

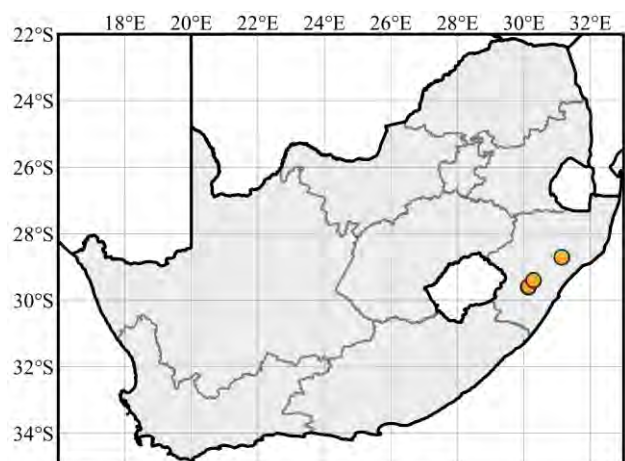
DOI: <https://dx.doi.org/10.4314/met.v31i4.5>**Genus** *Orachrysops* Vári, 1986.*Orachrysops ariadne* (Butler, 1898)

Karkloof Cupid; Karkloof Bloutjie

Adrian J. Armstrong

EN B1ab(iii)+2ab(iii)**Endemic**

A	S	O	N	D	J	F	M	A	M	J	J

**Type locality:** Karkloof, Natal.**Taxonomy:** There are no notable issues.**Distribution:** Endemic to KwaZulu-Natal province in South Africa, only occurring in part of the Midlands of KwaZulu-Natal province, from near Howick in the south-west to next to the Nkandla Forest Reserve in the north-east.**Habitat:** Midlands Mistbelt Grassland on relatively moist and cool south-facing slopes containing both the larval host plant and host ant.**Vegetation types:** FOz3 Southern Mistbelt Forest, Gs9 Midlands Mistbelt Grassland.**Assessment rationale:** A range-restricted species endemic to the KwaZulu-Natal midlands in South Africa (EOO 432 km²), known from four small subpopulations (AOO 16 km²) that are threatened by unscheduled burns and by alien invasive and indigenous encroacher plants. Active management of burning is taking place at the four locations,

while alien plant control is not consistently and regularly applied over the whole of the colony sites. The most important outcome that needs to be achieved in the near future is consistent implementation of the appropriate habitat management guidelines for the species as standard practice. The taxon thus qualifies globally under the IUCN criteria as Endangered under criterion B.

Change in status from SABCA: The status has not changed from the previous assessment.

Threats: The major threats facing this taxon are over-browsing of the larval host plant by domestic livestock, too frequent burning (< 2 years fire return frequency) and too infrequent burning (> 4 years fire return frequency) of the habitat, encroachment of invader plants, particularly the indigenous Curry's Post plant (*Phymaspermum acerosum*) and the non-indigenous American bramble (*Rubus cuneifolius*) into the habitat, and isolation of these subpopulations by transformation of the surrounding landscape. Preliminary genetic results indicate lack of genetic exchange between even nearby colonies, and genetic inbreeding may lead to the loss of all the colonies. Climate change, resulting in increased temperatures and concomitant habitat shifting, and loss of habitat intactness are likely to be severe future threats at the northern location, although microclimate diversity may have an ameliorating role. Loss of habitat intactness is a future threat at the southern locations. Other potential threats are the burning of entire colony sites at one time during the flight and egg and early-instar periods (beginning of March to middle of June) and excessive grazing and trampling of the species' habitat by cattle. Attraction of eco-tourism to one of the sites, as planned, may lead to unforeseen threats to that subpopulation should access to the site not be properly controlled.

Conservation measures and research required: The continuing operation of various threats to the species in its habitat indicates that the species is not out of danger. For example, although the decline in the number of eggs to near zero at the colony next to the Nkandla Forest Reserve has now been reversed and the target number for eggs laid (250) surpassed in 2017 and the habitat managed according to the conservation guidelines, unscheduled (accidental) burning of the egg-monitoring site occurred in 2017. This emphasises the continuing need for vigilance. Re-introductions to suitable habitat that could support metapopulations is required to ensure that the species does not become extinct. Some potential re-introduction sites currently exist, at which the host plant species occurs but the butterfly species is absent. However, surveys of host ants and nectar plants are still required to be undertaken at one of the two sites most favourable for re-introduction of the species. The number of patches required to be re-colonised needs to be determined via a PHVA. Updated management plans are also required for the four existing subpopulations.

Relevant literature:

Armstrong, A.J. & Louw, S.L. 2013. Monitoring of the eggs of the Karkloof blue butterfly, *Orachrysops ariadne*, for its conservation management. *Koedoe* **55**(1): 1156.

Orachrysops brinkmani Heath, 1997

Kammanassie Cupid; Kammanassie Bloutjie

David A. Edge

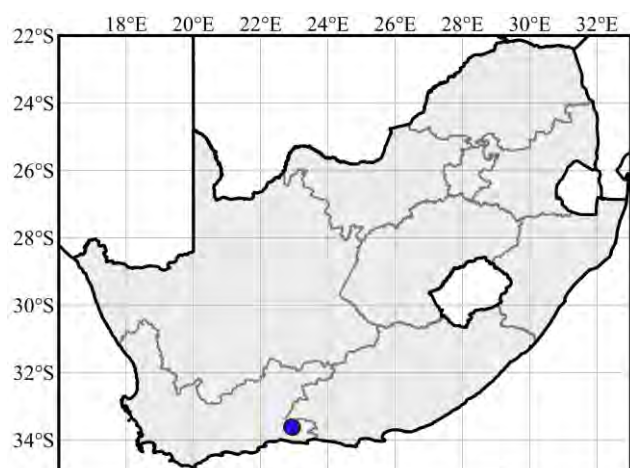
LC

Rare – Restricted Range, Habitat Specialist

Endemic



A	S	O	N	D	J	F	M	A	M	J	J



Type locality: Kammanassie Mts., Uniondale.

Taxonomy: There are no notable issues.

Distribution: Endemic to the Western Cape province in South Africa, found between 1300 and 1500 m altitude on the southern slopes of the Kammanassie mountain range near Uniondale.

Habitat: High south-facing mountain slopes at 1 300 to 1 500 m.

Vegetation types: FFb3 Central Inland Shale Band Vegetation, FFs26 South Kammanassie Sandstone Fynbos.

Assessment rationale: A range-restricted and rare endemic to the Western Cape province, South Africa (EOO 2 km²). This taxon is genuinely rare and in some years cannot be found at all. Its range is restricted to a small area of the southern side of the eastern Kammanassie Mountains, and it appears to be a habitat specialist, preferring cool south facing gullies or mountain slopes. It is not threatened on these well protected and well managed mountains. The taxon thus qualifies globally under the IUCN criteria as Least Concern and is nationally classified as Rare (Restricted Range and Habitat Specialist).

Change in status from SABCA: The status has not changed from the previous assessment.

Threats: The only perceived threat to this species could be an inappropriate fire regime, as the abundance of its host plant is greatest in the early years after a fire.

Conservation measures and research required: At present the fire regime is reasonably well managed by the conservation agency CapeNature, but it would be best if the burning blocks were redesigned so that all of the subpopulations are not affected by a single burn. More research needed on life history, ecology, host ants, distribution and population fluctuations.

Orachrysops mijburghi Henning & Henning, 1994
Heilbron Cupid; Vleiland Bloutjie

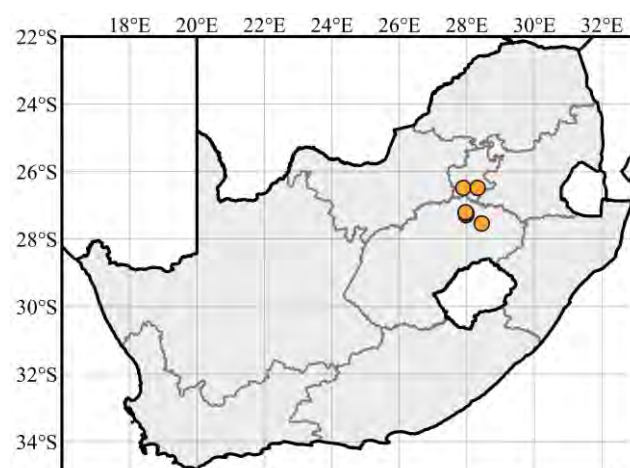
Jeremy C.H. Dobson & Chris M. Dobson

EN B1ab(ii,iii)+2ab(ii,iii)

Endemic



A	S	O	N	D	J	F	M	A	M	J	J



Type locality: Heilbron, Orange Free State, 21 Dec. 1981, G.A. Henning.

Taxonomy: A population discovered at Suikerbosrand has characteristics intermediate between *Orachrysops mijburghi* and *Orachrysops lacrimosa* (Terblanche & Edge, 2007), and at a locality near Greylingstad, both above-mentioned species occur, although at different times of the year (J. Dobson, pers. ob.).

Distribution: Endemic to the Free State and Gauteng provinces in South Africa, from Heilbron in the south to Doornkuil and in the vicinity of Suikerbosrand Nature Reserve near Heidelberg in the north.

Habitat: Moist habitats fringing ephemeral streams in undulating lowlands (Suikerbosrand and Heilbron); valleys within a south-facing hillside (Greylingstad).

Vegetation types: Gm6 Frankfort Highveld Grassland, Gm8 Soweto Highveld Grassland, SVcb11 Andesite Mountain Bushveld.

Assessment rationale: This is an endemic taxon from the Free State and Gauteng provinces in South Africa (EOO 4 465 km², AOO 28 km²). There are five locations. The extent and quality of the habitat has declined as a result of overgrazing by livestock. The taxon thus qualifies globally under the IUCN criteria as Endangered under criterion B.

Change in status from SABCA: The status has not changed from the previous assessment.

Threats: All known subpopulations of this species are found in prime agricultural areas. While difficult to quantify, there has been a visible deterioration, over a period of approximately ten years, in the quality of habitat within at least two sites, due to overgrazing. It seems likely that this grazing pressure will continue in future and that areas of currently underutilised land adjacent to streams will reduce in size due to grazing or cultivation.

Conservation measures and research required: Cooperation of the landowners is required in order to prevent undue disturbance and degradation of the habitat, and landowners of the farms where this taxon occurs should be informed. Further taxonomic and life history research is required to compare the southern and northern subpopulations, whose size also needs to be monitored.

Relevant literature:

Terblanche, R.F. & Edge, D.A. 2007. The first record of an *Orachrysops* in Gauteng. *Metamorphosis* 18(4): 131–141.

Orachrysops montanus Henning & Henning, 1994
Golden Gate Cupid; Golden Gate Bloutjie

Mark C. Williams

VU D2 Endemic

Type locality: Clarens, Orange Free State, December, 1958.

Taxonomy: There are no notable issues.

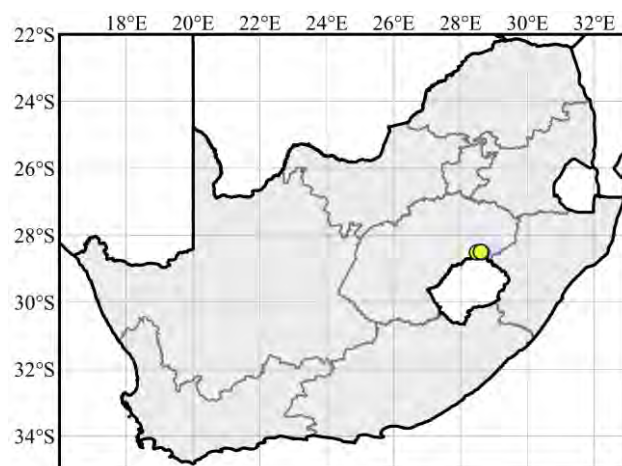
Distribution: Endemic to the Free State province in South Africa, from near Clarens to the Golden Gate Highlands National Park.

Habitat: Moist habitats at the foot of south-facing slopes of mountains, in shallow gullies or on the banks of streams. Larval host plant grows on bare areas very close to water's edge.

Vegetation types: Gd5 Northern Drakensberg Highland Grassland, Gd8 Lesotho Highland Basalt Grassland.



A	S	O	N	D	J	F	M	A	M	J	J



Assessment rationale: This is a range-restricted endemic species from the Free State province, South Africa (EOO 77 km²). There are two locations. One of the locations faces the threat of future urbanisation. The taxon thus qualifies globally under the IUCN criteria as Vulnerable under criterion D.

Change in status from SABCA: The 2012 assessment was too lenient. The change in status was made by more rigorous application of the same information used previously and thus the change in status from Least Concern to Vulnerable is not-genuine.

Threats: Although the taxon occurs in a national park, it is not necessarily safe from decline in numbers in the near future. The possible impact on its grassland habitat by bush encroachment by the indigenous tree *Leucosidea sericea* is a problem in the area and should be investigated. Fire regimes and the siting of hiking trails have to be well considered. Threats to the ecology of a possible associated ant species make the taxon a habitat specialist, consequently with a broader suite of possible threats. The ecosystem status of the habitat, from a vegetation perspective, is listed as Least Threatened.

Conservation measures and research required: The taxon occurs in a national park, but appropriate fire management of the habitat is required. Research into its distribution, life history and ecology is needed.

