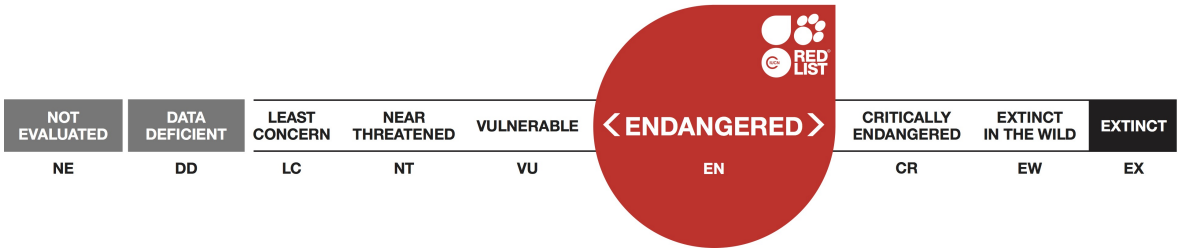
# *Philochortus zolii*

**Assessment by: Wagner, P., Wilms, T., Niagate, B., Böhme, W. & Baha El Din, S.**

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# Taxonomy

| Kingdom | Phylum | Class | Order | Family |
|---|---|---|---|---|
| Animalia | Chordata | Reptilia | Squamata | Lacertidae |

**Taxon Name:** *Philochortus zolii* Scortecci, 1934

**Taxonomic Notes:**

The taxonomy of this species, and other *Philochortus* species, needs to be reviewed (S. Baha El Din pers. comm). Schleich *et al.* (1996) indicated that the relationship between this species and West African *P. lhotei* was in need of clarification. More recently, Trape *et al*. (2012) considered West African *P. lhotei* a junior synonym of this species as its morphological characters fall within the range of variability of Egyptian *P. zolii* reported by Baha El Din (2006) (J.-F. Trape pers. comm. April 2012).

# Assessment Information

**Red List Category & Criteria:** Endangered B2ab(ii,iii) ver 3.1

**Year Published:** 2013

**Date Assessed:** July 17, 2012

**Justification:**

This species is listed as Endangered due to a small presumed area of occupancy, which is as low as 5 $km^2$ in the only site for which detailed information exists and which in total is almost certainly well below 500 $km^2$, severe fragmentation of its known (and apparently relictual) subpopulations, and a continuing decline in the quality and extent of suitable habitat due to agriculture and development in the oases where they are known. All subpopulations, but particularly the northern three, are likely to be impacted by droughts (both natural and those projected due to climate change).

**Previously Published Red List Assessments**

2006 – Critically Endangered (CR)

# Geographic Range

**Range Description:**

This species is known from five locality records widely scattered across northern Africa. It is known in Libya from two localities: the Oasis of Elbarkat (Al Barkat) 8 km south of Ghat in Fezzan (Zavattari 1937) and from near Ajedabia in western Cyrenaica (Marx 1968). In Egypt it is known from Wadi El Natrun (S. Baha El Din pers. comm); this subpopulation was previously misidentified as belonging to *P. intermedius* (S. Baha El Din pers. comm.). This account follows Trape *et al.* (2012) in considering a specimen from In Abezou in Niger (Marx 1968) and another from near Bourem in Mali (previously considered the only known representatives of *P. lhotei*) as also representing *P. zolii* (Marx 1968).

