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Conservation
Status of the
Terrestrial Snakes
of the Arabian
Peninsula

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# 9<sup>th</sup> Conservation Workshop for the Fauna of Arabia

Conservation Status of the Terrestrial Snakes of the Arabian Peninsula

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# **Executive Summary**



### Region of Assessment

The study area is defined as the Arabian Peninsula and includes Saudi Arabia, Kuwait, Bahrain, Qatar, the United Arab Emirates, Oman, and Yemen.

### Species to be Assessed

The snake fauna of the region, based on the most recent review (Egan 2007), comprises 53 species (55 described taxa) from a diversity of families (Table 1). This is a considerable increase from the 44 species discussed for the same region by Gasperetti (1988). However Egan (2007) includes accounts of problematic species whose taxonomic status remains unresolved and a number of species historically reported from the region whose presence on the peninsula has not been recently confirmed.

Moreover an additional species *Myriopholis yemenicus*, has been added to the Arabian snake fauna (Broadly & Wallach 2007). With these provisos, the final diversity of snakes in the region remains subject to certain refinements (see below), but can basically be considered well-known.

### Species with problematic taxonomy

A number of snakes are of problematic taxonomy and assessment of their conservation status requires further surveys and taxonomic study. These include:

- a) Status of *Eirenis coronella fennelli*: Although morphologically re-assessed by Sivan & Werner (2003) the distributions remain allopatric with no evidence of introgression. Molecular studies may resolve whether Arabian *fennelli* should be treated as a separate species.
- b) Status of *Atractaspis engaddensisl andersoni* complex: With the proposed restriction of *A. microlepidota* to West Africa (Trape *et. al.* 2006), the status of Middle East and Arabian burrowing asps assigned to *A. microlepidota* remains problematic. Molecular studies may resolve the specific status of Arabian *andersoni*.
- c) Status of saw-scaled vipers (*Echis*) from Hauf, on the Yemen-Oman border (specimen, D. Egan); and Taif, Saudi Arabia (photograph Dr Saud Al-Farraj). Recent revisions of saw-scaled vipers of the Arabian region (Babocsay 2003, 2004) have increased the number of taxa known from the region. However, the specimen and photograph of the saw-scaled vipers from Hauf and Taif do not fit any of the four known taxa of *Echis* that occur on the Arabian Peninsula, and indicate that further studies on these problematic snakes are required.
- d) Status of Arabian thread snakes (*Myriopholis* spp.): Thread snakes often have localised distributions and may thus be of conservation concern and subject to localised threats. Arabian thread snakes previously placed in the genus *Leptotyphlops* have been placed in the new genus *Myriopholis* (Andalsteinsson *et. al.* 2009) A recent revision of thread snakes (*Leptotyphlopidae*) in north-east Africa and adjacent Arabia (Broadley & Wallach 2007) considers four species to be present in Yemen, including *M. yemenicus* which is revived from synonomy of *M. nursii* and has been added to the Arabian snake fauna in Egan (2007). It is known only from the single type specimen, of vague locality 'Yemen'. Further studies on these small, fossorial snakes, and their affinities to species on Socotra (*M. wilsoni*, *M. filiformis* and *M. macrurus*) and adjacent Somalia are required before their distributions, and thus conservation status, can be assessed.

### Species of problematic occurrence

The presence of a number of species within the region remains problematic. Most are based on Scortecci's (1932) report on the collections of Capt. E. Dubbiosi, which were reportedly from Yemen. However, the Dubbiosi collection may have been mixed with specimens collected elsewhere (see discussion in Gasperetti 1988). These include: Eryx colubrinus, Natrix tessalata, Philothamnus semivariegatus, Lycophidion capense, Meizodon semiornatus, Brachyophis revolli, Macrovipera lebetina (obtusa?). None have been subsequently collected in the Arabian Peninsula, and for this assessment they are not considered part of the Arabian snake fauna.