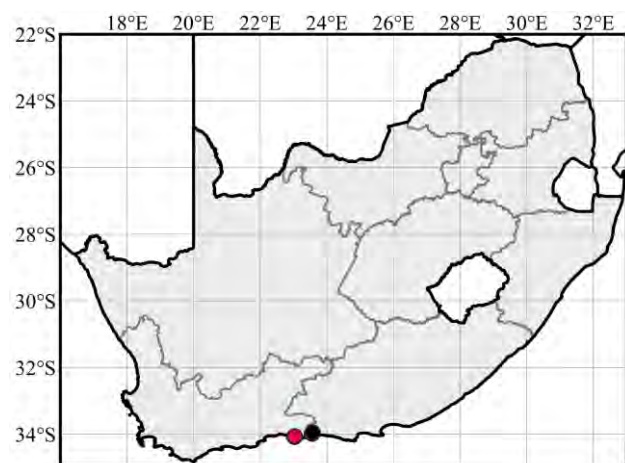
Orachrysops niobe (Trimen, 1862)

Brenton Cupid; Brenton Bloutjie

David A. Edge

CR A2; B1ab(iii,v)+2ab(iii,v); C1+2a(i,ii); D**Endemic**

A	S	O	N	D	J	F	M	A	M	J	J

**Type locality:** Knysna.**Taxonomy:** There are no notable issues.

Distribution: Endemic to the Western Cape province, confined to the Brenton Blue Butterfly Reserve (BBBR) at Knysna. Used to occur at Nature's Valley but went extinct there in the 1970s.

Habitat: Cool, moist south-facing 1:3 slopes close to the sea at 90–115 m altitude. The vegetation at the BBBR is a mosaic of dune thicket and sand fynbos classified by Mucina & Rutherford (2006) as Knysna Sand Fynbos. Nine vegetation units were described by Edge *et al.* (2008), and the host plant grew most abundantly in the partial shade of mature candlewood trees (*Pterocelastrus tricuspidatus*). Historically, regular mega-herbivore activities prevented candlewoods and other thicket species from dominating, causing too much shade, an increased fuel load and fire risk. Unfortunately a major fire in 2017 badly burnt the reserve and 80% of the candlewoods. The recovering vegetation includes a large host plant population, but loss of shade has allowed many other pioneer plants to dominate and smother the host plants.

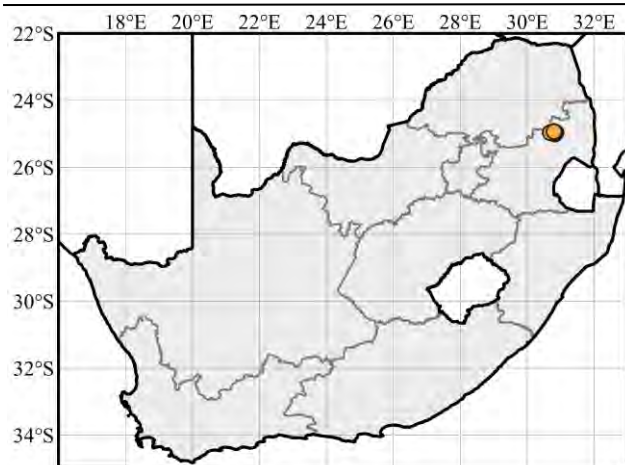
Vegetation types: FFd10 Knysna Sand Fynbos, (FFs20 Tsitsikamma Sandstone Fynbos).

Assessment rationale: This taxon is a highly range-restricted endemic to the Western Cape province, South Africa (EOO 4 km², AOO 4 km²). There is only one location, and there is continuing decline in the quality of the habitat (amount of host plant) and the number of mature individuals because of a severe drought (93% reduction in population size from 2014–2017), and more recently, a devastating fire in 2017 (the butterfly has not been seen since and the population reduction is 100%). There are less than 50 mature individuals, and continuing decline of >25% over three years. All of the mature individuals are in one subpopulation. The taxon thus qualifies as Critically Endangered under criteria A, B, C and D.

Change in status from SABCA: The status has not changed from the previous assessment.

Threats: There is no direct evidence of how the Brenton Blue population at Nature's Valley became extinct, but it can be inferred that this came about because houses were built on the primary dunes where the butterfly was breeding, which had a good sea view, reducing the amount of available habitat by over 90%. This was compounded by the exclusion of fire from the dune fynbos (to protect the houses). The small residual subpopulation of butterflies was thus unable to persist. All foreseeable threats to the single remaining subpopulation are being managed at this species' one remaining locality at the Brenton Blue Nature Reserve. The most significant future potential threats to this site are: 1) Unforeseeable stochastic events such as a runaway fire occurring at a time in the life cycle (mid-November or mid-March) when most adult individuals would be killed, or a very hot fire at other times which could kill all the larvae and pupae underground. The Knysna fire of June 2017 may have been such an event and the survival of the species is in the balance. 2) A prolonged drought, which could cause most of the host plants to die back and drastically reduce the food resource available to the larvae, is another potential threat. The serious decline in numbers of adults during the 2014–2017 drought (93% reduction) demonstrated the severity of this threat. 3) A loss of genetic diversity in the small isolated population is possible. There is no scientific evidence to substantiate this, because the adult population is too small to sustain even a minimal amount of DNA sampling. 4) Future failure to manage the Special Nature Reserve adequately beyond the lifetime of the current Brenton Blue Trustees is a threat. 5) The longer term impact of global warming could be a significant future threat, particularly because of the reliance of this butterfly and its plant and ant associates on a cool microclimate.

Conservation measures and research required: The Brenton Blue Butterfly Reserve is managed by a management committee established by the Brenton Blue Trust, with representatives from all stakeholders, including the conservation agency CapeNature. A management plan at this site has been established and is continuously refined by research, and continuous monitoring of the habitat and population levels is undertaken during the flight periods. Expansion of the reserve to 15 ha has been approved by the Knysna Municipality. This is a medium-term project, and habitat alteration to make it suitable for the host plant has commenced. Attempts to reintroduce the butterfly at the Nature's Valley fynbos reserve (about 60 km to the east),



Type locality: Mac Mac Falls, Eastern Transvaal.

Taxonomy: There are no notable issues.

Distribution: Endemic to Mpumalanga province in South Africa, between Hendriksdal in the south and Mariepskop in the north on the Drakensberg escarpment.

Habitat: Mountain slopes and hill tops in high rainfall areas around 1 500 m altitude, such as escarpments, often associated with nearby montane forest or a river valley.

Vegetation types: FOz4 Northern Mistbelt Forest, Gm22 Northern Escarpment Dolomite Grassland, Gm23 Northern Escarpment Quartzite Sourveld, Gm31 Long Tom Pass Montane Grassland.

Assessment rationale: A range-restricted endemic taxon from Mpumalanga province, South Africa (EOO 80 km²). There are four locations. The quality of the habitat is declining because of the expansion of pine and eucalyptus plantations and the invasion of alien vegetation. The taxon thus qualifies globally under the IUCN criteria as Endangered under criterion B.

Change in status from SABCA: The 2012 assessment was too lenient. The change in status was made by more rigorous application of the same information used previously and thus the change in status from Vulnerable to Endangered is therefore non-genuine change.

Threats: Currently the habitat is declining in quality as a result of encroachment of alien vegetation and due to activities associated with forestry.

Conservation measures and research required: The habitat of all four subpopulations needs to be protected from agroforestry and other activities and needs to be cleared of any alien vegetation invading these habitats. Research into its distribution, life history and ecology is needed.

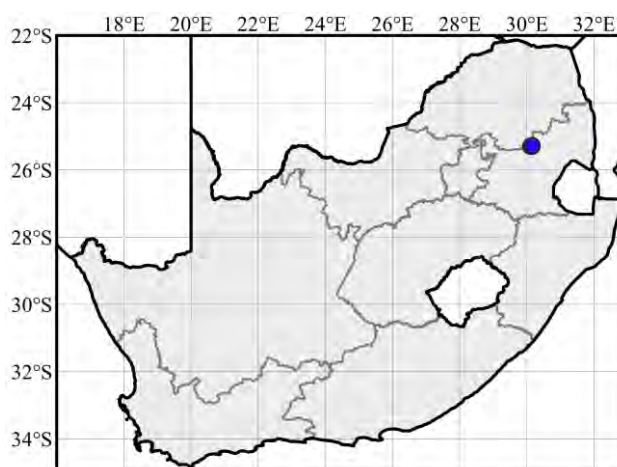
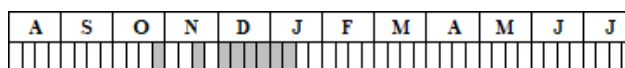
Orachrysops warreni Henning & Henning, 1994
Lost Valley Cupid; Donkerblou Bloutjie

Mark C. Williams

LC

**Extremely Rare
Endemic**

Type locality: Verloren Valei, 30° 09' 9" E 25° 17' 3" S, Eastern Transvaal, 24 Dec. 1988, R. Warren.



Taxonomy: There are no notable issues.

Distribution: Endemic to Mpumalanga province in South Africa, from Verloren Valei Nature Reserve near Dullstroom.

Habitat: Moist habitats fringing watercourses and on firebreaks, on high mountain slopes at about 2 100 m.

Vegetation types: Gm30 Steenkampsberg Montane Grassland.

Assessment rationale: This is a range-restricted endemic species known only from one locality in Mpumalanga province in South Africa (EOO 12 km²). It is conserved in a statutorily proclaimed nature reserve and it is not under real or perceived threat. The taxon thus qualifies globally under the IUCN criteria as Least Concern and is nationally classified as Extremely Rare.

Change in status from SABCA: The status has not changed from the previous assessment.

Threats: There are no significant threats to this taxon.

Conservation measures and research required: No conservation actions recommended at its only known locality in Verloren Valei Nature Reserve. Research into its distribution, life history and ecology is needed.

Genus *Ornipholidotos* Bethune-Baker, 1914.

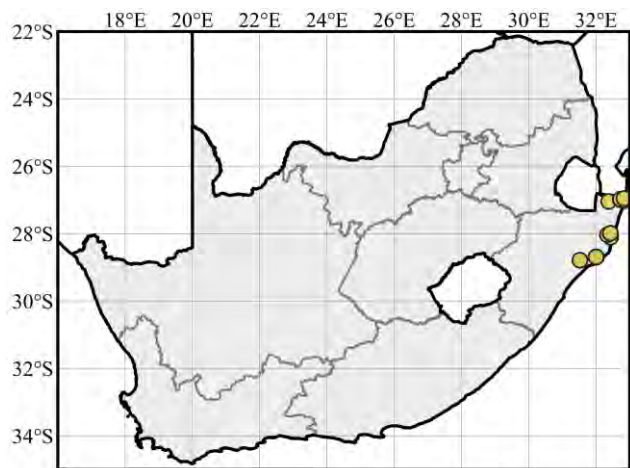
Ornipholidotos peucetia penningtoni (Riley, 1944)
Southern Large Glasswing; Groot Glasverkie

Steve E. Woodhall

NT B1ab(iii)



A	S	O	N	D	J	F	M	A	M	J	J



Type locality: Hluhluwe, False Bay, Zululand, 15.xii.1939 (K.M. Pennington).

Taxonomy: *Ornipholidotos peucetia penningtoni* is the most southerly of three subspecies, occurring in north-eastern KwaZulu-Natal and southern Mozambique. The most northerly is *O. p. peucedata*, occurring from Tanzania to southern Somalia. The nominate subspecies *O. p. peucetia*, occurs from south-western Uganda, across Rwanda and D.R.C., to Tanzania, Malawi, Zambia, northern Mozambique and eastern Zimbabwe.

Distribution: This taxon is found from Richards Bay in the south, in KwaZulu-Natal province in South Africa, to near Inharrime in southern Mozambique.

Habitat: The butterfly appears to be restricted to lowland forest and riverine bush although there are some records from higher altitude savanna (Mandawe Hill, Eshowe). Because it is a sedentary inhabitant of the lower storey of woodland, it may well be overlooked and have a larger area of occupancy than the SALCA data suggest.

Vegetation types: CB1 Maputaland Coastal Belt, FOa2 Swamp Forest, FOz7 Northern Coastal Forest, SV118 Tembe Sandy Bushveld, SV120 Western Maputaland Clay Bushveld, SV123 Zululand Lowveld.

Assessment rationale: A rare, seldom-encountered taxon that occurs in small, concentrated colonies in KwaZulu-Natal province in South Africa as well as in southern Mozambique, where it was recently recorded for the first time (EOO 26 730 km²). Its presence at Mandawe Hill near Eshowe has been confirmed and strong colonies exist on the Nibela Peninsula. There are eight locations. The Mozambican location at Palmeiras is close to the coast, where tourist developments are popular. Its habitat is threatened in some of its locations, such as Mandawe Hill, and the area to the west of Tembe Elephant Park, which is threatened by bush clearance and shifting agriculture. The subpopulations are subject to extreme fluctuations in numbers during droughts. Most locations are not severely fragmented and there is low confidence in AOO. The butterfly's habits make it inconspicuous, so it is probably often overlooked - it may have many more hitherto undiscovered subpopulations. However, the EOO is close to the Vulnerable threshold, and even if AOO is 20 times the current (uncertain) estimate, it would still fall inside the Vulnerable threshold. Also, the number of locations is fewer than ten. If the Mozambique location is lost due to charcoal production the EOO would also fall inside the VU threshold. The taxon thus qualifies globally under the IUCN criteria as Near Threatened under criterion B.

