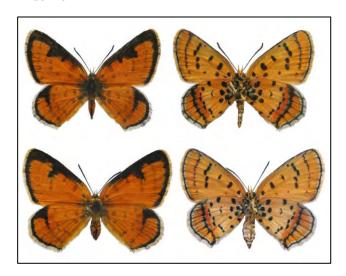
DOI: https://dx.doi.org/10.4314/met.v31i4.4

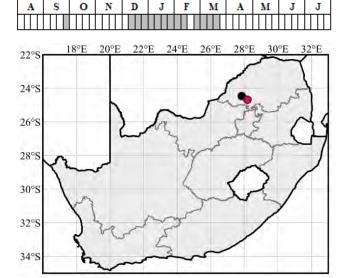
Genus Erikssonia Trimen, 1891

Erikssonia edgei Gardiner & Terblanche, 2010 Waterberg Acraea Copper; Waterberg Kopervlerkie

Jeremy C.H. Dobson & Chris M. Dobson

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





Type locality: Limpopo province, Perdekop, Waterberg Mountains, 24°27'34"S 27°50'38"E, 1 600 m, 27.xii.1980, D.A. Edge.

Taxonomy: The Waterberg population of *Erikssonia* was formerly thought to represent *Erikssonia acraeina*. This population has subsequently been described as a new species, *Erikssonia edgei*, by Gardiner & Terblanche (2010).

Distribution: Endemic to Limpopo province in South Africa, confined to one locality in the Waterberg Mountains at Bateleur Nature Reserve. It is locally extinct at Perdekop.

Habitat: At the type-locality (Perdekop) this species was found on level ground with a grassy understory, herbaceous elements and scattered trees, at the north-western base of a small mountain. The new location in Bateleur Nature Reserve, discovered in March 2013, occupies a gentle Southeast facing grassy slope, with deep sandy soil. Two colonies

have been found at the Bateleur site, approximately 800 m apart. The colonies are separated by a game-fence, which marks the border of the Bateleur Nature Reserve; the north-western colony lies on a privately-owned farm. In contrast to most of the adjacent areas, the areas where the butterflies fly are relatively free of large rocks and boulders. Both the Perdekop and Bateleur localities occur at the ecotone between Waterberg Mountain Bushveld and Central Sandy Bushveld vegetation types. Common denominators include altitude (both sites are at about 1 650 m); deep sandy soils; the presence of *Gnidia* plants and the presence of *Lepisiota* ants.

Vegetation types: SVcb17 Waterberg Mountain Bushveld, (SVcb17 Waterberg Mountain Bushveld).

Assessment rationale: A very range-restricted endemic to Limpopo province in South Africa (EOO 4 km² and AOO 4 km²). This taxon is known from only one location, Bateleur Nature Reserve, where it was discovered in March 2013. Bateleur is receiving regular monitoring by LSA, and numbers of the butterfly have been in rapid decline for four years in a row, very likely a result of one of the worst droughts in recorded history. LSA organised a controlled grass-burn at the Bateleur location in August 2016. This appears to have improved the quality of habitat within the area occupied by one of the two colonies at this location. The other colony, beyond the Bateleur boundary fence, plus the Perdekop location have received no active management. No adults have been seen at the Perdekop locality location for more than 20 years. Numerous searches in the adjacent area have failed to locate further subpopulations. The habitat at the Perdekop location has deteriorated markedly and is believed to have led to the disappearance of the taxon at this site, where it is now considered to be locally extinct. 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: A major threat at the Perdekop locality was the lack of regular burning and the exclusion of grazing animals. There were no fires from 1984 to 1989 and the population declined. After fire cycles were reintroduced in 1989 the population increased. Since then the habitat became severely overgrown and the larval host plant disappeared. No adults have been recorded from this site for more than 20 years, where it is now considered to be locally extinct. At the Bateleur locality a controlled burn was undertaken in August 2016 and the initial indications are that the veld has been rejuvenated, with abundant flowering *Gnidia*. The most significant current threat to this site was a recent drought, which was only broken in 2017. The number of butterflies observed through regular site-monitoring has declined rapidly over the last three seasons.

Conservation measures and research required: Conservation actions include regular population monitoring and habitat management of the Bateleur subpopulation. Searches for new localities elsewhere in Bateleur and the wider Waterberg area should be continued. The option of seeking Provincial protection for the Bateleur site is being considered.

Relevant literature:

Edge, D.A. 2014. Searching in the Waterberg for *Erikssonia edgei* Gardiner & Terblanche, 2010 during December 2011 & January 2012. *Metamorphosis* **25**: 77–81.

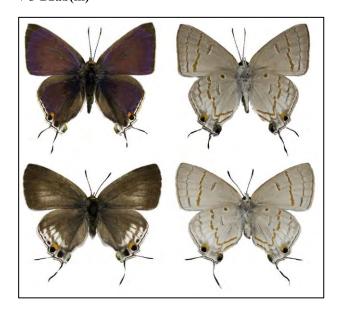
Garvie, O.G., Dobson, J.C.H., Edge, D.A., Gardiner, A.J., Terblanche, R.F. & Williams, M.C. 2014. Research and conservation plan for the Waterberg Copper (*Erikssonia edgei* Gardiner & Terblanche, 2010) (Lepidoptera: Lycaenidae) at the Bateleur Nature Reserve. *Metamorphosis* 25: 100–108.

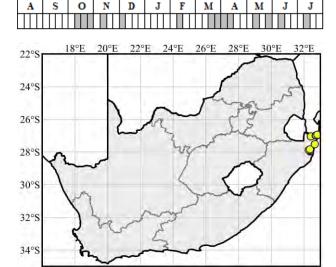
Genus Hypolycaena Felder C., 1862

Hypolycaena lochmophila Tite, 1967 Coastal Hairstreak; Strand Stertbloutjie

Steve E. Woodhall

VU B2ab(iii)





Type locality: Hluhluwe.

Taxonomy: Hypolycaena lochmophila is very similar to the widespread H. philippus philippus, and is often confused with it. It differs from H. philippus in that the upperside ground-colour is darker in both sexes; the underside ground-colour is bright whitish grey (dull grey-brown in philippus); on the forewing underside the postdiscal transverse band bends outwards below vein 3, forming an elbow which nearly approximates the submarginal band in area 1B (in

H. philippus it is in a straight line, roughly parallel to the submarginal band) (Pringle *et al.*, 1994).

Distribution: This taxon is found in KwaZulu-Natal province in South Africa, from False Bay in the south to Kosi Bay in the north-east, and Tembe Elephant Park in the north-west. Also found in Malawi (Ruo Forest near Mount Mulanje). There are unconfirmed records from Beira in Mozambique and the Mutare area of Zimbabwe, which were not considered for this assessment.

Habitat: Shady areas of coastal or lowland dry, sandy forest. The very similar *H. philippus* may be found nearby but it flies in open areas on the edges of the forest.

Vegetation types: CB1 Maputaland Coastal Belt, FOa2 Swamp Forest, FOz7 Northern Coastal Forest, FOz8 Sand Forest, SV118 Tembe Sandy Bushveld, SV123 Zululand Lowveld.

Assessment rationale: This species is found in KwaZulu-Natal province in South Africa and recently it was also recorded in Malawi (EOO 26 000 km², AOO 60-2 000 km²) (the potential AOO is very likely to be $< 2000 \text{ km}^2 - \text{even}$ though the actual figure is unknown and very uncertain). This is because the habitat between Maputaland and Malawi has been heavily transformed and we know this butterfly is a specialist. In South Africa there are five locations, two of which (Manguzi and Sodwana Bay) are under threat from bush clearance, small scale agriculture and urbanisation. There is a possible future threat of insecticide spraying of deltamethrin, to reduce tsetse fly populations to a degree where sterile male release could eradicate them, but in the medium term (five years) this is unlikely (A. Armstrong, pers. comm.; and www-naweb.iaea.org/nafa/ipc/tsetseflies.html). The Malawian subpopulation is also a location under threat, due to forest clearance encouraged by government action. A Data Deficient (Distribution) assessment could be considered, in the light of the high level of uncertainty about the true distribution. However, the number of locations is small, the AOO is small, and there are threats to at least three locations. The taxon thus qualifies globally under the IUCN criteria as Vulnerable under criterion B.

Change in status from SABCA: Despite the threats intensifying since the previous assessment, this in itself has not been enough for the taxon to change status. The main reason for the change in status is because better information has become available since the previous assessment, with EOO and AOO estimates as well as number of locations based on more reliable data. Previously, EOO was given as > 50 000 km², whereas now it is approximately 26 000 km², possibly more. No AOO figure was given previously, and although still uncertain it is definitely less than 2 000 km². Currently, six locations are known. Also, several of the records previously stated to be this taxon have proven on examination to be the common and widespread H. philippus philippus, with which it can easily be confused. The same Vulnerable category would have been valid for the previous assessment and thus the change in status from Least Concern to Vulnerable is non-genuine.

Threats: The subpopulations in Manguzi Forest and Sodwana Bay, despite being inside protected areas, are under threat from bush clearance, small scale agriculture, and urbanisation. The authorities appear to have little power to

prevent this. The Maputaland subpopulations also face a possible future threat of insecticide spraying to reduce tsetse fly populations to a point where sterile male release can be used to eliminate them. The Malawian subpopulation is under threat from forest clearance as a result of government allocating responsibility for forest care to local chiefs. This has led to extensive deforestation all over the country (R. Murphy, pers. comm.). This is a niche taxon that is vulnerable to changes in rainfall and temperature as a result of anthropogenic climate change. This makes the subpopulations in reserves such as False Bay Park, Tembe and Kosi Bay, as well as Phinda, subject to threats from temperature extremes and droughts.

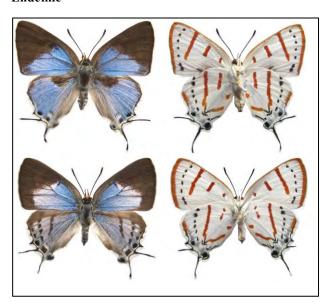
Conservation measures and research required: The EOO is likely to be larger than that recorded in this assessment, because it may often be overlooked because of its similarity to *H. phillipus*. Research is needed into its life history and ecology, and the known populations need to be monitored.

