

Adolfus alleni, Alpine Meadow Lizard

Assessment by: Spawls, S., Malonza, P., Wagner, P. & Branch, W.R.



View on www.iucnredlist.org

Citation: Spawls, S., Malonza, P., Wagner, P. & Branch, W.R. 2014. *Adolfus alleni. The IUCN Red List of Threatened Species 2014*: e.T60755628A45791802. http://dx.doi.org/10.2305/IUCN.UK.2014-3.RLTS.T60755628A45791802.en

Copyright: © 2015 International Union for Conservation of Nature and Natural Resources

Reproduction of this publication for educational or other non-commercial purposes is authorized without prior written permission from the copyright holder provided the source is fully acknowledged.

Reproduction of this publication for resale, reposting or other commercial purposes is prohibited without prior written permission from the copyright holder. For further details see <u>Terms of Use</u>.

The IUCN Red List of Threatened Species™ is produced and managed by the <u>IUCN Global Species Programme</u>, the <u>IUCN Species Survival Commission</u> (SSC) and <u>The IUCN Red List Partnership</u>. The IUCN Red List Partners are: <u>BirdLife International</u>; <u>Botanic Gardens Conservation International</u>; <u>Conservation International</u>; <u>Microsoft</u>; <u>NatureServe</u>; <u>Royal Botanic Gardens</u>, Kew; <u>Sapienza University of Rome</u>; <u>Texas A&M University</u>; <u>Wildscreen</u>; and <u>Zoological Society of London</u>.

If you see any errors or have any questions or suggestions on what is shown in this document, please provide us with feedback so that we can correct or extend the information provided.

Taxonomy

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

Taxon Name: Adolfus alleni (Barbour, 1914)

Synonym(s):

• Algiroides alleni Barbour, 1914

Common Name(s):

• English: Alpine Meadow Lizard

Taxonomic Source(s):

Wagner, P., Greenbaum, E., Malonza, P. and Branch, B. 2014. Resolving sky island speciation in populations of East African *Adolfus alleni* (Sauria, Lacertidae). *Salamandra* 50(1): 1-17.

Taxonomic Notes:

Wagner *et al.* (2014) investigated the taxonomy of *Adolfus alleni*, then understood to consist of four isolated, high montane subpopulations in western Kenya. Using a combination of morphological, genetic and meristic data, these authors found support for the presence of two species within *A. alleni*. Wagner *et al.* (2014) described the more widespread taxon as *A. masavaensis*, confining *A. alleni* to Mt. Kenya.

Assessment Information

Red List Category & Criteria: Near Threatened <u>ver 3.1</u>

Year Published: 2014

Date Assessed: January 28, 2014

Justification:

Listed as Near Threatened on the basis that this species is confined to a small area of Mt. Kenya, and the surrounding landscape is subject to ongoing pressures from farming and burning of moorland. As such it is close to qualifying for listing as Vulnerable under criterion D2. The species is nevertheless still common and threats currently appear to be limited within the national park where it occurs, and due to the management of the Mt. Kenya protected area, more extensive encroachment into the species' moorland habitat from agricultural activity is considered unlikely at present.

Geographic Range

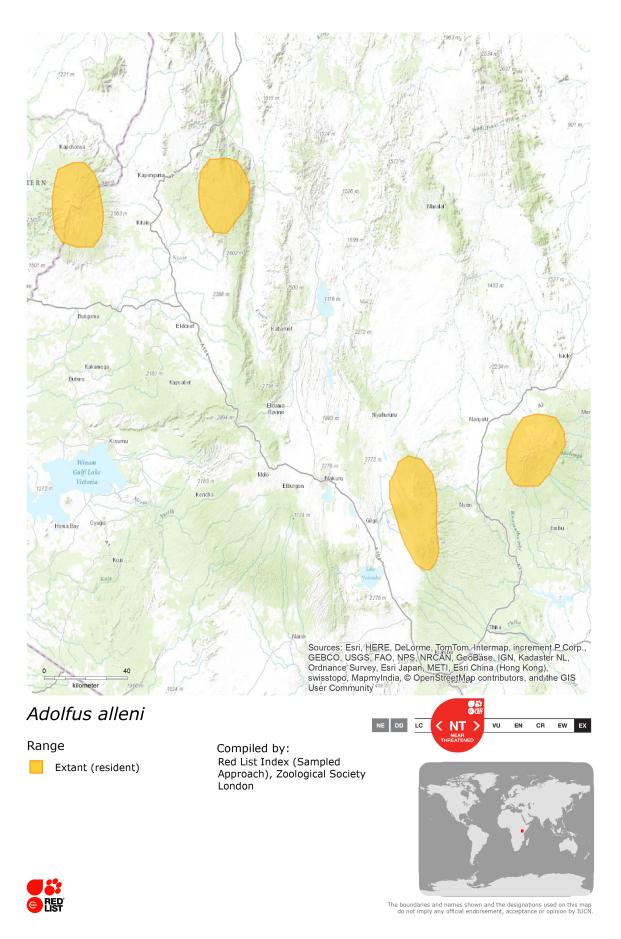
Range Description:

This species is endemic to Mt. Kenya, where it is found between 2,700 and 4,500 m asl (Wagner *et al.* 2014); P.K. Malonza (pers. comm. 2014) indicates that it may occur as low as 2,400 m asl., as moorland extends this far down the mountain.