Change in status from SABCA: Since the previous assessment, the discovery of new localities has increased the EOO from 9 556 km² to 26 730 km². The current threats also existed during the previous assessment. The Red Listing for the previous assessment was incorrectly applied and the status change from Least Concern to Near Threatened is therefore non-genuine.

Threats: Subpopulations inside most nature reserves are under no threat with the exception of that in the Manguzi Forest Reserve, which is threatened by illegal wood harvesting. Subpopulations outside nature reserves are also under threat by human settlement, bush clearing, uncontrolled agriculture, and in Mozambique, tourism development and forest clearing for charcoal production. All subpopulations inside Maputaland are under potential future threat by insecticide spraying to reduce tsetse fly numbers to a point where sterile male release can be used to extirpate survivors. As the butterfly occupies a specialist niche, it is also vulnerable to temperature extremes and droughts.

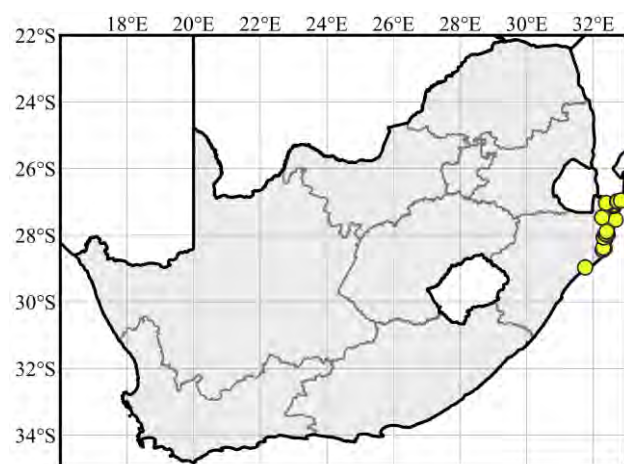
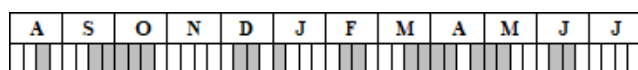
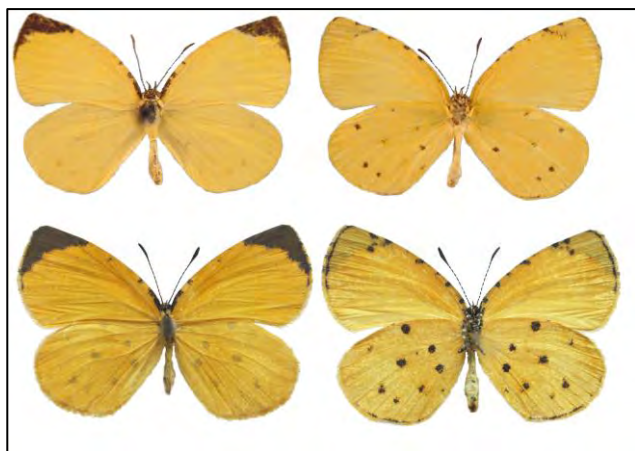
Conservation measures and research required: Continued protection of the subpopulations inside protected areas is vital, and the damage being done to Manguzi Forest by illegal wood gathering and small-scale farming must be stopped. The Mandawe Hill subpopulation is an important butterfly biodiversity site and it should be considered for protected status to prevent overgrazing and human settlement. Entities considering developing sites in Mozambique should be made aware of the possible presence of the butterfly, and urged to preserve suitable habitat. The plans to spray Maputaland with deltamethrin need to be permanently abandoned and not merely shelved. Research into its distribution, life history and ecology is needed.

Genus *Teriomima* Kirby, 1887.

Teriomima zuluana van Son, 1949
Zulu Yellow Buff, Zoeloe Geelvlerkie

Steve E. Woodhall

VU B1b(ii,iii)c(ii)



Type locality: Hluhluwe.

Taxonomy: There are no notable issues.

Distribution: Found in KwaZulu-Natal province in South Africa and in Mozambique, from Mtunzini in the south to Praia do Bilene in the north, as well as inland to the Makathini Flats and the Usutu Gorge in Zululand.

Habitat: The butterfly is found in small colonies and it is very slow flying and sedentary. Specimens are found in coastal lowland forest, on the edges, or in the understorey of forest/thicket in the Indian Ocean Coastal Belt. The species is largely confined to the north-east of KwaZulu-Natal province, with a single record from Mozambique.

Vegetation types: CB1 Maputaland Coastal Belt, CB2 Maputaland Wooded Grassland, FOa2 Swamp Forest, FOz7 Northern Coastal Forest, FOz8 Sand Forest, SV118 Tembe Sandy Bushveld, SV125 Maputaland Pallid Sandy Bushveld, SV126 Muzi Palm Veld and Wooded Grassland, (FOz7 Northern Coastal Forest).

Assessment rationale: This low density, secretive, rare butterfly is almost entirely restricted to the Maputaland area of northern KwaZulu-Natal province in South Africa and in southern Mozambique (EOO 12 390 km²). Its EOO could be larger because there is suitable habitat in Mozambique that remains unsurveyed. However, there are currently 13 known locations. The Mtunzini location is under threat from dune mining for titanium. The Makathini Flats location is under threat from slash-and-burn agriculture, and human encroachment. The same can be said for one of the Manguzi Forest colonies where it has been seen several times in recent years but it is in a part of the forest that has been severely affected by human encroachment in the last 20 years. The Maputaland subpopulations face a possible future threat of insecticide spraying (deltamethrin to control Tsetse Fly) but this is unlikely to occur in the near future so has not been used to calculate the number of locations. The Mozambican location is a single-specimen record. It was collected in 1971 and the area it was collected in is attractive to tourism developers. The whole population is subject to severe fluctuations as a result of cyclical droughts that appear to be worsening. This taxon therefore qualifies as Vulnerable under criterion B.

Change in status from SABCA: The EOO has increased to 12 390 km² since the previous assessment due to the presence of a hitherto unrecorded Mozambique population. This is still within the Vulnerable threshold. Even though the locations are not severely fragmented, there is continuing decline in the extent and suitability of habitat at several of the locations. Also, the butterfly's appearance fluctuates greatly, possibly as a result of droughts. Despite there being measurable changes in the level of threat since the previous assessment, this in itself was not enough to result in a change in Red List category. The threats were however not taken into account during the previous assessment and this species should have been assessed as Vulnerable then too. Thus the change in status from Least Concern to Vulnerable is non-genuine.

Threats: This is a seldom-seen taxon that inhabits thick woodland and forests in the Maputaland area and the coastal forests south to Mtunzini. The Mtunzini subpopulation is under threat from the effects of nearby titanium mining. Several of the Maputaland subpopulations are in protected areas, but those outside, such as the Makathini Flats colonies, and those adjacent to Tembe Elephant Park, are under threat from human encroachment, wood gathering and clearance for grazing and agriculture. The Manguzi subpopulation is under the same threats. All Maputaland subpopulations are subject to the threat of insecticide spraying to reduce tsetse fly populations to a size that can be eradicated using sterile male release. The proposed insecticide, deltamethrin, is non-specific and likely to cause serious harm to all butterfly species endemic or near-endemic to Maputaland. The Mozambique subpopulation is in an area popular for tourist development. Mozambique is unstable politically so there is a risk of war and civil unrest.

Conservation measures and research required: The forest habitats that this taxon inhabits in KwaZulu-Natal province have been declining since the 1940s. Where it occurs in these habitats, it is persisting, but its range is gradually shrinking due to the pressure from human populations and climatic fluctuations. The local inhabitants and conservation bodies need to be informed about the presence of this species and its need for protection. Long term security management of

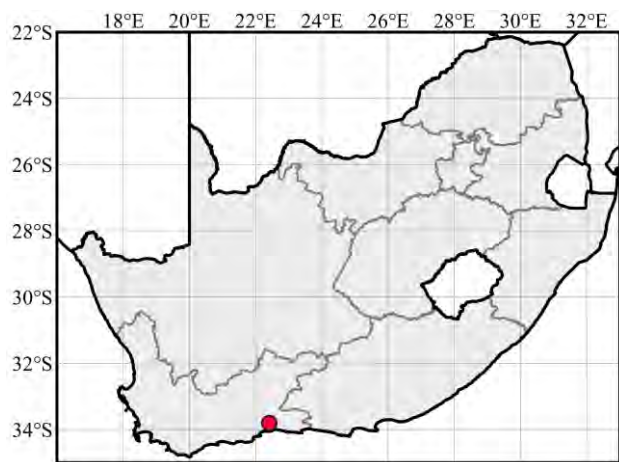
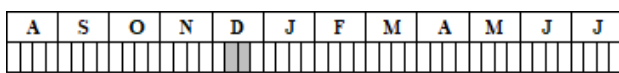
forests is needed, as well as measures to prevent uncontrolled use of insecticides in Maputaland. The colony at Mtunzini needs protection from pollution and urbanisation resulting from possible titanium mining activity there. Research is needed into its life history, ecology and distribution.

Genus *Thestor* Hübner, [1819].

Thestor barbatus Henning & Henning, 1997
Bearded Skolly; Langbaard Skollie

David A. Edge

CR B1ab(iii,v)+2ab(iii,v)
Endemic



Type locality: Spitskoppie, 6km NW Herald, 1080m.

Taxonomy: Genus recently revised by Heath & Pringle (2004). No issues that affect this taxon.

Distribution: Endemic to the Western Cape province in South Africa, from the Paardepoort mountain range north of Herold, inland of George.

Habitat: Rocky terrain on the higher slopes of mountains.

Vegetation types: FFs18 North Outeniqua Sandstone Fynbos.

Assessment rationale: This is a range-restricted endemic species in the Western Cape province, South Africa (EOO

4 km², AOO 4 km²). There is one location. Intensive searches for this taxon along the Paardepoort mountain range, where it was discovered, and on neighbouring mountains has not revealed any other localities. The habitat at the type locality is threatened by encroaching alien trees. The taxon thus qualifies globally under the IUCN criteria as Critically Endangered under criterion B.

Change in status from SABCA: For the previous assessment there were no significant threats and it would have been Least Concern. However, since then the threats have escalated rapidly. The intensified threats now qualify this species as Critically Endangered and thus the change in status is genuine.

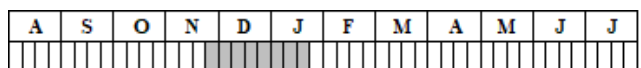
Threats: The mountain top where this taxon is found is threatened by invasion of *Hakea sericea* and *Pinus pinaster*. There is no really effective biological control for *Hakea* so manual removal is required.

Conservation measures and research required: The alien trees along this whole mountain range (*Hakea* and Pines) need to be eradicated. This would be a very costly exercise, so at present the limited goal is to keep the area around the extant subpopulation (c. 15 ha) clear of aliens. The custodian of this species has been keeping the area around where the butterfly occurs clear of *Hakea*, but the pines are too large for a single person to cut down (a chainsaw is needed). Research into its life history, including the host ants, its autoecology and population size and fluctuations is needed.

Thestor brachycera brachycera (Trimen, 1883)
Knysna Skolly; Strand Skollie

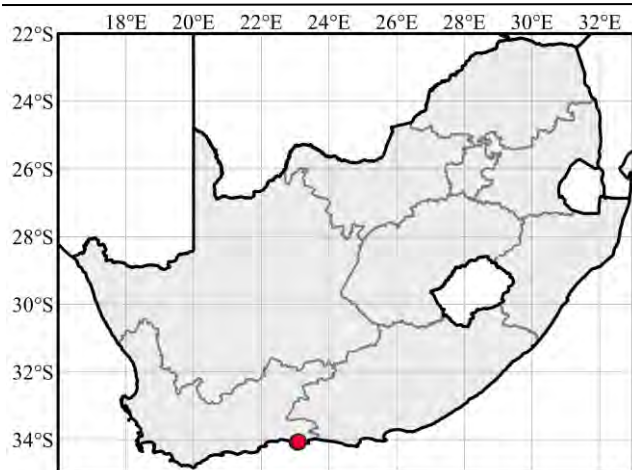
David A. Edge

CR B1ab(i,ii,iii,iv,v)
Endemic



Type locality: Cape Colony (Western Districts).

Taxonomy: Heath & Pringle (2004) treated *Thestor brachycera* and *T. dukei* (a very common and widespread species) as conspecific. Ongoing (as yet unpublished) molecular research has cast doubt on this opinion (E.L. Pringle, pers. comm.).



Distribution: Endemic to the Western Cape province in South Africa, only known from the Knysna area. Used to be widespread on eastern Knysna Head, from sea level inland westwards for approximately 7 km across the Woodbourne farm, and what is now the Sparrebosch golf estate, but is now restricted to two small subpopulations on the coast east of Coney Glen just above sea level.

Habitat: Since this species is aphytophagous it does not rely on a specific vegetation type but rather on the vegetation structure, the underlying substrate and the presence of the host ant. The butterfly and its host ant both require patches of open vegetation with significant bare ground or rocks. Inland, the habitat is on north-, north-east- and north-west-facing slopes covered with Knysna Sand Fynbos, originally with a warm, dry, fire-prone microclimate promoting low fynbos vegetation and patches of open sandy soil and animal paths. The extant subpopulations are found close to the sea to the east of Coney Glen at the Knysna Heads, with a completely different microclimate (south-facing, moist, sea spray) and vegetation type (Cape Seashore vegetation). The common factors with the inland habitat are low vegetation and a sunny, warm microclimate in midsummer, promoting good host ant populations.