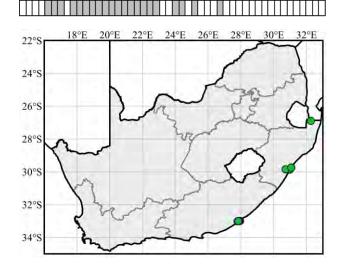
Genus Iolaus Hübner, [1819]

Iolaus aemulus Trimen, 1895 Short-barred Sapphire; Wegkruipertjie Saffier

Fanie Rautenbach

LC Endemic





D

J F

A

Type locality: Natal, D'Urban.

Taxonomy: There are no notable issues.

Distribution: Endemic to the Eastern Cape and KwaZulu-Natal provinces in South Africa, from East London in the south and Durban to Ndumo in the north. Likely to occur in adjacent parts of Mozambique and Swaziland.

Habitat: Forest edges, normally in coastal bush.

Vegetation types: AT53 Umtiza Forest Thicket, CB3 KwaZulu-Natal Coastal Belt Grassland, FOz7 Northern Coastal Forest, SVI21 Makatini Clay Thicket, SVs6 Eastern Valley Bushveld, (AT56 Hamburg Dune Thicket), (FOz7 Northern Coastal Forest).

Assessment rationale: An endemic taxon found in the KwaZulu-Natal and Eastern Cape provinces in South Africa (EOO 27 300 km²). There are five locations. However, more subpopulations may be found in Swaziland, Mozambique and in under-surveyed areas in South Africa. This butterfly is difficult to observe in the wild. It is therefore suspected that there are more than 10 locations. The host plant is used as traditional medicine and has been exterminated from some known localities where the taxon used to be found. There is a risk of continuous decline in the habitat of the remaining subpopulations as a result of further collecting of the host plant for traditional medicine and urban development. 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: The most significant threat to this taxon is overutilisation of its host plant for traditional medicine throughout its range. In addition, most of the subpopulations are very near coastal areas where housing, commercial, tourist, and roads/railroad expansion is a threat to the taxon.

Conservation measures and research required: The areas where the remaining subpopulations are need to be protected and managed, especially the host plant. There should also be a concerted effort to find more subpopulations. Research is needed into its life history and ecology.

Iolaus diametra natalica Vári, 1976 Natal Yellow-banded Sapphire; Natalse Geelstreep Saffier

Steve E. Woodhall

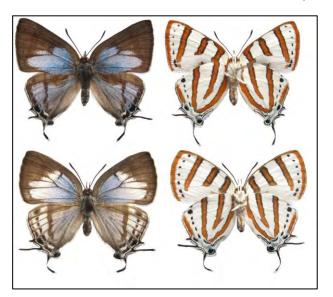
LC Rare – Low Density

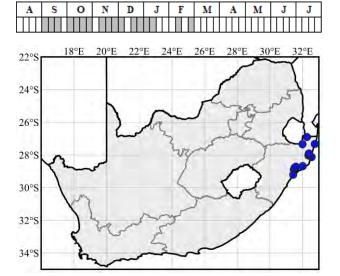
Type locality: Hluhluwe.

Taxonomy: This taxon is the South African subspecies of *Iolaus diametra*, which has four subspecies in total. Nominate *I. d. diametra* is found from north-central Tanzania to southern Ethiopia. *I. d. congco* occurs in coastal Kenya and Tanzania, and *I. d. zanzibarensis* occurs on Zanzibar Island.

Distribution: This taxon is found in KwaZulu-Natal province in South Africa, from Durban in the south, Weenen in the west to Ndumo in the north. Also from Xai Xai in southern Mozambique.

Habitat: Savanna and forest at low to medium altitudes, with





some records from further inland at higher altitudes (Weenen and the Tugela Valley).

Vegetation types: CB1 Maputaland Coastal Belt, FOz5 Scarp Forest, FOz7 Northern Coastal Forest, Gs20 Moist Coast Hinterland Grassland, SVl21 Makatini Clay Thicket, SVl22 Northern Zululand Sourveld, SVs6 Eastern Valley Bushveld, (SVs6 Eastern Valley Bushveld).

Assessment rationale: A rare, low density taxon occurring over a wide area of KwaZulu-Natal province in South Africa and also in southern Mozambique (EOO 32 659 km²). Many of its known subpopulations are in protected areas and have recently been found to be thriving and mostly under little threat at present. Only one of these, in Ndumo, is under threat of shifting agriculture and bush clearance due to land invasion. The whole of Maputaland is under a possible future threat of deltamethrin spraying for Tsetse Fly, but this is unlikely to occur in the near future. There may well be more subpopulations than indicated by the current data because it is seldom seen on the wing and probably remains undersampled, especially in southern Mozambique. Most adults are recorded from rearing larvae found on the host plants. It is a rare butterfly whose host plant is uncommon. The taxon thus qualifies globally under the IUCN criteria as Least Concern and is nationally classified as Rare (Low Density).

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

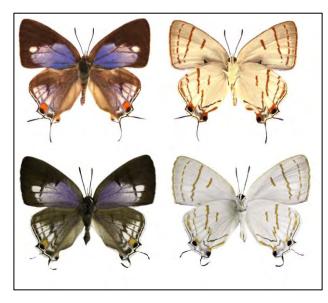
Threats: The subpopulations in most nature reserves are not under threat, except that in Ndumo where slash and burn agriculture and a land claim threaten the reserve. Farming (citrus orchards and bush cutting to allow cattle to graze) has eliminated one known locality, near Mandawe Hill. Uncontrolled land use change and habitat destruction are the major threats to populations in unprotected areas. The subpopulation at Xai Xai in Mozambique is subject to threats of tourism development. The subpopulations in Maputaland face a possible future threat of deltamethrin spraying to control tsetse fly, in preparation for sterile male release (A. pers. Armstrong, comm., and wwwnaweb.iaea.org/nafa/ipc/tsetse-flies.html).

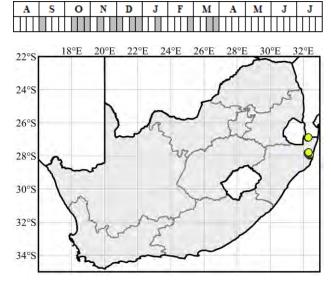
Conservation measures and research required: This taxon is not threatened but its host plant is uncommon. Outside protected areas, it may be under threat from agriculture and human encroachment. The subpopulations of the butterfly and its habitat need to be monitored.

Iolaus lulua (Riley, 1944) White-spotted Sapphire; Witkol Saffier

Steve E. Woodhall & Alan J. Gardiner

VU B1ab(iii)





Type locality: Hluhluwe, False Bay, Zululand.

Taxonomy: There are no notable issues.

Distribution: This species is found in the KwaZulu-Natal province of South Africa from the Makatini Flats at False Bay in the south to Ndumo in the north. It has been found at one locality in Mozambique near Xai Xai but it should also occur in the Maputo Special Reserve although no observations have been made there yet.

Habitat: It is found in coastal forest and thick bush near rivers, fresh water pans and on the coast where its semi-parasitic host plants are found. Its host plants are from the family Loranthaceae, such as *Oncocalyx bolusii* in South Africa and *Tapinanthus* sp. in Mozambique. The life cycle has been photographed but not all instars published.

Vegetation types: FOz7 Northern Coastal Forest, SVI16 Southern Lebombo Bushveld, SVI18 Tembe Sandy Bushveld, SVI21 Makatini Clay Thicket, SVI23 Zululand Lowveld.

Assessment rationale: A rare species in KwaZulu-Natal province, South Africa, and southern Mozambique. The EOO is 10 714 km2. There are five locations. The localities in the False Bay Park/Mkhuze/Phinda area are well protected and under little threat. The subpopulation in Ndumo Nature Reserve is experiencing ongoing loss of habitat due to bush clearing for subsistence agriculture. The subpopulation in southern Mozambique is under threat from tourism developments and agriculture. The known habitat is not severely fragmented in South Africa, but it is in Mozambique. Although only five locations are reported here, there could be more because the butterfly is likely to occur in other places such as Maputo Special Reserve. It is seldom encountered and has sedentary, secretive habits. The taxon thus qualifies globally under the IUCN criteria as Vulnerable under criterion B.

Change in status from SABCA: Previously, the AOO was given as 3 125 km² and it was stated that its known 'locations' (actually subpopulations) are all inside protected areas, so they were under no threat. In SALCA the AOO is measured at 56 km² including some new subpopulations. Now we know the Ndumo subpopulation (location) to be under threat of land invasion leading to bush clearance. This was not the case during the previous assessment so it is a genuine change in status. Another subpopulation (and location) was discovered in Mozambique but this is also under threat, from tourism development. This threat was probably present during the previous assessment so is a nongenuine change in status. Only the location in southern Maputaland (which contains some newly discovered subpopulations) is in well protected areas. Many suitable localities have been searched since the previous assessment. The Mkuze subpopulation has not been confirmed to exist despite searching for it. The Ndumo subpopulation was searched for (including the exact geo-coordinates) and neither the butterfly nor its host plant was found. The reasons for these absences cannot be reliably attributed to changes in threat levels. The areas are difficult to survey and other subpopulations may be present but undetected, but extensive searches in suitable areas have failed to turn up new subpopulations. Therefore, the assumption made in the previous assessment that its low density and elusive nature indicated that it was probably more numerous than actual observations indicated, was probably erroneous. This leads to the deduction that the threats were underestimated at the time, so with the reduction in known AOO (new data) the change in status from Least Concern to Vulnerable would appear to be non-genuine.

Threats: In southern Mozambique, coastal bush is under threat from cultivation and housing. The recent records from 2014–2016 of this species at Xai Xai indicates that it was probably formerly widespread across the Mozambique section of the Maputaland region. However, almost all suitable habitat in this area has been lost to urban expansion, rural settlements and agriculture, leading to the fragmentation of the population of this formerly widespread species. Threat of habitat loss at Xai Xai is ongoing. This subpopulation in Mozambique is also under threat from tourism development because Xai Xai is a popular tourist destination. It may be present in Maputo Special Reserve, a protected locality falling under the National Reserve system of Mozambique. Its remaining habitat in South Africa is protected, but it has also had extensive losses outside protected areas in the past (especially in the 20th century when there were extensive land use changes from agriculture, human development [sprawl] and plantations). The two South African subpopulations are in nature reserves, and in one of these habitat loss due to development is not considered to be a major threat (False Bay Park, Mkhuze and Phinda Private Game Reserve). This is because the land managers have good conservation policies. However, the location in Ndumo Nature Reserve is under threat from illegal bush clearance and small-scale agriculture and cattle grazing. Environmental changes or events such as fires, droughts, etc. could have an effect on population sizes. Also, all the South African Maputaland subpopulations are under a possible future threat of insecticide spraying to reduce Tsetse Fly populations to a size that can be extirpated using sterile male release (A. Armstrong, pers. comm.; wwwnaweb.iaea.org/nafa/ipc/tsetse-flies.html). However, this is unlikely to occur in the near future.