**Country Occurrence:**

**Native:** Egypt; Libya; Mali; Niger


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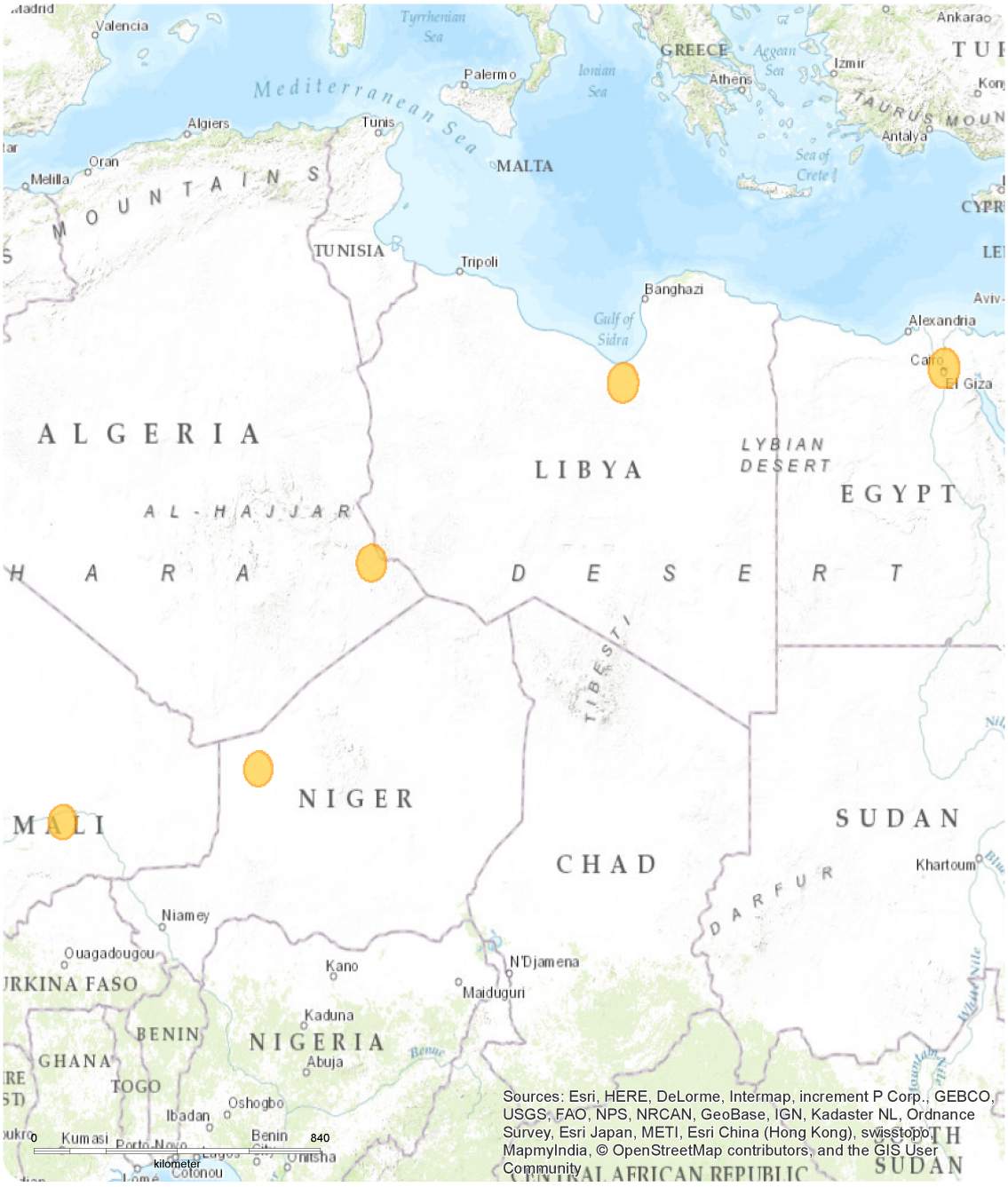
# Distribution Map



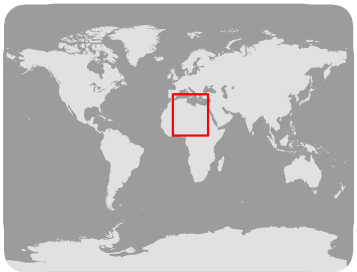

*Philochortus zolii*

NE DD LC NT VU **EN** ENDANGERED CR EW EX

Range

Extant (resident)

Compiled by:
IUCN, CI



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

This is a very rare species apparently occurring in small subpopulations, and likely to be genuinely localized around oases (P. Wagner, T. Wilms and B. Niagate pers. comms. 2012). Baha El Din (2006) reports measurements from 12 Egyptian specimens. Recent photographs taken by P. Geniez in Wadi El Natrun indicate that this lizard still occurs at the Egyptian locality (Trape *et al.* 2012), but no information on population trends at this site is available. Only one specimen is known from each of the two West African localities (Trape *et al.* 2012).

**Current Population Trend:** Decreasing

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

This lizard is found in semi-desert at the edge of oases, where it is confined to areas with Halfa grasses on sandy soil. The two known West African specimens were reported from sandy areas of the Sahara-Sahelian climatic zone with steppe vegetation (Trape *et al.* 2012). The species is not believed to be able to adapt to cultivated land. It is an egg-laying species. The northern subpopulations are most probably relictual and are expected to be confined to remaining areas with mesic conditions in an otherwise arid to hyperarid area.

**Systems:** Terrestrial

## Use and Trade (see Appendix for additional information)

There is, or has been, rare collection of this species in Egypt for the international pet trade. It may also have been collected for scientific research.