Vegetation types: AT36 Goukamma Dune Thicket, FFd10 Knysna Sand Fynbos, FFh9 Garden Route Shale Fynbos, FFs19 South Outeniqua Sandstone Fynbos.

Assessment rationale: This endemic taxon is range-restricted in the Western Cape province, South Africa, with a very small EOO (5.1 km²) and one of its subpopulations (and a location) appears to have been lost over the last three years. This (inland) fynbos subpopulation was also an important genetic resource, since it appears to have specialised ecological adaptations differing from the subpopulations closer to the sea shore. The loss of this genetic variation could make it extremely difficult for the taxon to recolonise fynbos sites in the future. The taxon thus qualifies globally under the IUCN criteria as Critically Endangered under criterion B.

Change in status from SABCA: The status has not changed from the previous assessment.

Threats: This taxon was originally quite widespread and common from the eastern Knysna Heads both down to near sea level and on the north-facing fynbos covered slopes. Further to the east plantation forestry in earlier years probably eradicated many subpopulations. Most of this large metapopulation has been lost since 1962 through incremental

habitat destruction and degradation caused by housing and road developments, a golf course development, and excessive grazing by sheep on the remaining agricultural land. At present the last subpopulation still extant in the fynbos has virtually disappeared because its habitat has become overgrown. This is because there are no grazing animals, either wild or domestic, and fire is being excluded because of the threat it poses to valuable properties. Another threat is the presence of increasing amounts of alien plants, such as hakea and pines, at this fynbos site. There are two extant subpopulations near the seashore which, even if they survive for several decades, will eventually be threatened later this century by sea level rise.

Conservation measures and research required: A research program into the life history and ecology of the taxon has been completed. This yielded accurate population counts, which showed that numbers at the (inland) fynbos site were declining. The owners of the land on which the last surviving subpopulation in a fynbos habitat occurred agreed to leave it undisturbed, but refused to implement active habitat management, such as the removal of alien plants, introduction of grazing animals and a block burning program. The habitat continued to deteriorate and this subpopulation has now virtually disappeared. Efforts will continue to persuade the landowners to implement the recommended management actions, but after the large Knysna June 2017 fire, fear of fire amongst property owners has continued to grow, although allowing this area to become overgrown with thicket vegetation will itself pose an increasing fire risk. Ideally this fynbos site should be declared as a nature reserve and be managed on sound ecological principles. On the positive side, the research also resulted in the discovery of the coastal subpopulations, which seem to be secure and stable at present, although they may eventually succumb to sea level rise. These subpopulations could be a source of butterflies to repopulate the inland sites if the landowners are persuaded to manage them properly. Searches will therefore be made further to the east along the coast to see if other subpopulations can be found, even as far as Noetzie and the eastern side of the Noetzie River (Sinclair Nature Reserve).

Relevant literature:

Bazin, E.A. & Edge, D.A. 2015. The ecology and conservation of *Thestor brachycerus brachycerus* (Trimen, 1883) – an aphytophagous miletine butterfly from South Africa. *Journal of Insect Conservation* **19**(2): 349–357.

Thestor calviniae Riley, 1954

Hantamsberg Skolly; *Calvinia* Skollie

Steve E. Woodhall

LC

Rare – Restricted Range

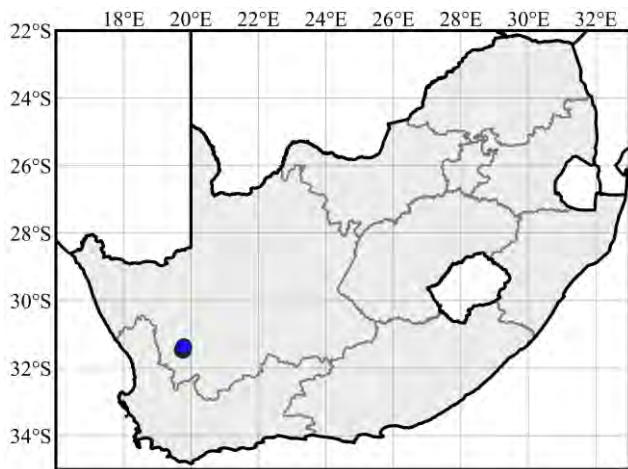
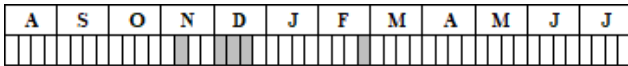
Endemic

Type locality: Hantam's Berg, *Calvinia*, Cape province [Northern Cape province].

Taxonomy: Genus revised by Heath & Pringle (2004).

Distribution: Endemic to the Northern Cape province in South Africa, from the Hantamsberg area at *Calvinia*.

Habitat: Arid rocky karroid terrain.



Vegetation types: FRd2 Hantam Plateau Dolerite Renosterveld, SKt2 Hantam Karoo.

Assessment rationale: A range-restricted endemic species from the Northern Cape province in South Africa (EOO 15 km²). Seventy percent of individuals, however, occur in a nature reserve and thus this taxon is not imminently threatened. Thus far the subpopulation at the Calvinia rubbish dump has had a positive effect on this taxon's numbers, with a large number of host ants attracted to and occurring there. The taxon thus qualifies globally under the IUCN criteria as Least Concern and is nationally classified as Rare (Restricted Range).

Change in status from SABCA: The status has not changed from the previous assessment.

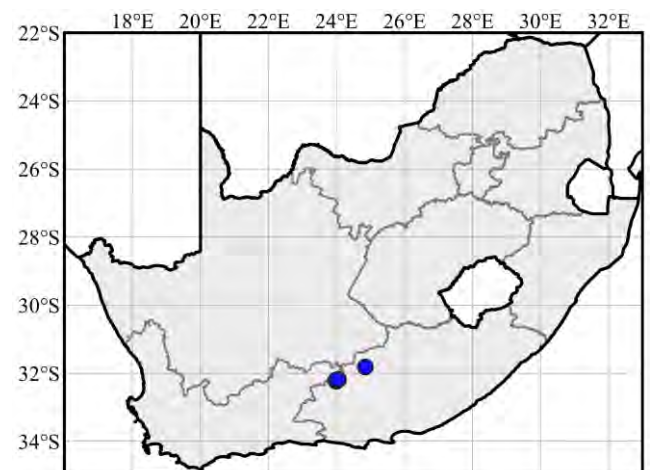
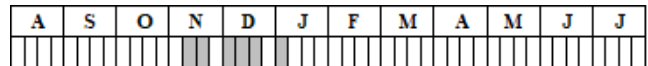
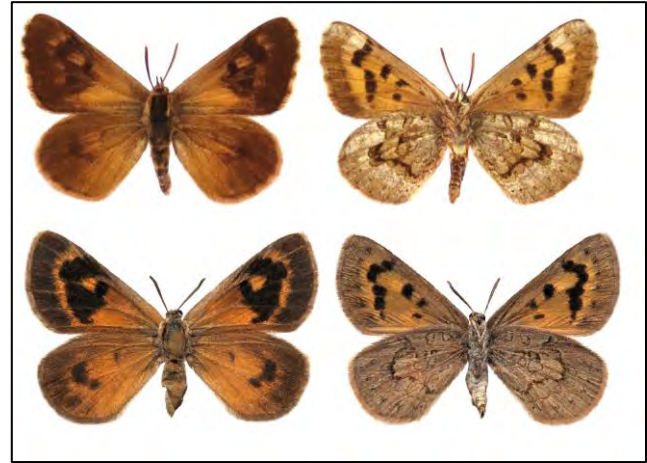
Threats: Calvinia is currently experiencing drought. It is yet to be determined how this may influence this taxon. It occurs in an area where there is a sewerage works and a rubbish dump. These may expand in future as the town expands. There is, however, plenty of suitable habitat in the Akkerdam Nature Reserve, where it also occurs. The rubbish dump is attractive to its host ant and this taxon has thus thrived here.

Conservation measures and research required: No conservation actions recommended. Research into its life history, including the host ants, its autoecology and population size and fluctuations is needed.

Thestor camdeboo Dickson & Wykeham, 1994
Camdeboo Skolly; Kamdeboo Skollie

Ernest L. Pringle

LC
Rare – Restricted Range
Endemic



Type locality: Eastern Cape province: Camdeboo Mountains, near Aberdeen, 11 Nov. 1982 (V.L. and E.L. Pringle).

Taxonomy: There are no notable issues.

Distribution: Endemic to the Eastern Cape province of South Africa, on the mountains NW of Graaff-Reinet and Aberdeen.

Habitat: Upper slopes of high mountains, in Karoo Mountain Merxmullera veld.

Vegetation types: Gh1 Karoo Escarpment Grassland, NKu2 Upper Karoo Hardeveld.

Assessment rationale: This is a range-restricted endemic species occurring on high mountains in the Eastern Cape province, South Africa (EOO 137 km²). There are no current threats. The taxon thus qualifies globally under the IUCN criteria as Least Concern and is nationally classified as Rare (Range Restricted).

Change in status from SABCA: The status has not changed from the previous assessment.

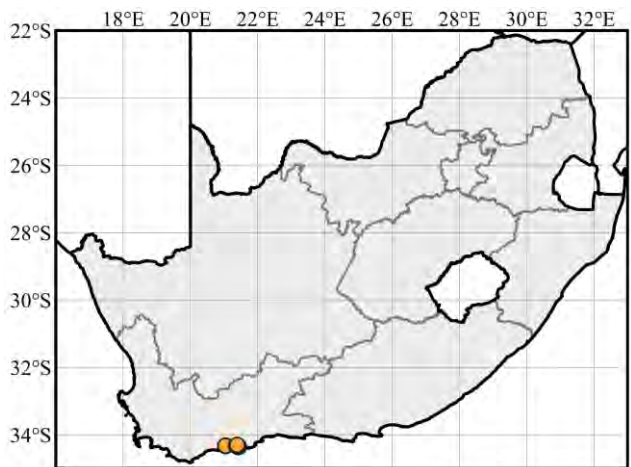
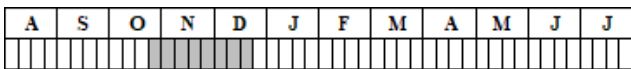
Threats: No known threats.

Conservation measures and research required: No conservation actions recommended apart from regular monitoring. Research into its life history and habitat requirements is needed.

Thestor claassensi Heath & Pringle, 2004
 Stilbaai Skolly; Suidkus Skollie

David A. Edge

EN B1ab(iii)+2ab(iii)
Endemic



Type locality: Stilbaai, Western Cape Prov.

Taxonomy: There are no notable issues.

Distribution: Endemic to the Western Cape province in South Africa, in the southern Cape coastal region between Vermaaklikheid in the west and Still Bay in the east.

Habitat: Short vegetation or bare/rocky areas on flat ground in limestone fynbos or sand fynbos.

Vegetation types: AT40 Hartenbos Dune Thicket.

Assessment rationale: This range-restricted endemic occurs in the Western Cape province, South Africa (EOO 120 km², AOO 24 km²). There are four locations. There are threats to

some of the subpopulations because of habitat degradation, with a decreasing trend in population numbers. The taxon thus qualifies globally under the IUCN criteria as Endangered under criterion B.

Change in status from SABCA: Since the previous assessment there has been a significant decline in the population size of the largest known sub population at Still Bay. The change in status from Vulnerable to Endangered is genuine.

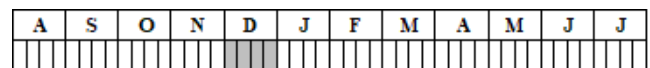
Threats: Some subpopulations have been lost due to urban expansion, particularly in the Still Bay area, and this trend continues. *Thestor* populations are only sustainable if the veld has a natural fire and grazing regime. In the absence of fire and grazing the habitat becomes overgrown with woody elements and is then not open enough to maintain populations of the host ant *Anoplolepis custodiens*.

Conservation measures and research required: Action should be taken to secure known localities close to Still Bay and Vermaaklikheid before these are lost to development or agriculture. Further exploration should be done to find other colonies elsewhere in this area. The spread of alien plants close to the existing known localities should be monitored. Research into its life history, including the host ants, its autoecology and population size and fluctuations is needed.