Conservation measures and research required: This taxon's areas of occurrence in South Africa are all inside protected areas, although the Ndumo subpopulation is threatened by illegal bush clearance for subsistence farming. Conservation workers need to be aware of the potential threat of spraying with deltamethrin (to control tsetse fly). This is unlikely to occur in the near future, but the entity promoting this is likely to persevere. The Mozambican subpopulation is under threat from tourist and subsistence agriculture development. Developers planning to build in this area need to be made aware of the butterfly and its importance to conservation.

Iolaus nasisii (Riley, 1928) Zimbabwe Yellow-banded Sapphire; Geellint Saffier

Mark C. Williams

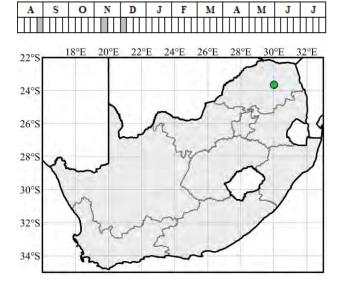
LC

Type locality: Naisi [Nasisi] Hills, 20 miles N. of Munias [Mumias], Kenya Colony, 4800 feet.

Taxonomy: There are indications that the southern subpopulations of *Iolaus nasisii* may not be conspecific with those of topotypical *nasisii* from Kenya (S. Sáfián, pers.

comm.). Taxonomic research is necessary to resolve this issue





Distribution: Found in Limpopo province in South Africa, recorded from Musina and Buffelsberg near Munnik and from the Kudu River Valley. Also found in Namibia, Botswana, Zimbabwe, Zambia, Malawi, Tanzania, Kenya and Uganda.

Habitat: Mesic to moist frost-free savanna. Most of the habitat in South Africa is in rocky, hilly terrain.

Vegetation types: SV18 Tzaneen Sour Bushveld.

Assessment rationale: This is a widespread species occurring in nine sub-Saharan African countries (EOO is greater than 100 000 km²) and there are no known threats. The taxon thus qualifies globally under the IUCN criteria as Least Concern.

Change in status from SABCA: Not previously assessed.

Threats: There are no known threats to the habitat.

Conservation measures and research required: No conservations actions are required. Research into the size and persistence of the South African population is needed.

Relevant literature:

Williams, M.C., Dobson, J.C.H., Bode, J.G. & Bode, Y. 2016. The occurrence and life history of *Iolaus nasisii* (Riley, 1928) (Lepidoptera: Lycaenidae) in South Africa.

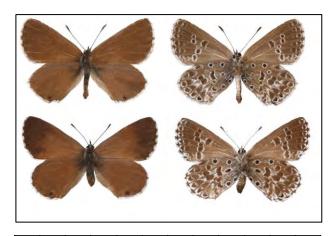
Metamorphosis 27: 3-5.

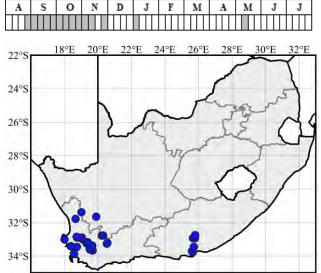
Genus Lepidochrysops Hedicke, 1923

Lepidochrysops bacchus Riley, 1938 Wineland Giant Cupid; Wynland Ratsbloutjie

Jonathan B. Ball

LC Rare – Habitat Specific, Low Density Endemic





Type locality: Tygerberg Hills, near Cape Town.

Taxonomy: There is some uncertainty about the taxonomic status of subpopulations in the Bitterfontein-Garies area. Some authorities (see Pringle *et al.*, 1994) contend that they are referable to *Lepidochrysops bacchus* while others regard them as belonging to *L. penningtoni*. Further research (including molecular genetics), is needed to clarify this.

Distribution: Endemic to the Eastern Cape, Northern Cape and Western Cape provinces of South Africa, from Cape Town in the south-west to Piketberg and Sutherland in the north, and Middelton and Coega in the east.

Habitat: At the type locality the butterfly was found mainly on a rocky, scrub-covered knoll on the side of a hill. Generally found in fynbos but the Uitenhage population is in

Valley Bushveld. Known localities receive between 500 mm and 750 mm of rainfall per annum.

Vegetation types: AT32 Fish Valley Thicket, AT44 Motherwell Karroid Thicket, AT51 Sundays Valley Thicket, AZd3 Cape Seashore Vegetation, AZi6 Southern Karoo Riviere, FFs1 Bokkeveld Sandstone Fynbos, FFs30 Western Altimontane Sandstone Fynbos, FFs5 Winterhoek Sandstone Fynbos, FFs6 Piketberg Sandstone Fynbos, FFs8 South Hex Sandstone Fynbos, FRg2 Swartland Granite Renosterveld, FRs6 Matjiesfontein Shale Renosterveld, FRs9 Swartland Shale Renosterveld, SKk9 Kobee Succulent Shrubland, SKt3 Roggeveld Karoo, SKv6 Koedoesberge-Moordenaars Karoo, SKv7 Robertson Karoo.

Assessment rationale: A taxon endemic to the Western, Northern and Eastern Cape provinces in South Africa but with a large distribution (EOO 138 394 km²). Over most of its range the taxon faces no threats. However, close to towns some subpopulations have declined or become extinct over the past 50 years. This localised decline is not likely to have impacted on more than 10% of the population. This taxon is rarely found in great numbers at any one site, but is found over a large area. The taxon thus qualifies globally under the IUCN criteria as Least Concern and is nationally classified as Rare (Habitat Specialist and Low Density).

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

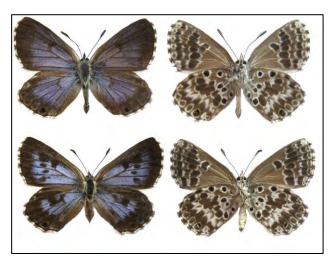
Threats: No perceived threats exist in most of the remote colonies. In the Western Cape province habitat fragmentation of Renosterveld due to housing, farming, plantation forestry and invasive alien vegetation has caused the demise or decline of a number of subpopulations. This has been most noticeable over the past 15 years near Malmesbury and Piketberg.

Conservation measures and research required: No conservation actions recommended. Research is needed into the taxonomy of the highly disjunct populations, life history, ecology, population size, distribution and trends.

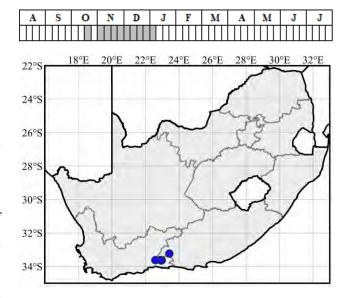
Lepidochrysops balli Dickson, 1985 Kammanassie Giant Cupid; Kammanassie Ratsbloutjie

Mark C. Williams

LC Rare – Habitat specialist Endemic



Type locality: Kammanassie Mountains (at approx. 4,900 ft. above sea level).



Taxonomy: There are no notable issues.

Distribution: Endemic to the Western Cape and Eastern Cape provinces in South Africa, restricted to the southern slopes of the Kammanassie mountains near Uniondale and the Aasvöelsberg near Willowmore.

Habitat: Rocky areas halfway up the southern slopes of the Kammanassie mountain range at an altitude of about 1 300 m.

Vegetation types: FFb3 Central Inland Shale Band Vegetation, FFq5 Grootrivier Quartzite Fynbos, FFs25 North Kammanassie Sandstone Fynbos, FFs26 South Kammanassie Sandstone Fynbos.

Assessment rationale: An endemic species from the Western Cape and Eastern Cape provinces, South Africa (EOO 810 km²). Considered to be a rare habitat specialist because the larval host plant, and probably also the associated ant, are restricted to high altitude, south-facing, rocky areas on a specific mountain. There are no known threats. The taxon thus qualifies globally under the IUCN criteria as Least Concern and is nationally classified as Rare (Habitat Specialist).

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. Further research is needed into the life history and ecology.

Lepidochrysops frederikeae Henning & Ball, 2013 Tankwa Giant Cupid; Nuuskierige Ratsbloutjie

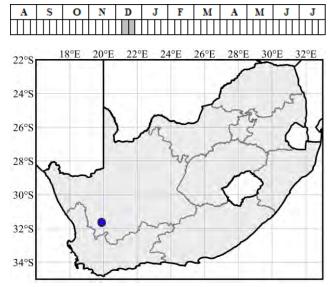
Jonathan B. Ball

LC Rare – Restricted Range Endemic

Type locality: Kieskie Road, Calvinia District, Northern Cape, 31°39.24′S, 19°56.78′E, 1246m.

Taxonomy: There are no notable issues.





Distribution: Endemic to the Northern Cape province, South Africa, 25 km south of Calvinia.

Habitat: The flattish, karroid habitat has sparse, low, microphyllous shrubs, dominated by plants in the genera *Eriocephalus*, *Antimima*, *Pentzia*, *Pteronia* and *Salsola*. The flight period of this butterfly is decoupled from the ephemeral, vernal flush of vegetation. The host plant (flowering when this butterfly is 'on the wing') is found growing within clumps of the plants mentioned above.

Vegetation types: SKt3 Roggeveld Karoo.

Assessment rationale: This endemic taxon has a very restricted range (EOO <1 km²) in an arid area of the Northern Cape province in South Africa, with very little human/agricultural activity apart from sheep farming. 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: Not previously assessed.

Threats: No known threats at present.

Conservation measures and research required: No conservation measures currently needed. Research into its life history, ecology, distribution and population size is necessary.