Another species (*Rhynchocalamus melanocephalus*) is recorded from Egypt, through the northern Middle East and possibly does occur in the extreme north of Saudi Arabia but its occurrence has not been confirmed in the region.

### Introduced species

A single parthenogenetic snake, the flower pot snake (*Rhamphotyphlops braminus*) has been introduced into Arabia. This Asian species has become almost cosmopolitan in distribution due to the ease with which it is transported in association with garden plants. For this assessment it is not considered part of the Arabian snake fauna.

### Marine species

Ten species of sea snake have been recorded from Arabian waters, almost solely within the Arabian Gulf. Little is known of their biology or the threats that they face in the marine environment, and they have therefore been excluded from this conservation assessment.

### **Summary of Assessment**

With the addition of *Myriopholis yemenicus* the snake fauna of Arabia now comprises 54 species and 56 taxa (two species having subspecies within the region). It was decided to exclude the two possible new species of *Echis* from any further discussion as their taxonomic status as distinct species or subspecies has not been confirmed.

Species not assessed include:

- Ten marine snake species (Astrotia stokesii, Enhydrina schistosa, Hydrophis cyanocinctus, Hydrophis lapemoides, Hydrophis ornatus, Hydrophis spiralis, Lapemis curtus, Microcephalophis gracilis, Pelamis platura and Praescutata viperina) as there is insufficient data;
- Seven snakes of problematic occurrence in Arabia (Eryx colubrinus, Natrix tessalata, Philothamnus semivariegatus, Lycophidion capense, Meizodon semiornatus, Brachyophis revolli, Macrovipera lebetina (obtusa?), and one species (Rhynchocalamus melanocephalus) that may occur in the Arabian Peninsula but its presence has still not been confirmed;
- One introduced species (*Rhamphotyphlops braminus*).

### Species assessed:

A total of 37 taxa were assessed 20 at regional level and 17 at global level, including:

Myriopholis macrorhynchus macrorhynchus
 Myriopholis nursii
 Myriopholis burii
 Myriopholis yemenicus
 Large-snouted Thread Snake
 Nurse's Thread Snake
 Yemen Thread Snake