Thestor compassbergae Quickelberge & McMaster, 1970
 Compassberg Skolly; Kompasberg Skollie

Ernest L. Pringle

LC
Rare – Restricted Range
Endemic

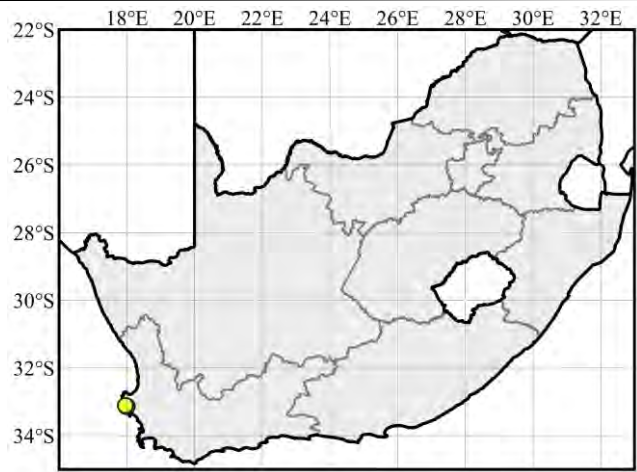
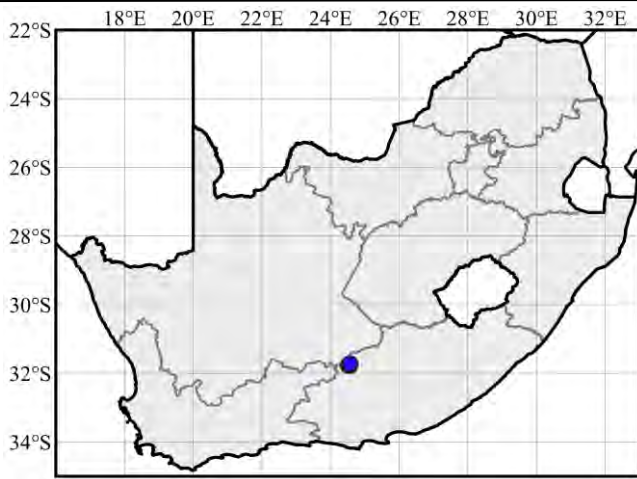


Type locality: Compassberg on Sneeuwbergen mountain range near and north of New Bethesda, Cape province.

Taxonomy: There are no notable issues.

Distribution: Endemic to the Eastern Cape province in South Africa, known only from the Compassberg near Nieu-Bethesda.

Habitat: Sparsely vegetated grassy areas, or areas of open shale, at high altitude on mountain slopes, in Karoo *Merxmuellera* Mountain Veld.



Vegetation types: Gh1 Karoo Escarpment Grassland, NKu2 Upper Karoo Hardeveld, NKu4 Eastern Upper Karoo.

Assessment rationale: This is a range-restricted endemic species from the Eastern Cape province of South Africa (EOO 11 km²). It is plentiful where it occurs, and there are no current threats to its colonies. The taxon thus qualifies globally under the IUCN criteria as Least Concern and is nationally classified as Rare (Restricted Range).

Change in status from SABCA: The status has not changed from the previous assessment.

Threats: None presently evident.

Conservation measures and research required: No conservation actions recommended apart from regular monitoring. Research into its life history and habitat requirements is needed.

Thestor dicksoni malagas Dickson & Wykeham, 1994
Atlantic Karoo Skolly; Atlantiëse Skollie

Andrew S. Morton

VU D2
Endemic



A	S	O	N	D	J	F	M	A	M	J	J

Type locality: Western Cape province: Langebaan [Kreef Bay, Langebaan Peninsula].

Taxonomy: The status of *Thestor malagas* was changed from distinct species to subspecies of *T. dicksoni* by Heath & Pringle (2004).

Distribution: Endemic to the Western Cape province in South Africa, from the Langebaan area.

Habitat: Found within a few hundred metres of the shoreline in Langebaan Dune Strandveld, in the Fynbos Biome. The habitat is sandy and rocky, with low-growing scrubby fynbos.

Vegetation types: FS2 Saldanha Granite Strandveld.

Assessment rationale: This is a range-restricted endemic taxon from the Western Cape province, South Africa (EOO 10 km²). There is one location. The population occurs near some holiday homes and a recreational barbecue and picnic area. Coastal development and increased recreational activity are identified as plausible future threats. The taxon thus qualifies globally under the IUCN criteria as Vulnerable under criterion D.

Change in status from SABCA: The status has not changed from the previous assessment.

Threats: Possible future threat from coastal residential or tourism development and increased recreational activities. There are some holiday homes and some public restrooms near the only known subpopulation.

Conservation measures and research required: Although the only known subpopulation falls within a nature reserve there are holiday houses and recreation facilities nearby. Should more houses be built or the recreation facilities be expanded this will directly impact the butterfly and its habitat. The coastal strip to the north and south needs to be explored to better establish the size of the population. Research into its life history, including the host ants, its autoecology and population size and fluctuations is needed.

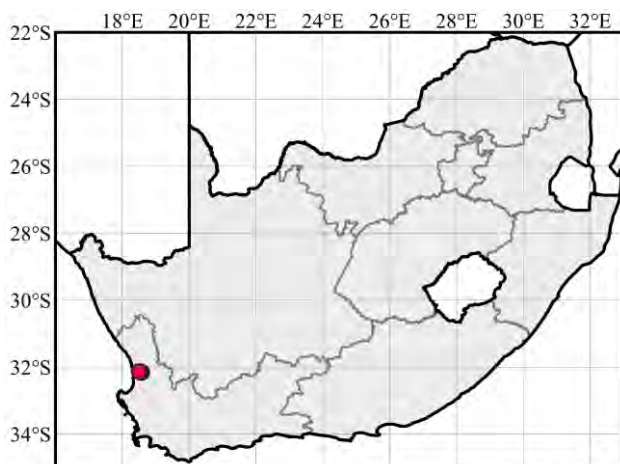
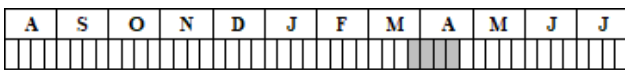
Relevant literature:

Williams, M.C. 2019. A new locality for *Thestor dicksoni malagas* Dickson & Wykeham, 1994 (Lepodptera: Lycaeinae: Miletinae) in the Western Cape Province, South Africa. *Metamorphosis* 30: 1–2.

Thestor dicksoni warreni Ball, 1994

Arid Karoo Skolly; Vlakke Skollie

Andrew S. Morton

CR B1ab(ii,iii)**Endemic**

Type locality: Western Cape province: 10 km W of Graafwater 32.08°S 18.31°E. Altitude 100 m.

Taxonomy: Genus revised by Heath & Pringle (2004).

Distribution: Endemic to the Western Cape province in South Africa, found at a single locality near Graafwater.

Habitat: Arid, rocky sandveld, on flat open ground.

Vegetation types: FFd2 Leipoldtville Sand Fynbos, FFs2 Graafwater Sandstone Fynbos, FS1 Lambert's Bay Strandveld.

Assessment rationale: This endemic taxon has a restricted range and is known from only one locality near Graafwater in the Western Cape province, South Africa (EOO 3 km²). The single subpopulation is bisected by a road, which is becoming busier, and the increasing traffic on it poses a higher risk for butterflies crossing the road. There is ongoing loss of this taxon's habitat to crop cultivation, in particular Rooibos Tea. Surveys in the area have not yielded additional localities. The taxon thus qualifies globally under the IUCN criteria as Critically Endangered under criterion B.

Change in status from SABCA: The previous assessment listed this taxon as data deficient. Several surveys have taken place over the last five years and there is still only one known locality. This colony is threatened by farming and a busy road and the status of the taxon is thus changed to Critically Endangered (non-genuine change).

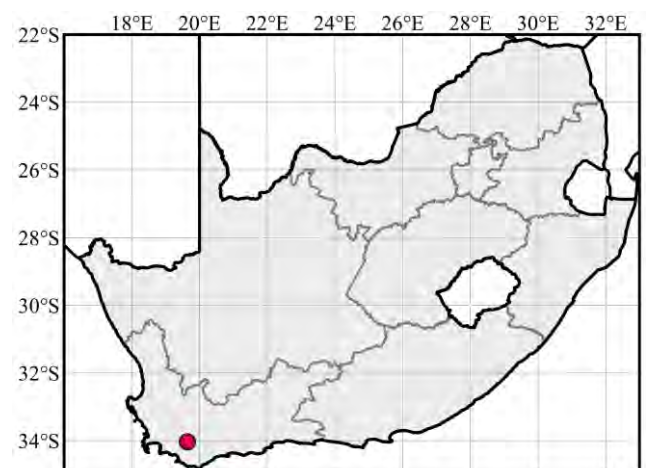
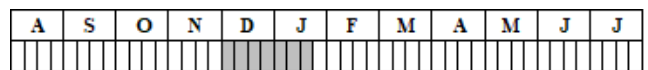
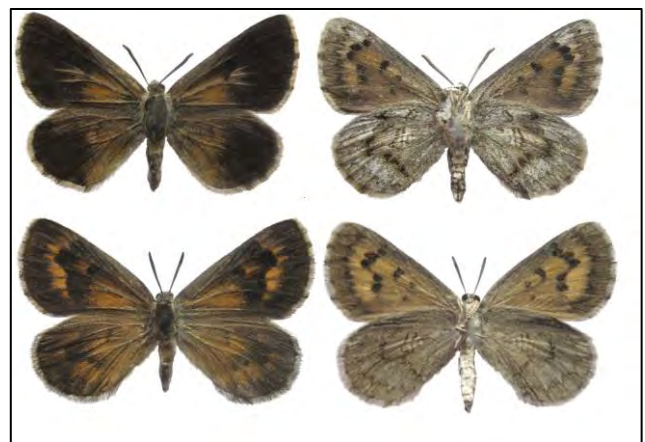
Threats: This taxon has lost most of its habitat and continues to lose habitat to Rooibos Tea and Potato farming activities. This habitat loss for crop cultivation is increasing at a rapid pace in the general area. Traffic on the road bisecting the colony is becoming heavier as farming activity in the area and recreation in the nearby coastal towns of Lambert's Bay and Eland's Bay are increasing.

Conservation measures and research required: Areas surrounding this taxon's locality, which were historically considered as somewhere that you could not farm successfully, have now been ploughed up to plant Rooibos tea. Farmers farming on land where this taxon occurs should be alerted to its existence in order to prevent potential threats to its remaining habitat. Research into its life history, including the host ants, its autoecology and population size and fluctuations is needed.

Thestor kaplani Dickson & Stephen, 1971

Greyton Skolly; Pragskollie

Andrew S. Morton

CR B1ab(iii)**Endemic**

Type locality: Western Cape province: Rivier Zonderend Mtns, near Greyton.

Taxonomy: Genus recently revised by Heath & Pringle (2004).

Distribution: Endemic to the Western Cape province in South Africa, in the mountains near Greyton.

Habitat: Rocky areas on the summits and slopes of mountains.

Vegetation types: FFs13 North Sonderend Sandstone Fynbos, FFs14 South Sonderend Sandstone Fynbos.

Assessment rationale: A range-restricted endemic species from the Western Cape province in South Africa (EOO 2 km²). The taxon is only known from two subpopulations close to one another on the mountain slopes above Greyton, which constitutes one location. The habitat is under constant threat from encroachment by alien vegetation and also disturbed by recreational activity as it is near to and on popular hiking trails. The taxon thus qualifies globally under the IUCN criteria as Critically Endangered under criterion B.

Change in status from SABCA: Due to the incorrect information being used for the previous assessment, the number of locations was given as two instead of one. The two colonies are a short distance from each other and are thus one location. Accordingly, the previous assessment should have been based on one location too, making it Critically Endangered, thus the change in status from Endangered to Critically Endangered is non-genuine.

Threats: The area is threatened by invasive alien trees, including Pines and Hakea. The butterfly occurs along popular hiking trails where the presence of hikers may disturb the habitat.

Conservation measures and research required: This taxon has not been seen at the colony closest to town for the last three years. This area had a fire less than five years ago. The two colonies need to be surveyed and monitored to see if the population closest to town recovers and to check how healthy the population furthest from town is. Research into its life history, including the host ants, its autoecology and population size and fluctuations is needed.

Thestor petra tempe Pennington, 1962
Southern Rock Skolly; Tempe Skollie

Fanie Rautenbach

LC

**Extremely Rare
Endemic**

Type locality: Seven Weeks Poort (Ladismith Distr., Cape province).

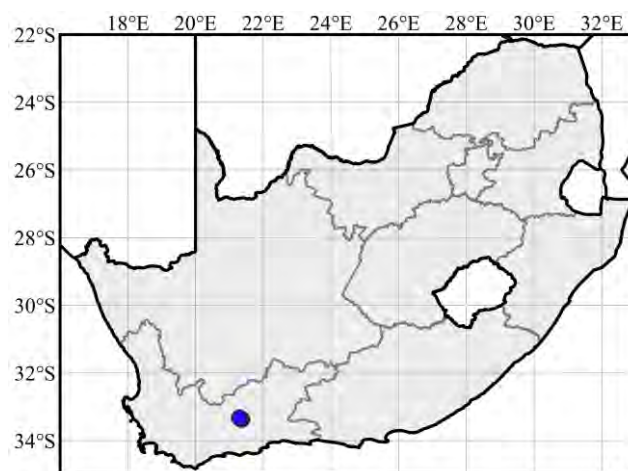
Taxonomy: The status of the taxon was changed from that of a distinct species to that of a subspecies of *Thestor petra* by Heath & Pringle (2004).

Distribution: Endemic to the Western Cape province in South Africa, on the Swartberg mountains near Ladismith.

Habitat: Drier, north-facing slopes of mountains.



A	S	O	N	D	J	F	M	A	M	J	J



Vegetation types: FFq3 Matjiesfontein Quartzite Fynbos, FFs23 North Swartberg Sandstone Fynbos.

Assessment rationale: This is a range-restricted taxon endemic to the Western Cape province, South Africa (EOO 0.2 km²). There are two subpopulations. There are currently no threats. The taxon thus qualifies globally under the IUCN criteria as Least Concern and is nationally classified as Extremely Rare.