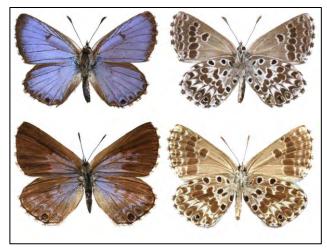
Relevant literature:

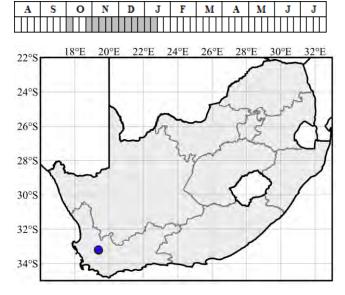
Henning, G.A. & Ball, J.B. 2012. A new species of *Lepidochrysops* Hedicke, 1923 (Lepidoptera: Lycaenidae) from the Northern Cape, South Africa. *Metamorphosis* 23: 1–7.

Lepidochrysops gydoae Dickson & Wykeham, 1994 Gydo Giant Cupid; Gydo Ratsbloutjie

Mark C. Williams

LC Extremely Rare Endemic





Type locality: Western Cape province: Gydo Mountain.

Taxonomy: There are no notable issues.

Distribution: Endemic to the Western Cape province in South Africa, from Gydo Mountain, Ceres District.

Habitat: Rocky mountain fynbos on the upper slopes of Gydo Mountain.

Vegetation types: FFs5 Winterhoek Sandstone Fynbos.

Assessment rationale: A range-restricted endemic species from the Western Cape province, South Africa (EOO 24 km²). Occurs only at a single site on the higher parts of Gydo Mountain. There are no actual or perceived threats to its habitat. 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 apparent threats.

Conservation measures and research required: No conservation measures currently needed. Research into its life history, ecology, distribution and population size is necessary.

Lepidochrysops hypopolia (Trimen, 1887) Geluksburg Giant Cupid; Verlore Ratsbloutjie

Kevin N.A. Cockburn

EX Endemic



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Type locality: Potchefstroom District; Upper Districts [false locality]; Blue Bank, near Drakensberg.

Taxonomy: There are no notable issues.

Distribution: This extinct endemic species used to occur near Ladysmith in the KwaZulu-Natal province in South Africa. There are also two doubtful records from near Potchefstroom in the North West province that have not been used in this assessment.

Habitat: Unknown but assumed to be grassland, based on the localities given for the original specimens captured in the 1870s. Records from KwaZulu-Natal province could also be from savanna areas west of Ladysmith, although vegetation has changed since the specimens were collected in the 1870s.

Vegetation types: (Gs4 Northern KwaZulu-Natal Moist Grassland).

Assessment rationale: This endemic species is only known from KwaZulu-Natal province, South Africa, from records in the 1870s, it has not been recollected since then despite a number of searches. The taxon thus qualifies globally under the IUCN criteria as Extinct.

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

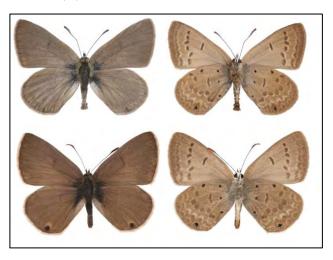
Threats: Because the taxon is extinct there are no threats.

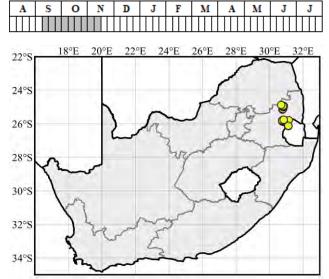
Conservation measures and research required: No conservation actions recommended. Research needed into the taxonomy of this species by obtaining DNA from museum specimens.

Lepidochrysops irvingi (Swanepoel, 1948) Sabie Giant Cupid; Brons Ratsbloutjie

Mark C. Williams

VU B1ab(iii)





Type locality: Nelshoogte, Barberton dist., Transvaal.

Taxonomy: There are no notable issues.

Distribution: From Mpumalanga province in South Africa, and from Swaziland, along the Drakensberg escarpment from Malolotja National Park in the south to near Ohrigstad in the north.

Habitat: Montane, fire-prone grassland with a short sward.

Vegetation types: FOz4 Northern Mistbelt Forest, Gm16 KaNgwane Montane Grassland, Gm17 Barberton Montane Grassland, Gm22 Northern Escarpment Dolomite Grassland, Gm23 Northern Escarpment Quartzite Sourveld, Gm31 Long Tom Pass Montane Grassland, SVI9 Legogote Sour Bushveld.

Assessment rationale: A species found in Mpumalanga province in South Africa as well as in Swaziland (EOO 3 585 km²). Recently discovered subpopulations near Ohrigstad, Barberton and in Swaziland, since the previous assessment in 2012, have significantly increased both the EOO and AOO. There are six subpopulations, two of which are in protected areas. Together with a third subpopulation near Ohrigstad, these three subpopulations are in relatively pristine grassland habitat suitable for the species. Plantations are absent here and unlikely to be planted because of the rocky, mountainous terrain. The subpopulations at Nelshoogte, Sabie and Graskop are experiencing ongoing decline in habitat quality as a result of fire suppression for Pine plantation management (the host plant requires fire) and invasion by alien plants. The taxon thus qualifies globally under the IUCN criteria as Vulnerable under criterion B.

Change in status from SABCA: Since the 2012 assessment two new localities for this taxon have been found, near Ohrigstad and near Barberton. Both are in unthreatened habitats and the Barberton locality is situated in a protected area. Very recently (October 2017), C. Dobson (J. Dobson, pers. comm.) found a subpopulation near the type locality at Nelshoogte. This new information has increased the estimated EOO from 850 km² in the 2012 assessment to 3 585 km² in the current assessment. These new localities would have existed during the 2012 assessment and thus six locations would have been valid then too, placing it in the Vulnerable category. The status change from Endangered to Vulnerable is therefore a non-genuine change.

Threats: Moderate fragmentation of the habitat has been caused by Pine and Blue-gum plantation development on the escarpment. Alien vegetation, in the form of Black Wattle, Bramble, Bug-weed and others, is causing further modification of the habitat. The host plant, *Ocimum obovatum*, is dependent on regular fire in order to thrive. Fires in the grassland patches are deliberately suppressed because of the danger to the plantations, leading to loss of grassland biodiversity. However, the subpopulations in Swaziland, near Barberton and near Ohrigstad are all under no threat (M. Williams, pers. obs.).

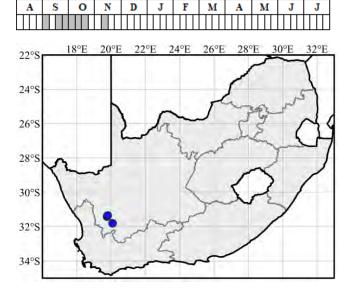
Conservation measures and research required: A management plan that protects and manages the Nelshoogte, Sabie and Graskop subpopulations should be developed and implemented. Research needed into its life history and ecology/habitat requirements.

Lepidochrysops jamesi claassensi Dickson, [1982] Calvinia Giant Cupid; Hantamsberg Karoobossie Ratsbloutjie

Jeremy C.H. Dobson & Harald E.T. Selb

LC Rare – Restricted Range, Habitat Specialist Endemic





Type locality: Western Cape province: Hantam's Berg, Calvinia.

Taxonomy: There are no notable issues.

Distribution: Endemic to the Northern Cape province in South Africa, restricted to the Hantamsberg north of Calvinia, and to a small area north-east of Middelpos.

Habitat: Arid mountains and slopes, covered with thick Renosterveld and Nama Karoo vegetation.

Vegetation types: FRd2 Hantam Plateau Dolerite Renosterveld, SKt3 Roggeveld Karoo.

Assessment rationale: A range-restricted endemic taxon found in the Northern Cape province, South Africa (EOO 191 km²). This is a very rare taxon, with a relatively small extent of occurrence. However, it faces no threats at present. The few known colonies are scattered, due to the taxon's strict habitat requirements. 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 taxon is rare and localised but is not under any significant threat at present.

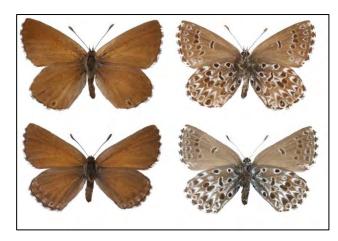
Conservation measures and research required: No conservation measures currently needed. Research into its

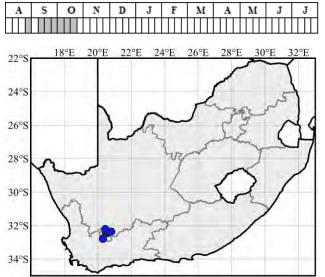
life history, ecology, distribution and population size is necessary.

Lepidochrysops jamesi jamesi Swanepoel, 1971 Sutherland Giant Cupid; Karoobossie Ratsbloutjie

Jeremy C.H. Dobson & Harald E.T. Selb

LC Rare – Habitat specialist Endemic





Type locality: Roggeveldberge (Sutherland district Cape province).

Taxonomy: There are no notable issues.

Distribution: Endemic to the Northern Cape province in South Africa, found only on the Roggeveld Escarpment near Sutherland.

Habitat: Rocky, high-altitude slopes, covered with thick Nama Karoo vegetation.

Vegetation types: FRs3 Roggeveld Shale Renosterveld, SKt3 Roggeveld Karoo, SKv6 Koedoesberge-Moordenaars Karoo.

Assessment rationale: This is a range-restricted endemic taxon from the Northern Cape province, South Africa (EOO 1 159 km²). It is a habitat specialist and is found at 15 known subpopulations in the Sutherland area. It faces no significant threats at present. The taxon thus qualifies globally under the

IUCN criteria as Least Concern and is nationally classified as Rare (Habitat Specialist).

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

Threats: The taxon is rare and localized but is not under any significant threat at present.

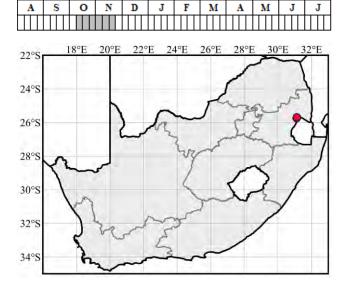
Conservation measures and research required: No conservation measures currently needed. Research into its life history, ecology, distribution and population size is necessary.

Lepidochrysops jefferyi (Swierstra, 1909) Purple-brown Giant Cupid; Bruinpers Ratsbloutjie

Mark C. Williams

CR B1ab(iii) Endemic





Type locality: Ulundi, near Barberton.

Taxonomy: There are no notable issues.

Distribution: Endemic to Mpumalanga province in South Africa, found only in the mountains north-east of Barberton.