• Eryx jaculus jaculus

• Eryx jayakari

• Platyceps ventromaculatus

Platyceps rhodorachisPlatyceps elegantissimus

Platyceps variabilis

• Platyceps thomasi

• Platyceps manseri

• Dasypeltis scabra

Eirenis coronella coronellaEirenis coronella fennelli

• Lamprophis fuliginosus arabicus

• Lytorhynchus diadema

• Lytorhynchus gasperettii

• Malpolon moilensis

Psammophis schokari schokari

• Rhynchocalamus arabicus

• Spalerosophis diadema cliffordi

• Telescopus dhara dhara

• Atractaspis (microlepidota) andersoni

• Atractaspis (microlepidota) engaddensis

Naja arabica

• Walterinnesia aegyptia

• Bitis arietans arietans

• Cerastes cerastes hoofieni

• Cerastes gasperettii

• Echis pyramidum pyramidum

• Echis (pyramidum) khosatzkii

• Echis carinatus sochureki

• Echis coloratus

• Echis omanensis

• Pseudocerastes persicus persicus

• Pseudocerastes fieldi

Javelin Sand Boa Arabian Sand Boa

Hardwick's Rat Snake

Wadi Racer

Elegant Racer

Variable Racer

Thomas' Racer

Manser's Racer

Rhombic Egg Eater

Crowned Dwarf Snake

Fennell's Dwarf Snake

Arabian House Snake

Crowned Leaf-nosed Snake

Gasperetti's Leaf-nosed Snake

Hooded Malpolon

Afro-Asian Sand Snake

Aden Black-headed Snake

Clifford's Diadem Snake

Arabian Cat Snake

Anderson's Burrowing Asp

Ein Geddi's Burrowing Asp

Arabian Cobra

Black Desert Cobra

Puff Adder

Hoofien's Horned Viper

Arabian Horned Viper

North East African Carpet Viper

Khosatzki's Saw-scaled Viper

Sindh Saw-scaled Viper

Burton's Carpet Viper

Oman Carpet Viper

Persian Horned Viper

Field's Horned Viper

Of the 20 regional assessments carried out only two species, *Pseudocerastes persicus* (NT) and *Eryx jaculus* (VU), were considered to be under threat with all the others species being considered as Least Concern. The remaining 17 species were assessed at the global level; of these two species *Myriopholis yemenicus* and *Rhynchocalamus arabicus* were Data Definite, three species *Myriopholis nursii*, *Cerastes cerastes hoofieni* and *Echis khosatzkii* were considered to be Near Threatened and four species *Myriopholis burii*, *Platyceps thomasi*, *Platyceps manseri* and *Lytorhynchus gasperettii* were considered Vulnerable. The snake species provisionally assessed as Threatened in Arabia are summarised in Table 2. All species placed in the Vulnerable category have very restricted areas of occupancy (<10 localities) some of which are subject to habitat loss of some form or extent.

Table 1. Summary by Family of Arabian Snake Fauna

				Type of A	Status				
Family	Species	Taxa	Presence	Global	Regional	DD	LC	NT	VU
Typhlopidae	1	1	1	0	0	-	-	-	-
Leptotyphlopidae	4	4	4	2	2	1	2	-	1
Boidae	3	3	2	1	1	-	1	-	1
Colubridae	16	17	14	6	8	1	10		3
Lamprophiidae	2	2	1	1	0	-	1	-	-
Psammophiidae	2	2	2	1	1	-	2	-	-
Atractaspidiidae	2	3	2	1	1	-	2	-	-
Natricidae	1	1	0	0	0	-	-	-	-
Elapidae	12	12	12	1	1	-	2	-	-
Viperidae	11	11	10	4	6	-	7	3	-

Table 2. Summary of Threatened Arabian Snakes

Species	Status	Criteria	Assessment
Myriopholis burii	Vulnerable	B1, B2c	Global
Myriopholis nursii	Near Threatened	Restricted range & possible habitat threats	Global
Eryx jaculus	Vulnerable		Regional
Platyceps thomasi	Vulnerable	B1, B2c	Global
Platyceps manseri	Vulnerable	B1, B2c	Global
Lytorhynchus gasperettii	Vulnerable	B1, B2c	Global
Cerastes cerastes hoofieni	Near Threatened	Restricted range & possible habitat threats	Global
Echis khosatzkii	Near Threatened	Restricted range & possible habitat threats	Global
Pseudocerastes persicus	Near Threatened	Restricted range & possible habitat threats	Regional

### Further Research Required

For a fuller, definitive conservation assessment of Arabian snakes further research is recommended. This includes:

### Field Surveys

Further field surveys should particularly target snake species of problematic taxonomy, rarity and/or problematic occurrence. These include:

- Two (possible) new species of saw-scaled viper (*Echis*) from Hauf (Yemen-Oman border) and Ta'if (Saudi Arabia);
- Two rare species, currently known only from one (*Myriopholis yemenicus*) or two (*Rhynochalamus arabicus*) specimens from Yemen.
- Old records of seven species recorded from Yemen (Scortecci 1932) but not subsequently recorded from the Arabian Peninsula (e.g. Eryx colubrinus, Natrix tessalata, Philothamnus semivariegatus, Lycophidion capense, Meizodon semiornatus, Brachyophis revolli, and Macrovipera lebetina (obtusa?)).

### Hot spots

Two centres of high snake diversity were identified, both of which would benefit from additional field surveys. These were the highlands of SW Yemen and the Dhofar region of southern Oman.