Change in status from SABCA: The status has not changed from the previous assessment.

Threats: No known threats.

Conservation measures and research required: No conservation actions are recommended. Research into its life history, including the host ants, its autoecology and population size and fluctuations is needed.

Thestor pictus van Son, 1941
Langberg Skolly; Langeberg Skollie

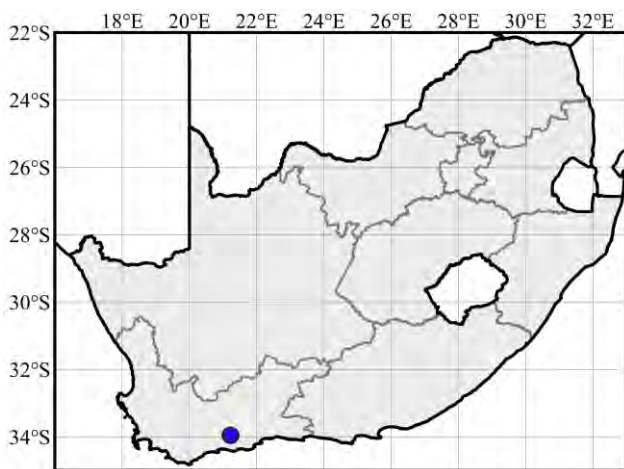
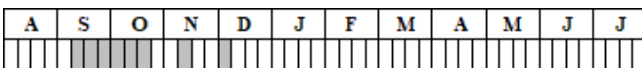
David A. Edge

LC

**Rare – Restricted Range, Habitat Specialist
Endemic**

Type locality: Garcias Pass, Riversdale District, Cape province.

Taxonomy: No taxonomic issues.



Distribution: Endemic to the Western Cape province in South Africa, only known from the Langeberg mountains at Garcia's Pass near Riversdale.

Habitat: Moist fynbos on the higher slopes of mountains. Males favour bare ground or paths on which to settle/perch.

Vegetation types: FFb4 Central Coastal Shale Band Vegetation, FFs16 South Langeberg Sandstone Fynbos.

Assessment rationale: This is a range-restricted and habitat specialist endemic taxon from the Western Cape province in South Africa (EOO 3.3 km²). It is not under any threat as it occurs in a nature reserve. The taxon thus qualifies globally under the IUCN criteria as Least Concern and is nationally classified as Rare (Restricted Range and Habitat Specialist).

Change in status from SABCA: The status has not changed from the previous assessment.

Threats: Garcia's Pass is managed by CapeNature, so there are no threats.

Conservation measures and research required: No conservation actions necessary. Research is required into the life history, ecology and ant symbionts; and the population size, distribution and trends need to be monitored.

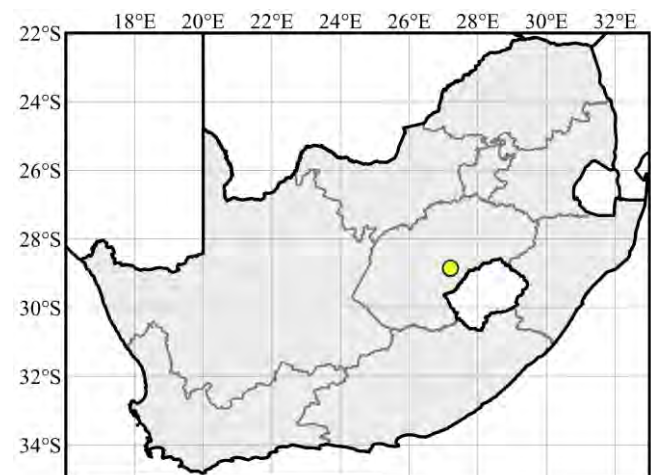
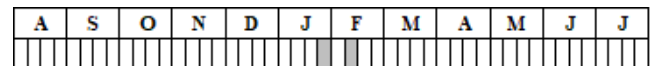
Thestor protumnus terblanchei Henning & Henning, 1993

Northern Boland Skolly; Vrystaat Skollie

Jeremy C.H. Dobson & Chris M. Dobson

VU D1+2

Endemic



Type locality: South Africa: Mooimeisieshoek, Korannaberg, Orange Free State, 14.i.1991, R.F. Terblanche.

Taxonomy: There are no notable issues.

Distribution: An endemic from the Free State province in South Africa, known only from the type locality on the Korannaberg near Excelsior.

Habitat: Dry Karoo-type vegetation at the base of, and in gullies, on the south-west-facing slopes of the Korannaberg.

Vegetation types: Gm3 Eastern Free State Clay Grassland.

Assessment rationale: This is a range-restricted taxon endemic to the Free State province of South Africa (EOO 8 km², AOO 8 km²). While this species is not under significant threat at present, it is an extremely rare species, found only at a single location, where no more than 500 mature individuals have ever been sighted. The location is currently not protected against future agricultural development and the habitat is considered unusually vulnerable to potential climate change. The taxon thus

qualifies globally under the IUCN criteria as Vulnerable under criterion D.

Change in status from SABCA: The status has not changed from the previous assessment.

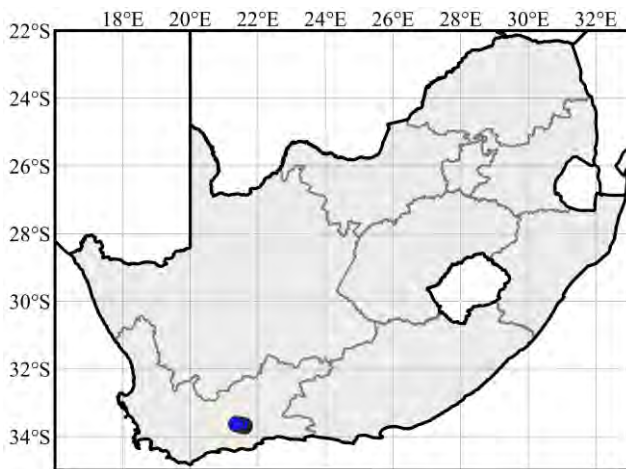
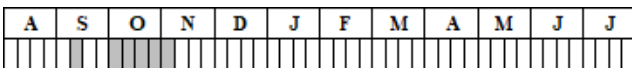
Threats: There are no immediate threats, but the habitat could easily be modified by agricultural activity. The site is at the very edge of the Karoo and the habitat is vulnerable to small weather changes predicted to occur with climate change.

Conservation measures and research required: A management plan, with the cooperation of the owner of the farm Mooimeisieshoek, is needed. Research is needed into its life history, ecology, population numbers and distribution.

Thestor rooibergensis Heath, 1994
Rooiberg Skolly; Rooiberg Skollie

David A. Edge

LC
Rare – Restricted Range
Endemic



Type locality: Rooiberg Mt. near Calitzdorp, Western Cape province.

Taxonomy: No issues outstanding.

Distribution: Endemic to the Western Cape province in South Africa, near the summits of the Rooiberg mountain range near Calitzdorp.

Habitat: Mesic mountain fynbos between 1 250 m and 1 400 m altitude on Table Mountain sandstone.

Vegetation types: FFs21 North Rooiberg Sandstone Fynbos, FFs22 South Rooiberg Sandstone Fynbos.

Assessment rationale: This is a range-restricted endemic taxon from the Western Cape province in South Africa (EOO 17.6 km²). There are no current threats to the taxon. The taxon thus qualifies globally under the IUCN criteria as Least Concern and is nationally classified as Rare (Restricted Range).

Change in status from SABCA: The status has not changed from the previous assessment.

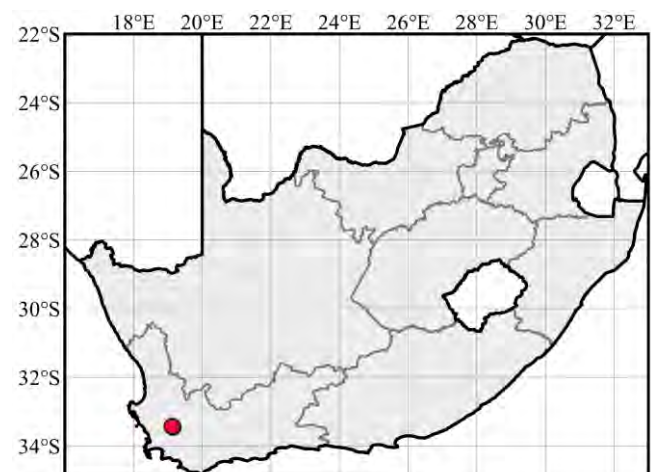
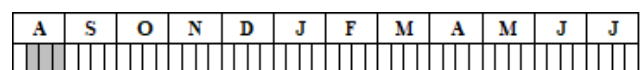
Threats: There are no current threats.

Conservation measures and research required: No conservation actions are necessary. Research is required into the life history, ecology and ant symbionts; and the population size, distribution and trends need to be monitored.

Thestor strutti van Son, 1951
Wolseley Skolly; Winter Skollie

Andrew S. Morton

CR B1ab(v)
Endemic



Type locality: Farm Verrekker, near Wolseley, Western Cape province.

Taxonomy: Genus recently revised by Heath & Pringle (2004).

Distribution: Endemic to the Western Cape province in South Africa, in the Wolseley area.

Habitat: Rocky areas in fynbos at the foot of mountain peaks.

Vegetation types: FFs10 Hawequas Sandstone Fynbos.

Assessment rationale: This is a range-restricted endemic taxon from the Western Cape province, South Africa (EOO 4 km²). There is only one location on the mountain slopes near Wolseley. The general area was under forest plantation, which has subsequently been felled/cleared and the area is now managed by CapeNature. There has, none the less, been a population decline over the last 10 years and no specimens have been seen in the last three years despite regular surveys by the taxon author and colleagues. The taxon thus qualifies globally under the IUCN criteria as Critically Endangered under criterion B.

Change in status from SABCA: For the previous Least Concern assessment there were no visible threats, but since then the population has decreased to low numbers of adults. While the threats causing this decline are still unknown, the current drought could be the reason for the recent decline in numbers. Also, better information has been used now, supporting that this species has only ever occurred at one locality, whereas previously it was thought to have a much wider range. The smaller EOO of 4 km² and the recent decline in numbers means that the change in status from Least Concern to Critically Endangered is genuine.

Threats: CapeNature is managing the land on which this butterfly occurs. The alien pine plantations have been removed from this locality as part of CapeNature's management plan. The butterfly is protected within a nature reserve. Despite this active management the number of mature individuals is declining. The reason for the decline in numbers in the last few years has not been determined, but could be due to the ongoing drought.

Conservation measures and research required: Continued protection of the taxon's habitat from alien vegetation invasion is needed. Exploration for more colonies of this taxon on nearby mountain slopes needs to be undertaken. Research is required into the life history, ecology and ant symbionts; and the population size, distribution and trends need to be monitored.

Thestor yildizae Koçak, 1983
Peninsula Skolly; Skiereiland Skollie

Andrew S. Morton

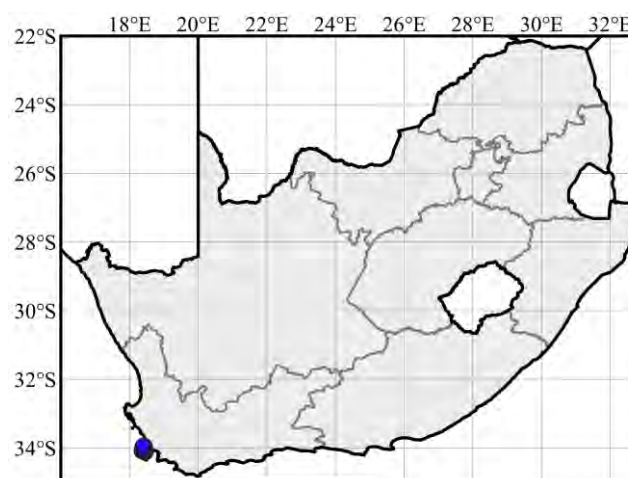
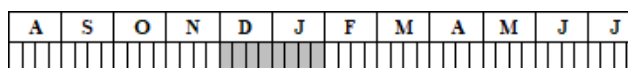
LC

Rare – Restricted Range
Endemic

Type locality: Muizenburg (near top of hill), Cape province [Western Cape province].

Taxonomy: Genus revised by Heath & Pringle (2004).

Distribution: Endemic to the Western Cape province in South Africa, restricted to the Cape Peninsula.



Habitat: Open areas in fynbos, in saddles between peaks, on sandy and rocky ground.

Vegetation types: FFg3 Peninsula Granite Fynbos, FFs9 Peninsula Sandstone Fynbos.

Assessment rationale: A range-restricted endemic taxon from the Cape Peninsula in the Western Cape province, South Africa (EOO 106 km²). It occurs in a well-protected and managed area. There are no current threats. The taxon thus qualifies globally under the IUCN criteria as Least Concern and is listed nationally as Rare (Restricted Range).

Change in status from SABCA: The status has not changed from the previous assessment.

Threats: No current threats, although only one specimen was seen in 2016. Low numbers are possibly due to the current drought.

Conservation measures and research required: No conservation actions are recommended. The taxon's subpopulations all fall within the Table Mountain National Park. Research is required into the life history, ecology and ant symbionts; and the population size, distribution and trends need to be monitored.