Habitat: Restricted to rocky, hilly grassland (Barberton Montane Grassland).

Vegetation types: Gm17 Barberton Montane Grassland.

Assessment rationale: An endemic species from Mpumalanga province in South Africa (EOO 5 km²). There is one location and the quality of the habitat is declining due to mining activities, alien vegetation invasion and inappropriate fire regimes. The taxon thus qualifies globally under the IUCN criteria as Critically Endangered under criterion B.

Change in status from SABCA: The 2012 assessment was based on the information that there were two to five locations. This is incorrect as there is only a single location which continues to suffer from ongoing habitat degradation. The previous assessment should have been Critically Endangered too, thus the status change from Endangered to Critically Endangered is non-genuine.

Threats: Notwithstanding the fact that the area of occupancy of the butterfly has been registered as a private nature reserve, there is ongoing legal and illegal mining in the reserve and its surrounds. There has been a gradual spread of alien vegetation, especially eucalypts and wattles, since the late 1960s and no attempts have been made to control or remove the aliens. Communal livestock, including cattle, donkeys and goats from surrounding rural communities have free access to the taxon's habitat. Increasing numbers of these animals may have a negative impact on the habitat. Fire regimes are also unregulated and members of the rural communities can set fire to the habitats inappropriately in attempts to induce growth of green grass for their livestock.

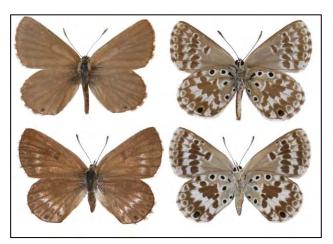
Conservation measures and research required: A management plan that includes appropriate habitat protection and management should be developed and implemented as soon as possible. Research needed into its life history and ecology/habitat requirements.

Lepidochrysops ketsi leucomacula Henning & Henning, 1994

White Spotted Ketsi Giant Cupid; Margate Ketsi Ratsbloutjie

Adrian J. Armstrong

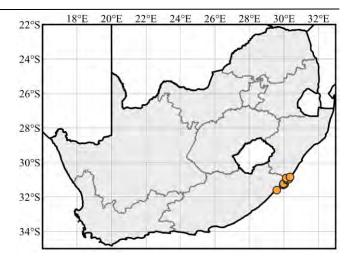
EN A3bc; B1ab(i,ii,iii,iv,v)+2ab(i,ii,iii,iv,v) Endemic



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

Type locality: Margate, Natal, 24 Nov. 1983, G.A. Henning.

Taxonomy: There are no notable issues.



Distribution: Endemic to KwaZulu-Natal and Eastern Cape provinces in South Africa, only known to occur in the coastal grasslands between Margate in KwaZulu-Natal province and Port St Johns in Eastern Cape province to the south.

Habitat: Undulating coastal grasslands with scattered trees and bushes and associated rocks on ancient geological formations.

Vegetation types: CB3 KwaZulu-Natal Coastal Belt Grassland, CB4 Pondoland-Ugu Sandstone Coastal Sourveld, CB5 Transkei Coastal Belt.

Assessment rationale: This endemic range-restricted taxon only occurs in the coastal grasslands of south-eastern KwaZulu-Natal province and north-eastern Eastern Cape province, South Africa. It has an estimated EOO of 1 153 km² and an estimated AOO of 56 km². It is threatened by urban and rural development and overgrazing at most of the unprotected localities where it occurs, as well as other local threats at individual unprotected sites. Certain habitats in Margate where it used to occur, including at the type locality, have been destroyed by urban and agricultural development, and local extinction has resulted at those sites. The population is moderately fragmented. The locations currently known to harbour the taxon are far apart, precluding movement of adults between them. Three of the five subpopulations are small and isolated and probably nonviable in the long term without conservation translocations, whereas the remaining two are larger and potentially viable in the long-term providing the threats to those subpopulations can be mitigated. Using environmental and the taxon's AOO data for KwaZulu-Natal province, and assuming similar results for the taxon's EOO in the Eastern Cape province, climate change is predicted to affect the character of about 67% of the remaining habitat for the taxon by making it change to or towards another biome type by 2050 (Jewitt et al., 2015b). The results of the conformalcubic atmospheric model (CCAM) that was down-scaled using the outputs of two Coupled Global Climate Models (CGCMs) (Jewitt et al., 2015b) as well as prior climatic model results (Driver et al., 2011) indicate that most of the grassland habitat of the taxon will become increasingly wooded up with savanna trees or forest trees by the year 2050 if climate change cannot be sufficiently ameliorated. The number of locations for the taxon as a result of climatechange-induced habitat shifting is therefore estimated to be three. Under the CCAM down-scaled using outputs from the GFDL2.1 CGCM, only the locations north of Umtamvuna Nature Reserve and near Mpenjati Nature Reserve are not

predicted to be affected by climate-change-induced habitat shifting, but these locations are subject to threats from agriculture and/or alien plants. Under the CCAM down-scaled using outputs from the HadCM2 CGCM, only the locations at Margate and Umtamvuna Nature Reserve are not predicted to be affected by climate-change-induced habitat shifting, but the Margate location is subject to threats from urbanisation, infrastructure development, alien plants, dumping of refuse, and off-road vehicles. The taxon thus qualifies globally under the IUCN criteria as Endangered under criteria A and B.

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

Threats: Climate change, coupled with land transformation and the resultant loss of habitat intactness, will pose a severe threat to this taxon in the KwaZulu-Natal part of its EOO in the future (Jewitt et al., 2015a). Although the extent of the Indian Ocean Coastal Belt in the part of the taxon's EOO in the Eastern Cape province may increase under the best case climate change scenario (Driver et al., 2012), this may result in forest expanding, which would render the habitat unsuitable for the taxon. Under the intermediate and worst case scenarios, the Indian Ocean Coastal Belt climate envelope shifts to a Savanna climate envelope (Driver et al., 2012), thereby rendering much or all of the area unsuitable as habitat. The taxon inhabits the Critically Endangered Margate Pondoland-Ugu Sourveld and Southern Coastal Grasslands ecosystems and the Endangered Oribi-Port Edward Pondoland Ugu Sourveld ecosystem in KwaZulu-Natal. However, the ecosystems that it inhabits in the Eastern Cape province are not listed as threatened in the South African 'National List of Ecosystems that are Threatened and in Need of Protection' of 2011. This taxon has lost colonies at Margate owing to urban development and cultivation; elsewhere, habitat has been degraded or lost through rural residential development, subsistence farming, overgrazing by livestock, tourism development and fire suppression as a result of urban development (Williams, 2013; A.J. Armstrong, pers. obs.). Off-road vehicle driving in the habitat, dumping of refuse, spread of invasive alien plants such as Lantana camara and timber trees, erection of buildings and laying of water pipelines are further current threats at one site on the outskirts of Margate (A.J. Armstrong, pers. obs.). Potential future threats to the habitat of this taxon include the rerouting of the N3 freeway and mining in the Eastern Cape province, and movement of pesticides and fertilizers into habitat with the intensification of agriculture on its edges.

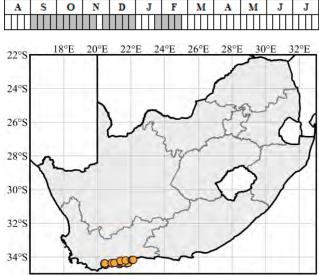
Conservation measures and research required: Management and protection of remaining known habitat outside currently protected areas is required. Legislation is pending that would protect its habitat in areas currently not protected. Ecotourism enterprises should be established in areas that need protection as there needs to be an income stream from the area as well as observer presence in the areas. Research needed into its life history and ecology/habitat requirements.

Lepidochrysops littoralis Swanepoel & Vári, 1983 Coastal Giant Cupid; Kus Ratsbloutjie

David A. Edge

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





Type locality: Southern Cape province, Still Bay (Riversdale District).

Taxonomy: *Lepidochrysops littoralis* is quite a variable species with populations at the limits of its range showing differences, e.g. Mossel Bay (Edge, 2005a). A phylogenetic investigation is underway and may reveal some taxonomically significant infraspecific variation.

Distribution: Endemic to the Western Cape province in South Africa, occurring from the De Hoop Nature Reserve near Bredasdorp in the west to a few kilometres west of Mossel Bay in the east.

Habitat: Rocky limestone ridges or sand dunes in coastal fynbos. Usually found quite close to the sea-shore, as at Still Bay.

Vegetation types: AT40 Hartenbos Dune Thicket, FFl2 De Hoop Limestone Fynbos, FFl3 Canca Limestone Fynbos, FFs15 North Langeberg Sandstone Fynbos, FS7 Overberg Dune Strandveld, FS8 Blombos Strandveld.

Assessment rationale: This taxon is endemic to the Western Cape province, South Africa (EOO 2 488 km², AOO 84 km²). Ten locations are known, separated by distances between 10 and 35 km, often across land transformed by agricultural activities, coastal developments, industrial complexes, housing estates, plantations and alien infestations. Even 10 km is probably beyond the dispersal range of this taxon (2–5 km average) so all of these locations represent isolated, closed subpopulations, some of which are

non-viable. The population is therefore severely fragmented. At some of its locations there is continuing decline in the AOO, extent and quality of the habitat, the number of subpopulations, and the total number of individuals supported by a smaller area of poorer quality habitat is less. The taxon thus qualifies globally under the IUCN criteria as Endangered under criterion B.

Change in status from SABCA: Severe fragmentation used to categorise this species as Endangered now would have been valid for the previous assessment, following new information being used. Therefore it would have qualified for Endangered previously too, instead of Near Threatened which was based on the number of locations. Thus the change in status is non-genuine.

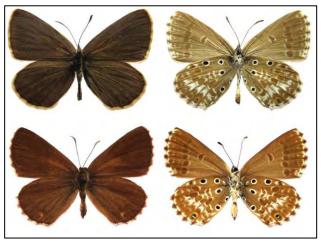
Threats: Property and recreational developments (homes, streets, roads, golf courses etc.) continue on the southern Cape coast, particularly around Mossel Bay and Still Bay. Alien vegetation, such as Port Jackson Willow (*Acacia saligna*) and Rooikrans (*A. cyclops*), originally introduced to "stabilise dunes" is drastically transforming natural habitat along many parts of this coastline. Other threats are from small scale agriculture and disruption of natural fire regimes to protect human properties.