### Taxonomic problems

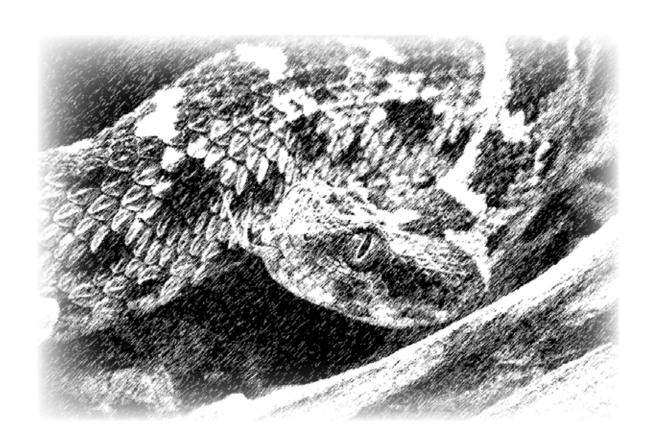
A number of taxonomic problems require further study. Tissues (blood, liver or muscle) from fresh specimens should be collected in 90% Ethyl Alcohol (EtOH) for molecular studies. A number of researchers are currently investigating phylogenetic relationships within the problem genera and could be approached to assist in the resolution of these problems. They include:

- *Echis sp.* Dr Wolfgang Wuster (Bangor, UK) has been undertaking phylogenetic studies on Afro-Asian viperids for sometime, including Arabian *Bitis, Cerastes* and *Echis*.
- A preliminary phylogeny of Leptophyphlopid snakes has appeared (Adalsteinssohn *et. al.* 2009), and Arabian species should be included in further studies.
- Atractaspis engaddensislandersoni The genus Atractaspis remains one of the enduring taxonomic problems among African snakes. A long-running morphological study (Hughes, in prep.) is underway, but molecular studies are urgently required.
- Eirenis c. coronella | E. c. fenneli The status of these small colubrine snakes should be studied in a general assessment of phylogenetic relationships among Afro-Asian colubrines.
- *Lamprophis 'arabicus'* A preliminary phylogeny of *Lamprophis* and related snakes is currently in progress (Kelly *et. al.* in prep), and Arabian house snakes could be included in this study.

### **Biology and Threats**

Further studies on the biology, habitat requirements, diet and distribution of Arabian sea snakes are desperately required. These aspects of basic biology are required if potential threats to sea snakes in the marine environment are to be assessed accurately. The escalating demand for building material in the coastal region possess particular threat to isolated limestone mountains and outcrops. The impacts of this extraction on the native herpetofauna remains poorly assessed.

# Conservation Status of the Terrestrial Snakes of the Arabian Peninsula



### **Facilitators:**

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### 1.Introduction

### 1.1 The geography of the Arabian Peninsula in the context of snakes

The region covered by this assessment is Peninsular Arabia, including Saudi Arabia, Yemen, Oman, United Arab Emirates, Qatar, Kuwait and Bahrain. Socotra was omitted as this archipelago is biogeographically distinct from mainland Arabia. Jordan was not assessed, but snake records from the southern regions, close to the border with Saudi Arabia, were taken into consideration where no trans-border habitat distinction occurs.

The Arabian Peninsula is primarily an arid zone consisting of a vast interior of sand desert, gravel plains and mountains. Most of the Arabian coastline is fringed with a mountain periphery, with watersheds facing the sea being relatively moister than those facing inland. Within these primary features are a variety of ecological zones and habitats, from cool mountain plateau, Monsoon belts and coastal plains, to hyper-arid shifting sand dunes and gravel plains. From an evolutionary perspective, Arabia is unique in that it is a former junction between Africa, the Palearctic and Asia and contains fauna with all three affinities.

The Western Mountains (Northwestern Saudi Arabia to Southwestern Yemen) form the Northeastern portion of the African Rift Valley (western aspect) and are separated from mainland Africa by the Red Sea. Although snakes of all three affinities occur in the region, there is a predominance of snakes with a direct African affinity, the forbearers of which have occupied Arabia either via Sinai, or across the former land bridge between Eritrea/Djibouti and Southwestern Yemen which is now the Bab el Mandeb straits. The southern parts of the region receive more rainfall and constitute the western side of what is known as the afrotropical belt, hosting many species with no specific adaptations to arid environments. The mountains of Northwestern Yemen attain altitudes of over 3 500 meters above sea level.