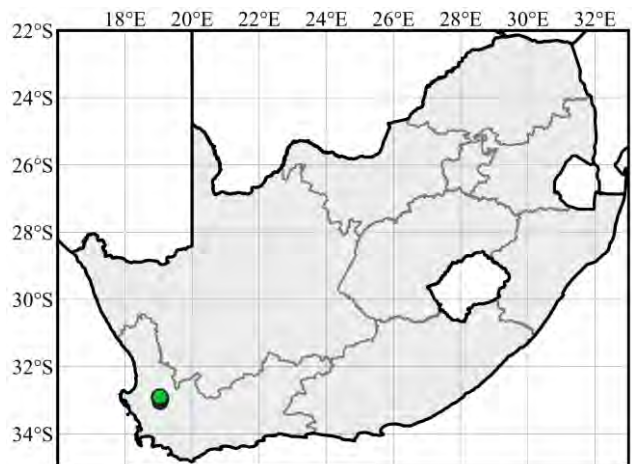
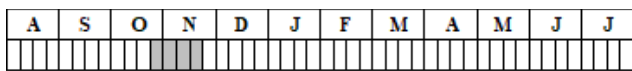
conservation actions are necessary. Research is required into the life history, ecology and ant symbionts; and the population size, distribution and trends need to be monitored.

Genus *Trimenia* Tite & Dickson, 1973.

Trimenia argyroplaga cardouwae Dickson & Wykeham, 1994
Mountain Large Silver-spotted Copper; Donker Silwerkolkopervlerkie

Jonathan B. Ball

LC
Endemic



Type locality: Western Cape province: mountains above Porterville.

Taxonomy: The true taxonomic status of specimens from the Hantamsberg/Calvinia needs to be determined, using molecular genetics as an adjunctive tool. Some, but not all specimens from near Calvinia are similar to the toptotypical *cardouwae* specimens.

Distribution: Endemic to the Western Cape province in South Africa, occurring in the Groot Winterhoek mountains near Porterville.

Habitat: Open areas amongst rocks in Sandstone Fynbos at an altitude of about 900 m.

Vegetation types: FFs3 Olifants Sandstone Fynbos, FFs5 Winterhoek Sandstone Fynbos, FRs9 Swartland Shale Renosterveld.

Assessment rationale: An endemic taxon from the Western Cape province in South Africa occurring in rocky, montane fynbos habitats in the Groot Winterhoek mountains (EOO 809 km²), with limited human activity. The distribution is probably larger than recorded. There are no currently known or foreseen threats. The taxon thus qualifies globally under the IUCN criteria as Least Concern.

Change in status from SABCA: The status has not changed from the previous assessment.

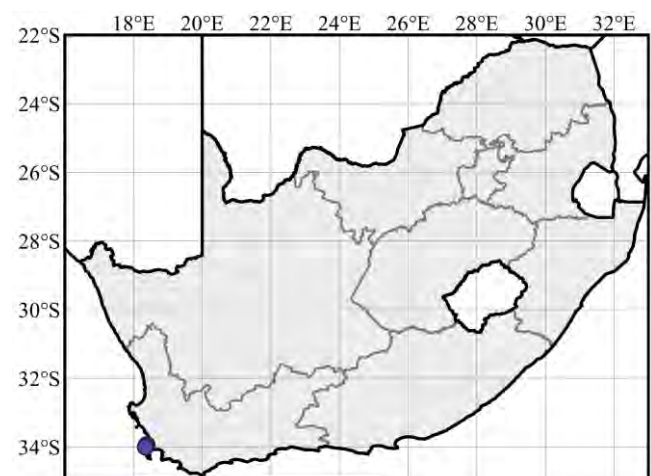
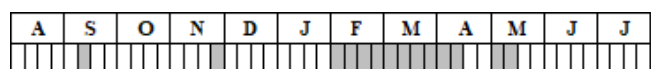
Threats: There are no notable threats to its rocky, montane habitat.

Conservation measures and research required: No conservation measures recommended. Research is required into the life history, ecology and ant symbionts; and the population size, distribution and trends need to be monitored.

Trimenia malagrida malagrida (Wallengren, 1857)
Scarce Silver-spotted Copper; Berg Silwerkolkopertjie

Fanie Rautenbach

CR–PE B1ab(i,ii,iii,iv,v)+2ab(i,ii,iii,iv,v)
Endemic



Type locality: ‘Caffraria’ [False locality].

Taxonomy: There are no notable issues.

Distribution: Endemic to the Cape Peninsula in the Western Cape province of South Africa, on the western slopes of Table Mountain between Llandudno and Lion's Head; used to occur at Llandudno.

Habitat: Rocky, west-facing slopes of the Table Mountain Range, at an altitude of 250 m to 350 m, in more open vegetation associated with periodic fires.

Vegetation types: FFg3 Peninsula Granite Fynbos, FFs9 Peninsula Sandstone Fynbos, (FFg3 Peninsula Granite Fynbos).

Assessment rationale: This is a range-restricted endemic from the Western Cape province, South Africa (EOO 4 km², AOO 4 km²). There is one location. No specimens of this taxon have been seen since 1994 despite regular surveys, although there have been no major surveys in the last few years. There is a persistent threat from invasion by alien plants and from an increase in fire frequency and intensity, causing a continuing decline in the area of suitable habitat. The taxon thus qualifies globally under the IUCN criteria as Critically Endangered (Possibly Extinct) under criterion B.

Change in status from SABCA: The status has not changed from the previous assessment.

Threats: The taxon has disappeared from most of its former habitats and now appears to be in a precarious state, if not already extinct. The last known colony on the western side of the higher slopes of Lion's Head in Cape Town was exterminated by the occurrence of too frequent and intense fires, enhanced by alien vegetation, in the mid-1990s. These fires occurred during the butterfly's late-summer flight period. This habitat was also affected by the invasion of alien vegetation. The second-last known colony of the taxon, near the Apostle Batteries above Llandudno, was destroyed by invasive alien vegetation- groves of trees of a *Eucalyptus* species. These groves continue to expand, displacing indigenous vegetation and thus inhibiting invertebrate presence as well as posing a fire hazard.

Conservation measures and research required: Systematic and intensive searches should be conducted for the taxon at the correct time of the year on Lion's Head and in the area above Llandudno, from where it was previously recorded.

Trimenia malagrida maryae (Dickson & G.A Henning, 1980)

De Hoop Silver-spotted Copper; Suid Kaapse Silwerkolkopertjie

Andrew S. Morton

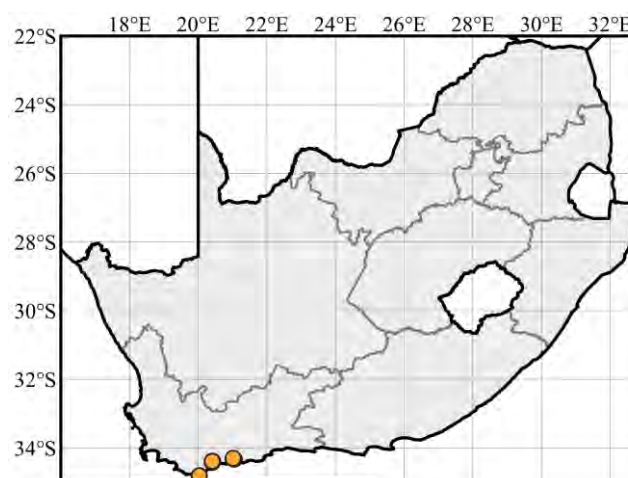
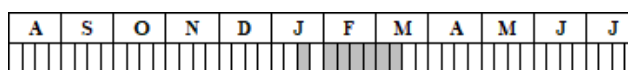
EN B1ab(i,ii,iii,iv,v)

Endemic

Type locality: Western Cape province: Struys Bay, nr. Cape Agulhas.

Taxonomy: There are no notable issues.

Distribution: Endemic to the Western Cape province in South Africa, from De Hoop Nature Reserve near Bredasdorp in the west and Vermaaklikheid and Struisbaai in the east.



Habitat: Rocky limestone ridges with short fynbos vegetation, at fairly low altitudes.

Vegetation types: AT40 Hartenbos Dune Thicket, FF11 Agulhas Limestone Fynbos, FF12 De Hoop Limestone Fynbos.

Assessment rationale: An endemic taxon from the Western Cape province in South Africa (EOO 1 369 km²). There are three locations at Struisbaai, De Hoop Nature Reserve and Vermaaklikheid, but it has not been recorded at Struisbaai or De Hoop for at least 10 years. There is therefore a decline in EOO, AOO, number of subpopulations and number of mature individuals. The habitat is declining due to encroachment of alien vegetation. The last record for this taxon was at Vermaaklikheid more than five years ago, where less than ten specimens were seen. Despite regular visits to De Hoop and Vermaaklikheid by the taxon author since then, no more specimens have been seen. Although it is scarce, there are no noticeable changes to the threats to this taxon and there is still a large area between Struisbaai in the west and Vermaaklikheid in the east with suitable habitat. The taxon thus qualifies globally under the IUCN criteria as Endangered under criterion B.

Change in status from SABCA: New and better information has proved that this butterfly is rarer than previously thought. It has been seen at only one of its three known localities in the last 10 years and the number of individuals seen here have declined. It was previously seen in good numbers and there were no obvious threats. Since

the previous assessment alien vegetation has become a serious threat. The status change from Least Concern to Endangered is therefore genuine.

Threats: There are three locations at Struisbaai, De Hoop Nature Reserve and Vermaaklikheid, but it has not been recorded at Struisbaai or De Hoop for at least 10 years. There is therefore a decline in EOO, AOO, number of subpopulations and number of mature individuals. The habitat is declining due to encroachment of alien vegetation.

Conservation measures and research required: Effective control of alien wattles at Vermaaklikheid is needed. Research is required into the life history, ecology and ant symbionts; and the population size, distribution and trends need to be monitored.

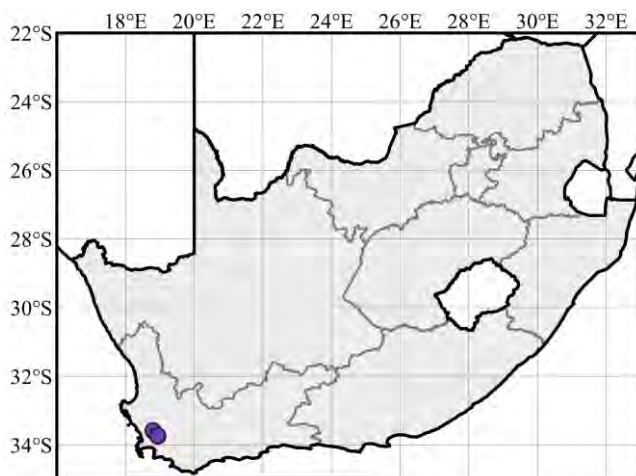
Trimenia malagrida paarlensis (Dickson, 1967)
Paarl Silver-spotted Copper; Paarl Silberkolkopertjie

Fanie Rautenbach

CR–PE B1ab(iii)+2ab(iii)
Endemic



A	S	O	N	D	J	F	M	A	M	J	J



Type locality: Cape province: Paarl Mountain.

Taxonomy: The taxonomic status of the subpopulation on the Paardeberg (about 20 km north-west of Paarl) is not quite certain; it may not represent *Trimenia malagrida paarlensis* but a distinct subspecies (Henning *et al.*, 2009).

Distribution: Endemic to the Western Cape province in South Africa, only ever found on Paarl Mountain and Paardeberg Mountain near Paarl. The Paarl Mountain subpopulation is extinct.

Habitat: Restricted to rocky inselbergs in Boland Granite Fynbos at altitudes from 600 m to 750 m, with rocky outcrops nearby and short fynbos vegetation.

Vegetation types: FFg2 Boland Granite Fynbos, (FFg2 Boland Granite Fynbos).

Assessment rationale: This is a range-restricted endemic taxon on the Paardeberg in the Western Cape province, South Africa (EOO 8 km², AOO 8 km²). There is one location. It has not been seen at the last remaining colony since 2010, despite regular surveys. Invasive alien vegetation and inappropriate fire regimes have reduced the quality of the habitat. The taxon thus qualifies globally under the IUCN criteria as Critically Endangered (Possibly Extinct) under criterion B.

Change in status from SABCA: This taxon was last observed in 2010 despite regular surveys and the habitat has undergone a good deal of degradation. The change in status from Critically Endangered to Possibly Extinct is therefore a genuine change.

Threats: Invasive alien vegetation, mainly Port Jackson Willow (*Acacia saligna*) on the Paardeberg and a *Pinus* species and Port Jackson Willow on Paarl Mountain, probably poses the most severe threat to this taxon. Inappropriate fire regimes have also proved harmful. There is a 4x4 trail on Paardeberg Mountain, but this does not appear to be impacting negatively on either colony. However, this situation has to be further assessed and monitored.

Conservation measures and research required: The last remaining site is on private land, which forms part of a nature conservancy. Population monitoring and detailed autecological and synecological studies are needed to design and implement an effective habitat management plan that includes cooperation by the landowners.