Conservation measures and research required: This taxon should be included in environmental impact assessments for all proposed new developments in the coastal zone from De Hoop to Mossel Bay, and further loss of habitat prevented. Further research into its life history and ecology is needed.

Lepidochrysops loewensteini (Swanepoel, 1951) Loewenstein's Giant Cupid; Bergpiek Ratsbloutjie

Ernest L. Pringle

LC

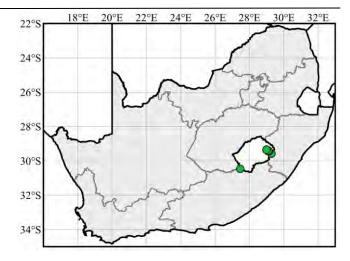


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Type locality: Mokhotlong, Basutoland, 18th January, 1949 (D.A. Swanepoel).

Taxonomy: There are no notable issues.

Distribution: Occurs on the Drakensberg mountains in the Eastern Cape province in South Africa as well as in Lesotho, from Dulcie's Nek near Barkly East in the south to the Maluti Mountains in Lesotho in the north.



Habitat: Afroalpine grassland, found in elevated areas greater than 2 000 m above sea level.

Vegetation types: Gd8 Lesotho Highland Basalt Grassland.

Assessment rationale: A Drakensberg endemic species occurring in the Eastern Cape province in South Africa and in Lesotho (EOO 3 674 km²). The mountainous area where it occurs is largely inaccessible because of poor infrastructure and is therefore poorly explored. Also, its flight period is restricted, making it very difficult to detect. It is currently known from six subpopulations and there are likely to be many more. There is a slight threat of habitat degradation to the subpopulations in Lesotho. 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 threats from extensive subsistence farming and possible invasive plants.

Conservation measures and research required: Appropriate management of known sites would be beneficial. Research to look for additional sites would also be useful. Research is needed into its life history and ecology/habitat requirements.

Lepidochrysops lotana Swanepoel, 1962 Lotana Giant Cupid; Wolkberg Ratsbloutjie

Mark C. Williams

EN B1ab(iii) Endemic

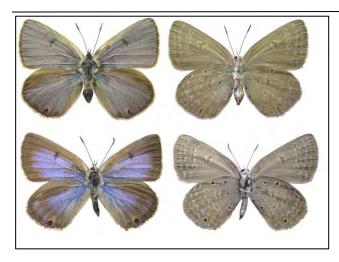
Type locality: Farm Rietvlei (Pietersburg Distr., Tvl.), 14.XI.1961. D.A. Swanepoel.

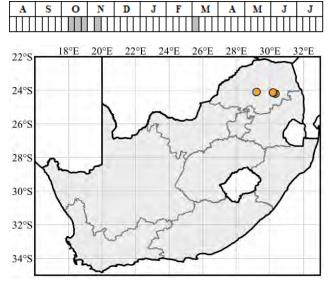
Taxonomy: There are no notable issues.

Distribution: Endemic to Limpopo province in South Africa, found at isolated localities at Ysterberg, Wolkberg and Lekgalameetse Nature Reserve near Ofcolaco. Has not been observed at the Ysterberg locality (the type locality) for about 25 years.

Habitat: Rocky grassland with a short sward.

Vegetation types: Gm23 Northern Escarpment Quartzite Sourveld, Gm26 Wolkberg Dolomite Grassland, Gm27 Strydpoort Summit Sourveld, SVcb25 Poung Dolomite





Mountain Bushveld, SV18 Tzaneen Sour Bushveld.

Assessment rationale: This is an endemic species from Limpopo province, South Africa (EOO 446 km²). There are three locations, one of which may possibly be lost and there is continuing decline in the quality of the habitat due to overgrazing by cattle, inappropriate fire regimes and road construction. 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.

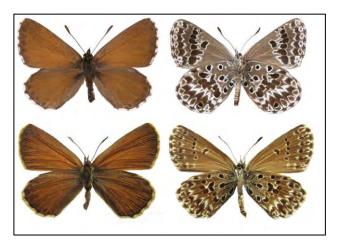
Threats: The taxon has not been seen at the type locality (Ysterberg) for at least 25 years, probably because of overgrazing of the habitat by cattle (J. Dobson, pers. comm. and M. Williams, pers. obs.). The subpopulation at the type locality is declining, and may even have been extirpated. The subpopulation on the Downs in the Lekgalameetse Nature Reserve is relatively large. The status of the third subpopulation (Wolkberg) is unknown, as only a single female has been captured. The road from Malipsdrift to the Downs in Lekgalameetse Nature Reserve is currently being tarred, and if connected to the tarred road from the east, would run close to the subpopulation on the Downs, greatly facilitating access by large numbers of people and potentially having very deleterious effects on the subpopulation. There are old avocado plantations near the habitats of the taxon on the Downs, which appear to be maintained notwithstanding that they are in a nature reserve. Nomadic cattle are present and their numbers are not controlled. Members of nearby rural communities may set fires at inappropriate times to promote growth of grass for these cattle.

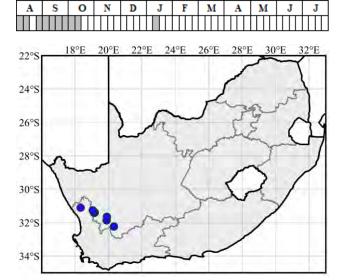
Conservation measures and research required: A habitat management plan needs to be drawn up and implemented. Research is needed into its life history and ecology/habitat requirements.

Lepidochrysops mcgregori Pennington, 1970 Hantam Giant Cupid; Koperbruin Ratsbloutjie

Jeremy C.H. Dobson & Harald E.T. Selb

LC Rare – Habitat specialist Endemic





Type locality: Glen Lyon [farm], near Nieuwoudtville, 2.200 ft.

Taxonomy: There are no notable issues.

Distribution: Endemic to the Northern Cape and Western Cape provinces in South Africa, found from Nuwerus at the north-east extent of its range to Kompromise in the southeast.

Habitat: Flat areas in the Karoo Renosterveld and Succulent Karoo bioregions.

Vegetation types: FRd1 Nieuwoudtville-Roggeveld Dolerite Renosterveld, FRs2 Nieuwoudtville Shale Renosterveld, FRs3 Roggeveld Shale Renosterveld, SKn7

Southern Namaqualand Quartzite Klipkoppe Shrubland, SKt3 Roggeveld Karoo.

Assessment rationale: An endemic from the Northern Cape and Western Cape provinces, South Africa (EOO 4 421 km²). Although widespread, the taxon is rare and localised as a result of its specific habitat requirements and it occurs in scattered colonies, generally in low numbers. It faces no significant threats at present. The taxon thus qualifies globally under the IUCN criteria as Least Concern and is nationally classified as Rare (Habitat Specialist).

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

Threats: This taxon lost habitat on the Bokkeveld escarpment to wheat cultivation in the past but transformation of this habitat is no longer taking place. There are no immediate threats to this taxon. The subpopulation from which the species was originally described is protected in the Hantam National Botanical Garden.

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

Relevant literature:

Willis, C.K. & Williams, M.C. 2014. Oviposition behaviour in MacGregor's Blue (*Lepidochrysops mcgregori*) (Lepidoptera: Lycaenidae), in South Africa. *Metamorphosis* **25**: 152–153.

Lepidochrysops methymna dicksoni Tite, 1964 Tygerberg Monkey Giant Cupid; Tygerberg Bobbejaan Ratsbloutjie

Jonathan B. Ball

EX Endemic

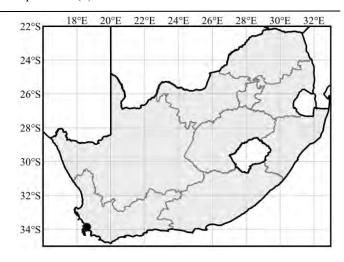


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Type locality: Cape province: Tygerberg Hills.

Taxonomy: There are no notable issues.

Distribution: An extinct taxon that was endemic to the Western Cape province in South Africa, where it used to occur on the Tygerberg Hills near Cape Town. No other



colonies are known.

Habitat: Renosterveld vegetation on the Tygerberg Hills near Cape Town.

Vegetation types: (FRs9 Swartland Shale Renosterveld).

Assessment rationale: This endemic taxon from the Western Cape province has not been seen for 50 years despite extensive searching in the known localities. These localities are close to longstanding areas of agricultural activity, housing development and quarry activity. Renosterveld is one of the most threatened vegetation types in the Western Cape. Further searching is required. The taxon thus qualifies globally under the IUCN criteria as Extinct.

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

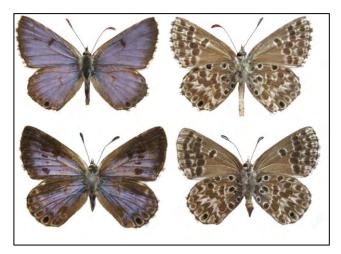
Threats: As the taxon is extinct, there are no threats.

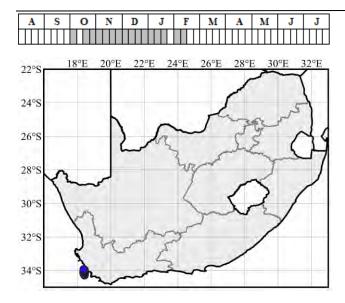
Conservation measures and research required: No conservation actions recommended as this taxon is extinct. Its taxonomic status will be confirmed by obtaining a DNA sample (a few legs) for sequencing.

Lepidochrysops oreas oreas Tite, 1964 Sky-blue Giant Cupid; Skiereiland Ratsbloutjie

Mark C. Williams

LC Rare – Restricted Range Endemic





Type locality: Simon's Town.

Taxonomy: There are no notable issues.

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

Habitat: Rocky fynbos on the mountains of the Cape Peninsula.

Vegetation types: FFd6 Hangklip Sand Fynbos, FFg3 Peninsula Granite Fynbos, FFs9 Peninsula Sandstone Fynbos.

Assessment rationale: A range-restricted endemic from the Western Cape province in South Africa (EOO 238 km²), occurring only on the hills and mountains of the Cape Peninsula. None of the subpopulations are under any real or perceived threat. 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 recommended. Research is required into the life history, ecology and ant symbionts; and the population size, distribution and trends need to be monitored.