The central, southern mountain complex, known as the Hadramaut range, is primarily a hyper-arid zone that consists of lower altitude dry mountain plateaus and deep wadis, and acts as an ecological barrier between non-arid adapted species to the west, and those occurring in the monsoon belt of Dhofar in the east. This range once represented an extension of the Afro-tropical species in pre-history, but has since desertified, fragmenting populations of non-arid adapted species. The fauna from this region still has a strong African element but animals of all three affinities are present.

Dhofar is an extension of the southern complex and represents the eastern extremity of this feature. This area receives annual monsoon rains from Asia and is thus relatively greener. Many of the species occurring in the southwestern Afro-tropical belt are also found here as a remnant. The area is noted for its high level of endemism.

The eastern mountain complex extends from the Musandam mountains of Oman in the north, through eastern UAE and down to Ras al Had in northern Oman. They form the western aspect of a fault between Iran and Arabia. They consist of arid mountains with a few perennial streams. Rainfall is highest in the south of this feature, particularly in the high Jebel Akhdar complex (3 000 m.a.s.l.) of northern Oman and to a lesser degree in the Musandam peninsula. The Eastern watershed is relatively better vegetated due to coastal precipitation. Much of the fauna in the region is of Asian affinity, with several species occurring in Arabia as well as Iran.

The remainder of the peninsula (the interior and southeast) consists of low lying sand desert, volcanic remnants, gravel plains and mountain belts, or mosaic habitats, all of which are considered hyper-arid. Snakes of various affinities are found throughout.

The Arabian Gulf consists of shallow, warm and sheltered waters, generally less than 80 meters in depth, perfect for the many sea snakes inhabiting this region. This gulf is an extension of the Indo-Pacific complex. The coastal waters get progressively deeper further south, as they enter the Gulf of Oman and the Arabian Sea. The continental shelf on the southern coast drops vertically, to more than 1000 meters in depth, effectively excluding all but the pelagic sea snake from moving further west. Further factors excluding sea snake migration include the relatively cooler waters, and the unprotected nature of the southern coastline, resulting in rougher seas. No sea snakes have been recorded in the Red Sea and the most westerly record is from the Gulf of Aden (*Pelamis platura*).

### 1.2 Diversity and rate of endemism

With the inclusion of *Myriopholis yemenicus*, there are 56 recorded taxa on the Arabian Peninsula, of which several will most certainly be reclassified and possibly split up further. With evidence of two potentially new species of *Echis* (neither of which appears to have been scientifically described) the snake fauna of Arabia could increase to 58 taxa.

The existing recorded taxa consist of 56 species and subspecies from 32 genera and 8 families, of which 7 taxa are problematic and may be erroneous reports. One family, consisting of a single genus and species is introduced.

There are a total of 15 (27% of total recorded taxa) endemic taxa consisting of 6 families and 11 genera, with western Yemen hosting the most species, followed by the Dhofar region of Oman.

### 2. General Assessments

### 2.1. Objectives of the assessment

The primary objectives of this conservation assessment are as follows:

- To ascertain the conservation status of snakes on the Arabian Peninsula, following IUCN guidelines, for inclusion in the Red Data Book.
- To highlight species where a deficiency in data hinders accurate assessment.
- To raise awareness to scientists and field workers in the region, as to the importance of data collection and sampling.
- To formulate a set of initial, tangible recommendations that will aid in increasing our knowledge of the true conservation status of Arabian Snakes. This will form a stronger basis against which further recommendations can be made to initiate conservation measures.
- To make a preliminary assessment of any specific threats to snakes based on the literature and knowledge available.