Country Occurrence:

Native: Kenya

Distribution Map



Population

This lizard appears to be common on Mt. Kenya (S. Spawls and P.K. Malonza pers. comm. 2014), however, two recent one-week surveys at higher elevations on the mountain recorded a total of two specimens (P.K. Wagner, unpubl. data).

Current Population Trend: Stable

Habitat and Ecology (see Appendix for additional information)

This high montane species inhabits moorland above the tree line, however, A. alleni is also found in clearings in bamboo forest on Mt. Kenya (P.K. Malonza, pers. obs.). The diurnal lizard is more terrestrial than other Adolfus species, and is found in tussocks of coarse or spiny heath vegetation (Arnold 1989).

Systems: Terrestrial

Use and Trade

There is no known use or trade in this species.

Threats (see Appendix for additional information)

This species is confined to small patches of habitat at high elevations on Mt. Kenya. This area is within Mt. Kenya National Park (Spawls et al. 2002), but despite its protected status, moorlands are still being burnt and the high local human population means that these habitats are vulnerable to habitat disturbance and change. The lizard is, however, common well into burned areas, and the species is thought likely to be adaptable to fire at its current frequency and intensity (S. Spawls and P.K. Malonza pers. comm. 2014). There is a high human population density in the surrounding area (Wagner et al. 2014), and people are encroaching into this species' moorland habitat as they farm potatoes and destroy the grass tussocks on which they rely (P.K. Malonza pers. comm. 2014), and as such threats are likely to intensify in the immediate future. Climate change is a plausible future threat, as these lizards live at the top of mountains and desiccation of their open, moorland habitat may increase the intensity and destructiveness of fires, with the resulting destruction of the grass tussock habitat (S. Spawls pers. comm. 2014).

Conservation Actions (see Appendix for additional information)

There are no known species-specific conservation measures in place for this species, however, all known sites lie within the best-managed protected areas in Kenya, and large-scale encroachment by human activities is unlikely (S. Spawls pers. comm. 2014). Systematic monitoring of subpopulations is required to ensure that any evidence of decline or further human encroachment is detected and remedial measures instituted.

Credits

Assessor(s):

Spawls, S., Malonza, P., Wagner, P. & Branch, W.R.

Reviewer(s):

Bowles, P.

Contributor(s): De Silva, R., Milligan, H.T., Wearn, O.R., Wren, S., Zamin, T., Sears, J., Wilson, P.,

Lewis, S., Lintott, P. & Powney, G.

Bibliography

Arnold, E.N. 1989. Systematics and adaptive radiation of Equitorial African lizards assigned to the genera *Adolfus, Bedriagais, Gastropholis, Holaspis* and *Lacerta* (Reptilia: Lacertidae). *Journal of Natural History* 23: 525-555.

IUCN. 2014. The IUCN Red List of Threatened Species. Version 2014.3. Available at: www.iucnredlist.org. (Accessed: 13 November 2014).

Spawls, S., Howell, K.M., Drewes, R.C. and Ashe, J. 2002. *A Field Guide to the Reptiles of East Africa*. Academic Press, Elsevier Science, San Diego, San Francisco, New York, Boston, London.

Wagner, P., Greenbaum, E., Malonza, P. and Branch, B. 2014. Resolving sky island speciation in populations of East African *Adolfus alleni* (Sauria, Lacertidae). *Salamandra* 50(1): 1-17.

Citation

Spawls, S., Malonza, P., Wagner, P. & Branch, W.R. 2014. *Adolfus alleni. The IUCN Red List of Threatened Species 2014*: e.T60755628A45791802. http://dx.doi.org/10.2305/IUCN.UK.2014-3.RLTS.T60755628A45791802.en

Disclaimer

To make use of this information, please check the **Terms of Use**.

External Resources

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

Appendix

Habitats

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

| Habitat | Season | Suitability | Major Importance? |
|---|--------|-------------|----------------------|
| 1. Forest -> 1.9. Forest - Subtropical/Tropical Moist Montane | | Suitable | No |
| 3. Shrubland -> 3.7. Shrubland - Subtropical/Tropical High Altitude | | Suitable | Yes |

Threats

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

| Threat | Timing | Scope | Severity | Impact Score |
|--|---|---|----------|--------------|
| 2. Agriculture & aquaculture -> 2.1. Annual & perennial non-timber crops -> 2.1.4. Scale Unknown/Unrecorded | Ongoing | Minority (50%) | Unknown | Unknown |
| | Stresses: | 1. Ecosystem stresses -> 1.1. Ecosystem conversion | | |
| | 1. Ecosystem stresses -> 1.2. Ecosystem degradation | | | |
| 7. Natural system modifications -> 7.1. Fire & fire suppression -> 7.1.1. Increase in fire frequency/intensity | Future | Whole (>90%) | 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: Yes | |
| Percentage of population protected by PAs (0-100): 100 | |

Conservation Actions Needed

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

Conservation Actions Needed 2. Land/water management -> 2.1. Site/area management

Research Needed

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

Research Needed

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

Additional Data Fields

Distribution

Number of Locations: 1

Lower elevation limit (m): 2400

Upper elevation limit (m): 4500

Population

Population severely fragmented: No

The IUCN Red List Partnership



The IUCN Red List of Threatened Species™ is produced and managed by the IUCN Global Species Programme, the IUCN Species Survival Commission (SSC) and The IUCN Red List Partnership. The IUCN Red List Partners are: BirdLife International; Botanic Gardens Conservation International; Conservation International; Microsoft; NatureServe; Royal Botanic Gardens, Kew; Sapienza University of Rome; Texas A&M University; Wildscreen; and Zoological Society of London.