Trimenia wallengrenii gonnemoides Ball, 1994
Piketberg Silver-spotted Copper; Piketberg Silberkolkopertjie

Fanie Rautenbach

EN B1ab(ii,iii)+2ab(ii,iii)
Endemic

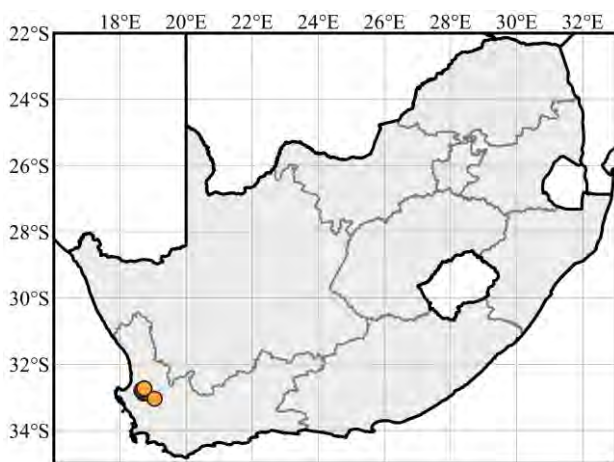
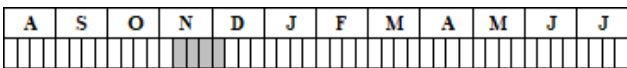
Type locality: Piketberg, Cape province.

Taxonomy: There are no notable issues.

Distribution: Endemic to the Western Cape province in South Africa, on upper slopes of the inselberg of the Piketberg mountain.

Habitat: Flat or sloping summits of mountains, in small open areas between rocky, montane fynbos vegetation.

Vegetation types: FFs3 Olifants Sandstone Fynbos, FFs6 Piketberg Sandstone Fynbos.



Assessment rationale: This is a range-restricted endemic from the Western Cape province of South Africa (EOO 81 km², AOO 24 km²). There are five locations. There has been past loss of habitat to agriculture and there is ongoing slow loss of habitat to further agricultural expansion. There is also ongoing decline in habitat quality as a result of invasion by alien plants. The taxon thus qualifies globally under the IUCN criteria as Endangered under criterion B.

Change in status from SABCA: Previously assessed as Vulnerable (D2) but now assessed as Endangered (B1 & B2). There has been past loss of habitat to agriculture and there is ongoing slow loss of habitat to further agricultural expansion. There is also ongoing decline in habitat quality as a result of invasion by alien plants. These threats were also present during the previous assessment and thus the threats were wrongly interpreted as future potential threats during the previous assessment. Due to better quality data used for the current assessment, the EOO has declined from EOO from 200 km² to 81 km² but the number of locations are five, within the Endangered threshold. The change in status from Vulnerable to Endangered is not genuine because the threats should have been considered as current threats instead of future potential threats for the first assessment, which would have made it Endangered too.

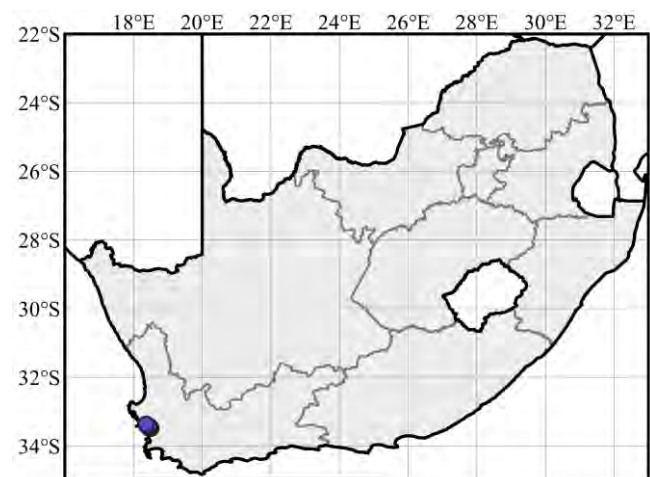
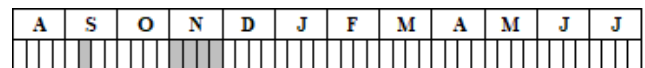
Threats: A forestry plantation has diminished and fragmented one of the main subpopulations and its presence will continue to have a negative impact. Increased fire frequency and invasive alien vegetation are also current threats and future threats.

Conservation measures and research required: No further plantation forestry should be allowed where this taxon presently occurs. Invasive alien vegetation needs to be removed from the mountain as it increases fire frequency and intensity. Any further agricultural development near the few remaining colonies needs to be carefully considered because of its possible deleterious effects on subpopulations. Research is required into the life history, ecology and ant symbionts; and the population size, distribution and trends need to be monitored.

Trimenia wallengrenii wallengrenii (Trimen, 1887)
Swartland Silver-spotted Copper; Fynbos Silwerkolkopertjie

Jonathan B. Ball

CR–PE B1ab(i,ii,iii,iv,v)
Endemic



Type locality: Swellendam and Grahamstown [both false localities], Cape Colony.

Taxonomy: There are no notable issues.

Distribution: Endemic to the Western Cape province in South Africa, on hills between Darling in the west to Mamre in the east, historically this taxon occurred near Stellenbosch as well as near Mamre.

Vegetation types: FRg2 Swartland Granite Renosterveld.

Habitat: Found near the summits and on the western slopes of low hills in renosterveld vegetation at an altitude of 350 m to 450 m.

Assessment rationale: A range-restricted taxon endemic to the Western Cape province of South Africa (EOO 62 km²). This taxon has not been seen for 14 years at its last two known locations, despite regular surveys. It was once quite widespread in the Western Cape province, from Stellenbosch to Darling. Extensive searching has taken place over the last 40 years in both previously known as well as possible further suitable habitats. The taxon thus qualifies globally under the IUCN criteria as Critically Endangered (Possibly Extinct) under criterion B.

Change in status from SABCA: No specimens have been seen since the previous assessment despite extensive searching. The last known observation was made in 2003 and the taxon has thus not been seen for 14 years. The status has therefore been changed from Critically Endangered to Possibly Extinct and is a genuine change.

Threats: This taxon appears to be extinct. It was, in the past, severely threatened by incremental habitat destruction and degradation from agricultural activity and invasive alien vegetation. The ecosystem status of the habitat, from a vegetation perspective, is Critically Endangered. Trimen (1887) reported that he ‘found *Trimenia wallengrenii*, rather numerous, on hills near Stellenbosch.’ There have been no other records from this locality and the taxon probably no longer occurs there. Extensive agricultural activities in the area have led to the extinction of several other colonies. It had survived at a few habitats located on rough or rocky ground, which, owing to its nature, had escaped the plough. In some cases cultivated areas extended up to the borders of the few previously existing colonies. Pesticide use is a presumed threat but there is no empirical evidence to confirm this.

Conservation measures and research required: The last two subpopulations were on privately owned farms. Monitoring of this taxon has not revealed any specimens in 14 years. This taxon is thus presumed to be extinct, although targeted searches should continue for at least another 10 years.

Trimenia wykehami (Dickson, 1969)
Roggeveld Silver-spotted Copper; Nama Karoo
Silwerkolkopertjie

Fanie Rautenbach

LC
Endemic

Type locality: Summit of Nieuwveld Mtns. (6000'), nr. Beaufort West, Western Cape province.

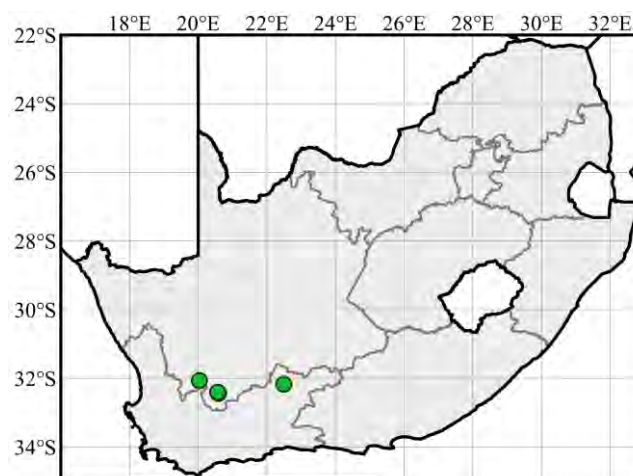
Taxonomy: There are no notable issues.

Distribution: Endemic to the Western Cape and Northern Cape provinces in South Africa, from the Roggeveld Escarpment near Sutherland in the west to the Nuweveldberge near Beaufort West in the east.

Habitat: Rocky hillsides and slopes in dry karroid country, at fairly high altitudes.



A	S	O	N	D	J	F	M	A	M	J	J



Vegetation types: FRs3 Roggeveld Shale Renosterveld, NKu4 Eastern Upper Karoo, SKv4 Tanqua Escarpment Shrubland.

Assessment rationale: This endemic taxon is found in the Western Cape and Northern Cape provinces in South Africa (EOO 4 420 km²). There are no current threats. The taxon thus qualifies globally under the IUCN criteria as Least Concern.

Change in status from SABCA: The status has not changed from the previous assessment.

Threats: There are no major threats as the subpopulations are isolated from one another and in remote areas.

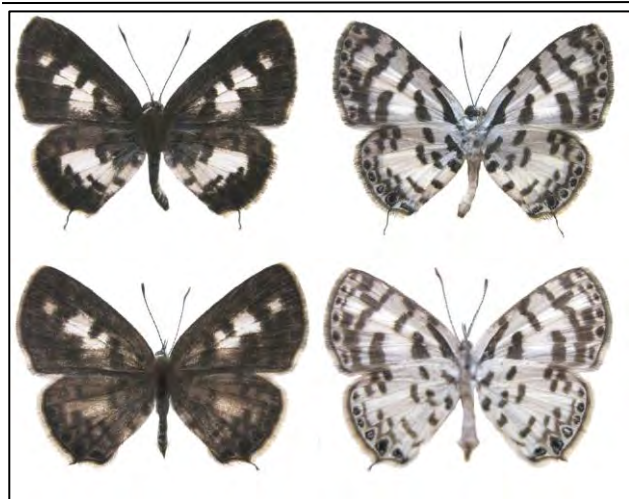
Conservation measures and research required: No conservation actions are recommended. Research is required into the life history, ecology and ant symbionts; and the population size, distribution and trends need to be monitored.

Genus *Tuxentius* Larsen, 1982.

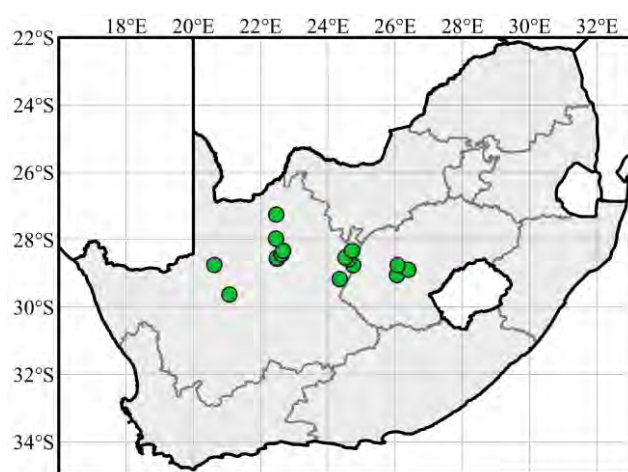
Tuxentius melaena griqua (Trimen, 1887)
Griqua Black Pie; Griekwa Swartbontetjie

Graham A. Henning

LC
Endemic



A	S	O	N	D	J	F	M	A	M	J	J
█	█	█	█	█	█	█	█	█	█	█	█



Type locality: Griqualand West. – Vaal River.

Taxonomy: There are no notable issues.

Distribution: Endemic to the Northern Cape and Free State provinces in South Africa, from Kakamas and Kenhardt in the west to Bloemfontein in the east, and to the Hotazel area in the north.

Habitat: Arid savanna and riverine bush, wherever the host plant is found.

Vegetation types: AZa3 Lower Gariep Alluvial Vegetation, AZa5 Highveld Alluvial Vegetation, Gh5 Bloemfontein Dry Grassland, Gh7 Winburg Grassy Shrubland, Gh9 Western Free State Clay Grassland, NKb3 Bushmanland Arid Grassland, SVk13 Olifantshoek Plains Thornveld, SVk15 Koranna-Langeberg Mountain Bushveld, SVk4 Kimberley Thornveld, SVk5 Vaalbos Rocky Shrubland.

Assessment rationale: A wide-ranging endemic taxon from the Northern Cape and Free State provinces in South Africa (EOO 79 192 km²). There are at least 15 locations. Urban development, wood collection, and alluvial diamond mining are impacting the habitat. Current threats have not resulted in decline levels that qualify this taxon under any of the categories of threat. The taxon thus qualifies globally under the IUCN criteria as Least Concern.

Change in status from SABCA: The distribution range has been extended during recent research and it is now found

over a considerably larger area than previously thought (EOO of about 79 000 km² now). Current threats have not resulted in decline levels that qualify this taxon under any of the categories of threat. For the 2012 assessment it would have been Least Concern too and thus the change in status from Data Deficient to Least Concern is non-genuine.

Threats: The banks of the Vaal and other rivers inhabited by the taxon are threatened by alluvial diamond mining operations and in other places by the development of pleasure resorts or housing. Use of wood of the host plant by the local population as a fuelwood is a current threat to the habitat. Threats have not caused more than a 10% decline in the population of this taxon.

Conservation measures and research required: No conservation actions recommended. Research is needed into its life history, ecology, population numbers and distribution.