### 2.2. Type of assessment

As the main focus of the workshop was to assess the conservation status of species within peninsular Arabia, all non-endemic species were assessed on a regional level, unless they have a very limited global distribution (i.e. the biggest percentage of their global distribution falls within Arabia). Endemic species, and species extant in Arabia with a limited global distribution, were assessed on a global level.

### 2.3. Preparations

A preliminary draft assessment of Arabian snakes was made by Damien Egan (BCEAW) prior to the workshop, based on available literature (see cited references). Draft maps, in 25km² increments, were also produced in digital and hard format based only on confirmed point localities in the literature and confirmed records from the Breeding Centre for Endangered Arabian Wildlife. All reference material was supplied in the form of briefing material on the table. Wireless Internet access was available for cross referencing. Taxon data sheets were provided to each delegate in hard format and were installed in template form on a computer, to be filled in as each species was covered.

### 3. Taxon Assessments

### 3.1. Preliminary review of the checklist of Arabian snakes

After introductions, the group reviewed 58 taxa on the combined knowledge of the delegates and the summarized assessments based on existing literature. This process was to establish an order of species assessment, prioritizing endemic species. It was also to establish which snakes could not be assessed due to lack of data or problematic occurrence due to possibly erroneous records. Introduced species and the sea snakes (as they are largely data deficient) were also not assessed. As time constraints would have hindered the thorough assessment of each species, this step was agreed upon by the entire group.

### 3.1.1. Species of problematic occurrence on the Arabian Peninsula

Seven species were acknowledged but instantly omitted from further assessment on the basis that they were all recorded from single specimens and no locality data was provided by the collector (Capt. Emilio Dubboisi). None of these species has been recorded since the original collection record (all collected in the 1920's and reported by Scorttecci, in 1932). Following is a list of the seven species of problematic occurrence in Arabia:

- Egyptian sand boa *Eryx colubrinus* (Boidae)

  This species is recorded from Northern Kenya to the Nile Valley, one specimen is reported from Arabia with no locality details.
- Cape wolf snake *Lycophidion capense* (Lamprophidae)

  This species is common and widespread in Sub-Saharan Africa. It is recorded from one specimen allegedly collected in Arabia. No locality details are available.
- Semi-ornate snake *Meizodon semiornatus* (Colubridae)

  This is a widely distributed species from southern and eastern Africa. There is one record from the Arabian Peninsula with no locality information.
- Spotted bush snake *Philothamnus semivariegatus* (Colubridae)

  This species is common and widespread across sub-Saharan Africa. One record with no locality data exists for Yemen.

- Dice snake *Natrix tessalata* (Natricidae)
  - A widely distributed Palearctic species extant in the northern parts of the Middle East. One specimen was reported from Yemen. There was some discussion of the possibility that this species, which also occurs in the Azraq oasis in Jordan, may be extant in the far north of Saudi Arabia. This has not been substantiated.
- Revoil's short snake *Brachyophis revoili* (Atractaspidinae)

  A rare and localized snake from the Somalian coast. One specimen was reported from Yemen with unknown locality data.
- Levantine viper *Macrovipera lebetina* (Viperidae)

  A species with a wide range from North Africa, Mediterranean Europe through to Asia. The subspecies *Microvipera lebetina obtusa* is extant in the northern Middle East countries. One specimen was alleged to have been recorded from Yemen with no locality data.

### 3.1.2. Introduced species

One species, the flowerpot snake *Rhamphotyphlops braminus* (Typhlopidae), was recognized as an introduced species. This is a commonly introduced species that reproduces by parthenogenesis. It is known worldwide although it most likely originates in Western Asia. It is known to occur in points throughout the Arabian Peninsula. This species was not assessed due to the fact that it is an artificial introduction, although it's presence was acknowledged.