Lepidochrysops outeniqua Swanepoel & Vári, 1983 Outeniqua Giant Cupid; Outenikwa Ratsbloutjie

Mark C. Williams

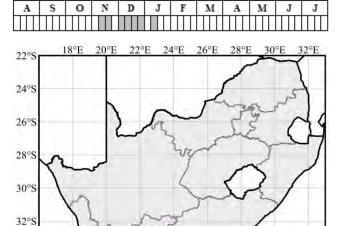
LC Endemic

Type locality: Outeniqua Mountains (Uniondale District) Avontuur.

Taxonomy: There are no notable issues.

Distribution: Endemic to the Western Cape and Eastern Cape provinces in South Africa, on the Outeniqua mountains near Avontuur in the west and the Kouga mountains near Uniondale in the east.





Habitat: Fynbos on the stony, upper northern slopes of the Outeniqua mountains and on the upper, southern slopes of the Kouga mountains.

Vegetation types: FFs19 South Outeniqua Sandstone Fynbos, FFs20 Tsitsikamma Sandstone Fynbos, FFs27 Kouga Sandstone Fynbos, FFs28 Kouga Grassy Sandstone Fynbos.

Assessment rationale: An endemic species from the Western Cape and Eastern Cape provinces, South Africa (EOO 1 121 km²). The subpopulations are in inaccessible terrain that is unsuitable for human activities. There are no 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 apparent threats.

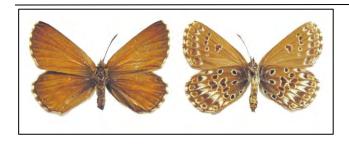
Conservation measures and research required: No conservation actions recommended. Research is required into the life history, ecology and ant symbionts; and the population size, distribution and trends need to be monitored.

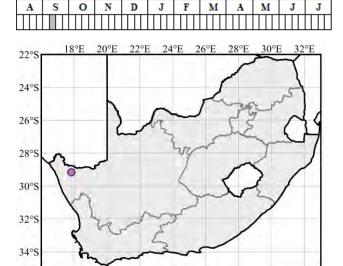
Lepidochrysops penningtoni Dickson, 1969 Golden Giant Cupid; Dorsland Ratsbloutjie

Jonathan B. Ball

DD Endemic

34°S





Type locality: (Little Namaqualand): Steinkopf.

Taxonomy: The taxonomy of this species needs to be reviewed. This taxon has not been seen at the type locality north of Steinkopf for over four decades. Several populations have been found in the Kamieskroon/Garies areas, which have been referred to as belonging to this taxon. This probably is incorrect, using type specimens of *Lepidochrysops penningtoni* for comparison. Molecular genetic analysis will be undertaken to determine whether a separate non-penningtoni and non-bacchus taxon is involved.

Distribution: Endemic to the Northern Cape province in South Africa, from just north of Steinkopf. There are specimens from between Kotze's Rus and Kamieskroon that some collectors feel may be part of this taxon, however, molecular genetic analyses are required to determine if this is the case.

Habitat: Flat to gently sloping, relatively dry areas with low shrubs, including mesembryanthemums.

Vegetation types: SKn1 Namaqualand Klipkoppe Shrubland, SKr17 Eenriet Plains Succulent Shrubland.

Assessment rationale: This taxon is endemic to the Northern Cape province in South Africa and has an uncertain range. It has not been seen near Steinkopf, where it was originally collected, for nearly fifty years. The taxon author has personally been to the type locality over twenty times since 1976. During this interval, vernal flower abundance has incrementally diminished by a remarkable degree. Some *Selago* sp. were present in moderate abundance in 1976. None have been seen for twenty years. This plant taxon may or may not have been utilized by the larvae. Other golden/dark Namaqualand *Lepidochrysops* populations may not be *L. penningtoni*. Taxonomic (including molecular

genetics) research is about to be undertaken. The taxon thus qualifies globally under the IUCN criteria as Data Deficient.

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

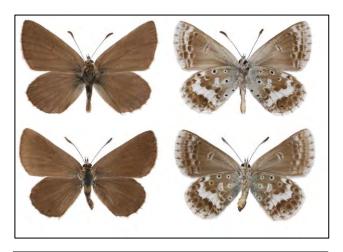
Threats: Overgrazing and extended droughts are threats. True *L. penningtoni* is possibly extinct.

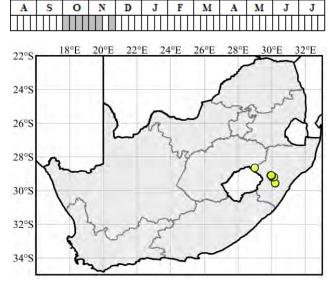
Conservation measures and research required: Taxonomic research on true taxonomic status of non-Steinkopf populations needs to be undertaken. There is possibly another undescribed taxon involved, which is neither *L. penningtoni* or *L. bacchus*. If the taxon is rediscovered research is required into the life history, ecology and ant symbionts; and the population size, distribution and trends need to be monitored.

Lepidochrysops pephredo (Trimen, 1889) Estcourt Giant Cupid; Middelland Ratsbloutjie

Adrian J. Armstrong

VU B1ab(ii,iii,iv,v)+2ab(ii,iii,iv,v) Endemic





Type locality: Upper Districts - Estcourt.

Taxonomy: There are no notable issues.

Distribution: Endemic to KwaZulu-Natal province in South Africa, only occurring in part of the Midlands and Drakensberg mountain foothills, from Mpophomeni near

Howick in the south-east to Rugged Glen Nature Reserve in the north-west.

Habitat: Rocky, grassy hills and mountains, between approximately 1 200 and 1 700 m altitude.

Vegetation types: Gd5 Northern Drakensberg Highland Grassland, Gs8 Mooi River Highland Grassland, Gs9 Midlands Mistbelt Grassland.

Assessment rationale: This endemic range-restricted species only occurs on rocky, grassy hills and mountains in limited parts of the Midlands and Drakensberg foothills of KwaZulu-Natal province, South Africa. It has an EOO of 2 364 km² and an estimated AOO of 40 km². The number of locations with respect to local threats such as overgrazing is estimated to be seven (if indeed local extinctions in the south-east of the species range have occurred) or eight, although overall habitat quality is not expected to recover to a better state in the near future. This species is threatened mainly by overgrazing in its habitat at certain of the unprotected localities where it occurs, as well as other local threats at individual unprotected sites. Certain habitat areas where the species used to occur no longer support it. Localities currently known to be occupied by the species are far apart, with unsuitable habitat that constitute barriers to movement for the species between the locations, indicating that the population is moderately fragmented. Although climate change may affect the species occurrence in the foothills of the Drakensberg, the existence and persistence of most of the grassland where it still occurs should not be significantly impacted with respect to land use and climate change over the next few decades. This taxon thus qualifies globally under the IUCN criteria as Vulnerable under criterion B.

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

Threats: Habitat and subpopulations have been lost over the past century through overgrazing in particular, and some habitat has been degraded by overgrazing, Eucalyptus plantations, off-road vehicles and perhaps too frequent burning. It has not been sighted during repeated searching over the last two years at its most south-easterly situated locality (A. Armstrong, pers. obs.).

Conservation measures and research required: This taxon only occurs in a part of one protected area (Rugged Glen section of the uKhahlamba-Drakensberg Park). Thus protection and management of its habitat outside protected areas is essential, beginning with raising awareness of its presence and Vulnerable status to landowners. Research is needed into its life history and ecology/habitat requirements.

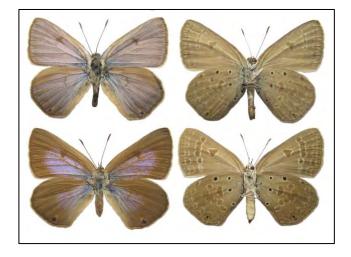
Lepidochrysops praeterita Swanepoel, 1962 Highveld Giant Cupid; Hoëveld Ratsbloutjie

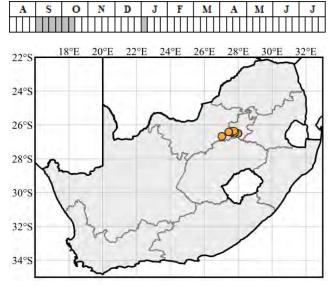
Jeremy C.H. Dobson

EN B1ab(i,ii,iii,iv,v)+2ab(i,ii,iii,iv,v) Endemic

Type locality: New Doornfontein Mine (Potchefstroom Distr., Tvl.), 17.IX.1961. W. Teare.

Taxonomy: There are no notable issues.





Distribution: Endemic to the Gauteng and North West provinces, occurring from Potchefstroom in the west to Sasolburg in the east, in the highveld region.

Habitat: This taxon is confined to grassy, rocky, typically south-facing slopes, where its host plant (*Ocimum obovatum*) and, presumably, its host ant occur. Most localities are within an altitudinal band between 1 500 m and 1 750 m. Males frequently fly around solitary trees or other features in the general vicinity of the colony. *Lepidochrysops praeterita* is highly localised and appears to have a very specific habitat niche. The life history is unrecorded.

Vegetation types: Gh15 Carletonville Dolomite Grassland, Gm11 Rand Highveld Grassland, Gm8 Soweto Highveld Grassland, SVcb10 Gauteng Shale Mountain Bushveld, SVcb11 Andesite Mountain Bushveld.

Assessment rationale: This is a range-restricted endemic species found in the Gauteng and North West provinces in South Africa (EOO 1 336 km², AOO 44 km²). There are currently estimated to be four locations. The taxon inhabits an area with dense human habitation and intensive land use. Its range has shrunk significantly over the last 20 years, and the number of specimens recorded during its flight period has reduced alarmingly in recent years. The quality and extent of habitat is declining at a fairly rapid rate, due to extended residential construction and associated infrastructure, agricultural development and overgrazing by nomadic herds

of cattle. 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: Habitat degradation owing to a lack of burning diminishes the quality and quantity of the larval food plant and associated ant habitat. The recent droughts have compounded the problem. The effects of airborne pollution are an unquantifiable factor. Further threats include, overgrazing by nomadic herds of cattle and the proposed extension of residential development into the butterfly's habitat at Hillshaven.