## Threats (see Appendix for additional information)

This is a highly localized species. Its extent of occurrence at the known Egyptian locality is less than 5 $km^2$; at other sites it is known from isolated specimens. It is threatened by habitat loss through land reclamation for agriculture, and through overgrazing in Egypt and presumably also in Libya. Because the three known northern populations are relictual, survivors from a period when conditions in the Sahara were less arid, they are likely to be extremely dependent on the mesic conditions provided by oases. Potential drying of the region due to droughts, potentially exacerbated by future climate change, is therefore a threat to these subpopulations. This may also be a threat to the southern populations, though little is known about their ecology.

## Conservation Actions (see Appendix for additional information)

It is not present in any protected areas. Research is urgently needed into the taxonomy, distribution, ecology and biology of this species. This species could benefit from *ex situ* conservation measures to prevent the extinction of the species while *in situ* conservation measures are developed (S. Baha El Din pers. comm.). There is a need to create protected areas to protect the species and to develop community-based action to conserve the species' habitat in Egypt.

## Credits

**Assessor(s):** Wagner, P., Wilms, T., Niagate, B., Böhme, W. & Baha El Din, S.


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**Reviewer(s):** Bowles, P.

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## Citation

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## External Resources

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

# Appendix

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

| Habitat | Season | Suitability | Major Importance? |
|---|---|---|---|
| 4. Grassland -> 4.5. Grassland - Subtropical/Tropical Dry | - | Suitable | - |
| 5. Wetlands (inland) -> 5.9. Wetlands (inland) - Freshwater Springs and Oases | - | Suitable | Yes |

## Use and Trade
(http://www.iucnredlist.org/technical-documents/classification-schemes)

| End Use | Local | National | International |
|---|---|---|---|
| Pets/display animals, horticulture | No | No | Yes |
| Research | No | No | Yes |

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

| Threat | Timing | Scope | Severity | Impact Score |
|---|---|---|---|---|
| 2. Agriculture & aquaculture -> 2.1. Annual & perennial non-timber crops -> 2.1.3. Agro-industry farming | Ongoing | - | - | - |
| | Stresses: | 1. Ecosystem stresses -> 1.1. Ecosystem conversion<br>1. Ecosystem stresses -> 1.2. Ecosystem degradation | | |
| 2. Agriculture & aquaculture -> 2.3. Livestock farming & ranching -> 2.3.1. Nomadic grazing | Ongoing | - | - | - |
| | Stresses: | 1. Ecosystem stresses -> 1.1. Ecosystem conversion<br>1. Ecosystem stresses -> 1.2. Ecosystem degradation | | |
| 11. Climate change & severe weather -> 11.2. Droughts | Future | Unknown | Unknown | Unknown |
| | Stresses: | 1. Ecosystem stresses -> 1.2. Ecosystem degradation | | |

## Conservation Actions in Place
(http://www.iucnredlist.org/technical-documents/classification-schemes)

| Conservation Actions in Place |
|---|
| In-Place Land/Water Protection and Management |
| Occur in at least one PA: No |


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## Conservation Actions Needed

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

| Conservation Actions Needed |
|---|
| 1. Land/water protection -> 1.1. Site/area protection |
| 1. Land/water protection -> 1.2. Resource & habitat protection |
| 2. Land/water management -> 2.1. Site/area management |
| 2. Land/water management -> 2.3. Habitat & natural process restoration |
| 3. Species management -> 3.3. Species re-introduction -> 3.3.1. Reintroduction |
| 3. Species management -> 3.4. Ex-situ conservation -> 3.4.1. Captive breeding/artificial propagation |
| 4. Education & awareness -> 4.3. Awareness & communications |
| 5. Law & policy -> 5.1. Legislation -> 5.1.1. International level |
| 5. Law & policy -> 5.1. Legislation -> 5.1.2. National level |
| 5. Law & policy -> 5.4. Compliance and enforcement -> 5.4.1. International level |
| 5. Law & policy -> 5.4. Compliance and enforcement -> 5.4.2. National level |

## Research Needed

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

| Research Needed |
|---|
| 1. Research -> 1.1. Taxonomy |
| 1. Research -> 1.2. Population size, distribution & trends |
| 1. Research -> 1.3. Life history & ecology |
| 1. Research -> 1.5. Threats |

## Additional Data Fields

| Distribution |
|---|
| Estimated area of occupancy (AOO) (km²): 450 |
| Continuing decline in area of occupancy (AOO): Yes |
| Number of Locations: 5 |
| **Population** |
| Population severely fragmented: Yes |
| **Habitats and Ecology** |
| Continuing decline in area, extent and/or quality of habitat: Yes |


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## The IUCN Red List Partnership


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