### 3.1.3. Snakes extant within the region but not assessed due to data deficiency

There was some reluctance among the group in regards to assessing the 10 species of sea snakes occurring in the Arabian Gulf and the Arabian Sea, as sampling of sea snakes has historically been biased towards those areas where coastal fishing activities are conducted. Apart from a few scattered localities elsewhere, there is insufficient data to make any further assessment.

The sea snakes extant within the region's waters include:

- Stoke's sea snake Astrotia stokesii,
- Beaked sea snake Enhydrina schistosa
- Annulated sea snake Hydrophis cyanocinctus
- Arabian Gulf sea snake *Hydrophis lapemoides*
- Ornate sea snake Hydrophis ornatus ornatus
- Yellow sea snake Hydrophis spiralis spiralis
- Short sea snake Lapemis curtus
- Small-headed sea snake Microcephalophis gracilis
- Pelagic sea snake *Pelamis platura*
- Viperine sea snake *Preascutata viperina*

All sea snakes were appended in a recommendation for further, specific studies on distribution, dynamics, general ecology and potential threats facing them. An accurate assessment was impossible because of the complete lack of knowledge regarding the distributions, life-histories and dynamics of sea snakes within Arabian waters. It was agreed to include them in the discussions as time permitted, but the group were unable to give any accurate assessments due to data deficiency. Pritpal Soorae of the Environment Agency, Abu Dhabi made available a number of new localities of some of the species from the UAE, which were added to the distribution maps.

### 3.1.4. Species of possible occurrence in Arabia

Palestine black-headed snake *Rhynchocalamus melanocephalus*. This species is recorded from Egypt, through the northern Middle East and possibly the extreme north of Saudi Arabia. As its occurrence has not been confirmed in the region, this species was not assessed, but was acknowledged as a possible Arabian Peninsula species.

### 3.1.5. Undescribed Species

Evidence of two vipers from Hauf and Ta'if that did not fit any of the four known taxa of *Echis* that occur on the Arabian Peninsula was presented. As neither of the species appears to have been scientifically described, they could not be accurately assessed and therefore could not be assigned a conservation status.

### Undescribed saw-scaled viper Echis sp. 1

This specimen, most likely a member of the *E. pyramidum* complex, was collected near Hauf, in Yemen. Samples have been prepared for DNA analysis to ascertain its taxonomic status. The specimen is preserved at the Breeding Centre for Endangered Arabian Wildlife, Sharjah, UAE.

### Undescribed saw-scaled viper Echis sp. 2

A photograph, supplied by Dr. Saud, near Ta'if in the Asir Mountains, clearly depicts an *Echis* species that does not conform to any morphological keys, being completely distinct from any other known *Echis* in the region. A specimen is not available at present and we hope that genetic material will become available in the future.

### 3.2. Individual taxon assessments

Following is a brief report of discussions of the snakes of Arabia. They have been placed in taxonomic order in this report, but were discussed as prioritized by the workshop members as mentioned (3.1). Taxon data sheets and maps (Appendix 1) were completed for each assessed taxon.

### Buri's thread snake Myriopholis burii

This rare snake is endemic to western Yemen and was assessed on a global level. It is only known from two specimens collected NNE of Aden. It has an area of occupancy and area of occurrence of approximately 25km<sup>2</sup>. One population is recognized. *M. burii* was assigned Vulnerable status based on the literature that was available.

A recommendation is made for further sampling in its known region of occupancy and adjacent areas to ascertain its full range, and for genetic material to be collected for molecular taxonomic study. No immediate threats to the population appear to be present but the species is extremely localized and this area is subject to increasing rural agricultural use.

### Nurse's thread snake Myriopholis nursii

This snake is not endemic, but the bulk of its recorded distribution falls within Arabia, with a small population known from Somalia. Within Arabia it is known from two populations; one in western Saudi Arabia and southwestern Yemen and a second in the vicinity of Muscat in Northern Oman. The species was assessed on a global level. It has an area of occupancy of  $575 \, \mathrm{km}^2$ , with an area of occurrence of over  $75,000 \, \mathrm{km}^2$ .