Conservation measures and research required: The town-planners responsible for the proposed Hillshaven extension into the adjacent colony need to be informed of the implications and alternative plans made, if possible. The habitat of many known subpopulations of this species are close to residential areas. These areas are regularly burnt in winter for public safety reasons. Regular grass-burning is considered imperative for the wellbeing of this species, but this needs to be monitored. Research is needed into its life history and ecology/habitat requirements. Monitoring of all known subpopulations is needed to detect trends in numbers or habitat quality.

Lepidochrysops pringlei Dickson, [1982] Hilltop Giant Cupid; Kleinblou Ratsbloutjie

Mark C. Williams

LC Endemic



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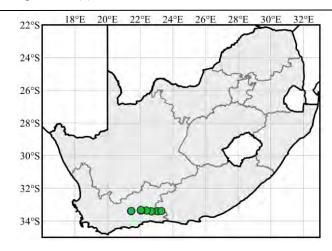
Type locality: South Western Cape province: Toverwater.

Taxonomy: There are no notable issues.

Distribution: Endemic to the Western Cape and Eastern Cape provinces in South Africa, in the Swartberg mountains, from Ladismith in the west to Willowmore in the east.

Habitat: Rocky ridges, in fynbos, on the upper slopes of the Swartberg mountains.

Vegetation types: FFs23 North Swartberg Sandstone Fynbos, FFs24 South Swartberg Sandstone Fynbos, FFs31 Swartberg Altimontane Sandstone Fynbos.



Assessment rationale: An endemic species from the Western Cape and Eastern Cape provinces in South Africa (EOO 930 km²). Since the taxon was originally discovered at the eastern end of the Swartberg mountains many new subpopulations have been found along the entire length of the Swartberg mountains, from Ladismith in the west to Willowmore in the east. None of these subpopulations are under any real or perceived threat. The taxon thus qualifies globally under the IUCN criteria is assessed as Least Concern.

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

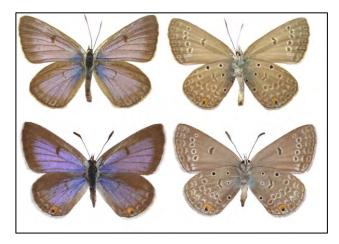
Threats: No known threats.

Conservation measures and research required: No conservation actions recommended.

Lepidochrysops procera (Trimen, 1893) Potchefstroom Giant Cupid; Grasveld Ratsbloutjie

Jeremy C.H. Dobson & Chris M. Dobson

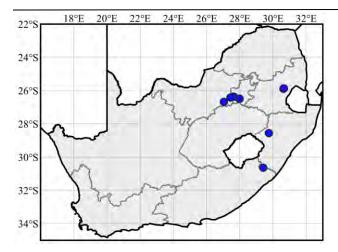
LC Rare – Habitat specialist Endemic



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Type locality: Estcourt, Natal (J.M. Hutchinson); Potchefstroom District, Transvaal (T. Ayres).

Taxonomy: Historical records from north of the Magaliesberg; Wonderboom and Nylsvley for example, are believed to represent *Lepidochrysops vansoni* and have been



removed from the distribution data related to this species. It is recommended that DNA comparisons are undertaken between samples of the four disjunct populations of this butterfly (southern Highveld grassland; eastern Mpumalanga; southern KZN and KZN Midlands).

Distribution: Endemic to the Gauteng, KwaZulu-Natal, Mpumalanga and North West–provinces in South Africa, from Kokstad in the south to Komatipoort in the north-east and Potchefstroom in the west.

Habitat: Rocky areas in grassland (and grassy areas in savanna), where its larval host plant, *Ocimum obovatum*, occurs. The early stages are unrecorded, but the presence of the host ant (probably a *Camponotus* species) will be an additional requisite.

Vegetation types: Gm8 Soweto Highveld Grassland, Gs12 East Griqualand Grassland, SVcb10 Gauteng Shale Mountain Bushveld, SVcb11 Andesite Mountain Bushveld, SVl14 Swaziland Sour Bushveld, SVs2 Thukela Thornveld.

Assessment rationale: A taxon endemic to a large area in South Africa (EOO 93 799 km²). However, it occupies a very small portion of this area. The taxon is a rare habitat specialist with relatively few known locations, several of which are under some degree of threat. The taxon thus qualifies globally under the IUCN criteria as Least Concern and is nationally classified as Rare (Habitat Specialist).

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

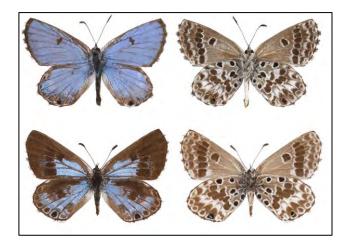
Threats: The southern Gauteng/Highveld habitat of this species is threatened by residential developments and overgrazing by cattle. Elsewhere the taxon appears to thrive in grassland subjected to annual winter fires. Fire suppression, or fires during the butterfly's flight period of late September/October may be threats. The influence of drought is unknown, but observations from the southern Gauteng localities during the drought of the last three years appear to indicate that numbers have declined dramatically.

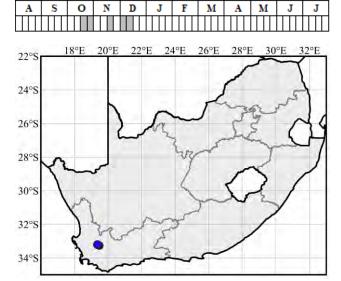
Conservation measures and research required: No conservation actions are recommended at this stage. Research into the taxonomy of the disjunct subpopulations and the life history and ecology/habitat requirements is needed.

Lepidochrysops quickelbergei Swanepoel, 1969 Pale Giant Cupid; Bleekblou Ratsbloutjie

Mark C. Williams

LC Extremely Rare Endemic





Type locality: Gydo mountain (Ceres distr., Cape province).

Taxonomy: There are no notable issues.

Distribution: Endemic to the Western Cape province in South Africa, from Gydo Mountain.

Habitat: Fynbos in rocky areas on north-facing slopes of Gydo Mountain, at altitudes above 1 500 m.

Vegetation types: FFs5 Winterhoek Sandstone Fynbos.

Assessment rationale: A range-restricted endemic species from the Gydo Mountain in the Western Cape province, South Africa (EOO 16 km²). The taxon occurs at only one small site but there are no real perceived threats to the population. 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.

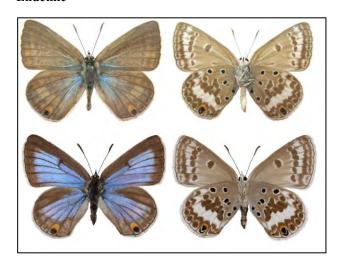
Threats: No threats known. The habitat is located high up on Gydo Mountain.

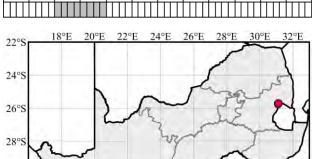
Conservation measures and research required: No conservation actions recommended. Research is required into the life history, ecology and ant symbionts; and the population size, distribution and trends need to be monitored.

Lepidochrysops swanepoeli (Pennington, 1948) Barberton Giant Cupid; Witband Ratsbloutjie

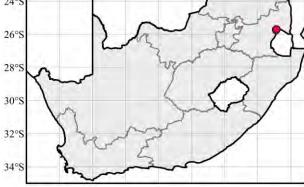
Mark C. Williams

CR B1ab(iii) **Endemic**





J



Type locality: Sheba Mine, Barberton District, Transvaal.

Taxonomy: There are no notable issues.

Distribution: Endemic to Mpumalanga province in South Africa, on the hills to the north-east of Barberton.

Habitat: Restricted to rocky, hilly grassland (Barberton Montane Grassland).

Vegetation types: Gm17 Barberton Montane Grassland.

Assessment rationale: An endemic species from Mpumalanga province in South Africa (EOO 10 km²). There is one location. The quality of the habitat is declining due to mining activities, grazing by livestock, and inappropriate fire regimes. The taxon thus qualifies globally under the IUCN criteria as Critically Endangered under criterion B.

Change in status from SABCA: The 2012 assessment was based on the information that there were two locations. This is incorrect as there is only a single location which continues to suffer from ongoing habitat degradation. The first assessment should therefore have been Critically Endangered and thus the status change from Endangered to Critically Endangered is non-genuine.

Threats: Notwithstanding the fact that the area of occupancy of the butterfly has been registered as a private nature reserve, there is ongoing legal and illegal mining in the reserve and its surrounds. There has been a gradual spread of alien vegetation, especially eucalypts and wattles, since the late 1960s and no attempts have been made to control or remove the aliens. Communal livestock, including cattle, donkeys and goats from surrounding rural communities have free access to the taxon's habitat. Increasing numbers of these animals may have a negative impact on the habitat. Fire regimes are also unregulated and members of the rural communities can set fire to the habitats inappropriately in attempts to induce growth of green grass for their livestock.

Conservation measures and research required: A management plan that includes appropriate habitat protection and management should be developed and implemented as soon as possible. Research is needed into its life history and ecology/habitat requirements.

Lepidochrysops victori Pringle, 1984 Bedford Giant Cupid; Grasheuwel Ratsbloutjie

Ernest L. Pringle

VU D2 **Endemic**



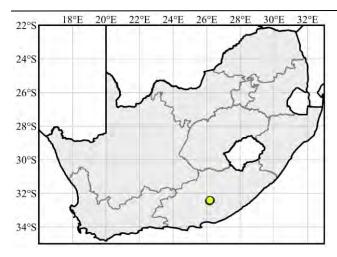
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Type locality: 'Huntly Glen', Bedford, South Africa.

Taxonomy: There are no notable issues.

Distribution: Endemic to the Eastern Cape province in South Africa, confined to four adjacent farms in the Bedford and Adelaide districts.

Habitat: Montane grassland, on the slopes of the foothills of the Great Winterberg mountains.



Vegetation types: Gd1 Amathole Montane Grassland.

Assessment rationale: This is a range-restricted endemic species from the Eastern Cape province in South Africa (EOO 21 km²). There are four locations all under potential future threat from agricultural development and fire, which would severely impact the population. The taxon thus qualifies globally under the IUCN criteria as Vulnerable under D.

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

Threats: As it is on private land, future crop cultivation and incorrect fire management are potential threats.

Conservation measures and research required: All known subpopulations occur on the farms Many Waters, Damon's Kloof and Huntly Glen. Because of the restricted range of this taxon, the subpopulation sizes should be monitored carefully to prevent them from deteriorating. Research is needed into its life history and ecology/habitat requirements.