The northern Oman population of *M. nursii* was assigned Near-Threatened status, whereas the western population was assigned Least Concern status.

It was suggested by Prof. William R. Branch that the eastern population near Muscat could represent an introduced population. Dr. Khaled Al Rasbi commented on the occurrence of a similar species found around temporary human habitations in the sand dunes to the interior of Muscat. This was later thought to be an introduction through soil importation and no specimens were available for examination. Further scientific study is required before a conservation assessment can be made.

Threats were identified in the form of large-scale coastal development in the Oman Mountains and development to a lesser degree in the region of Saudi Arabia where the species occurs.

A recommendation is made for further sampling, particularly in the Oman Mountains, and for comprehensive genetic studies to be done.

### Large-snouted thread snake Myriopholis macrorhynchus

This is a widespread species that occurs from West Africa to western Asia. It has a wide distribution within the Arabian Peninsula. *M. macrorhynchus* was assessed on a regional level. It has an area of occupancy of 525km² and an area of occurrence of over 20,000km². It was agreed that the Arabian distribution of this species probably represents one population, but it is uncertain to what level it is artificially introduced with growing media and cultivated plants. It is assumed that specimens recorded from the western Emirates, for example, are introduced, as this species is not arid-adapted.

M. macrorhynchus was assigned Least Concern status.

No major threats were recognized that affect this species. Recommendations are made for collection and sampling to ascertain taxonomic status throughout their distribution.

### Yemen thread snake Myriopholis yemenicus

This very rare snake, know only from a single specimen, was revived from the synonymy of *M. nursii* (Broadley & Wallach 2007) and was an addition to the discussion. It is only known from the type specimen and is supplied with nonspecific locality data, i.e, "Yemen". Based on the complete lack of data for the range of this species, it could not be accurately assessed and is therefore considered Data Deficient.

### Javelin Sand Boa Eryx jaculus

This species is widespread from North Africa and Mediterranean Europe, as far east as China. Within Peninsular Arabia it is only known from two confirmed specimens and one unconfirmed photographic record, in the far northeast of Saudi Arabia on the Kuwait border. As the Arabian records represent less than 1% of this species global distribution, *E. jaculus* was assessed on a regional level. It has an area of occupancy of 25km², with an area of occurrence of less than 400km².

E. jaculus was assigned Regionally Vulnerable status.

Military activity, as is inherent in border areas was listed as a possible threat, but was not confirmed. The snakes' presence in Arabia represents a peripheral potion of the global population.

Recommendations are made generally for the region for more sampling and field studies on possible threats. No recommendations were made specifically for this species.

### Arabian sand boa Eryx jayakari

This species has been recorded in the sand deserts throughout the Arabian Peninsula and is considered widespread. It is endemic to the region and has been assessed on a global level. The area of occupancy is 19,750km<sup>2</sup>, and the area of occurrence is well over 40,000km<sup>2</sup>.

E. jayakari has been assigned Least Concern status.

There are several general threats affecting this species, but no known immediate threats to the overall population.

No recommendations have been made for this species

### Hardwick's rat snake Platyceps ventromaculatus

This species has been recorded from eastern Arabia, some of the Gulf Islands, Iran and Pakistan. It is known from marshes and agricultural areas, and peripheral sandy areas in eastern Saudi Arabia, Qatar, Bahrain and Abu Dhabi Emirate (including onshore islands where it may have been introduced). Two populations were identified: one on mainland Arabia and the second on Bahrain. This snake's range in Arabia comprises less than 1% of the global population and was assessed on a regional level. It has an area of occupancy of 300km², and an area of occurrence probably more than 3,200km².

P. ventromaculatus was assigned Least Concern status.

Some threats that were identified included; increasing salinity of freshwater marshes as a result of over-utilization of freshwater resources by man, as well as habitat destruction for human urban development. None of these threats appear to have a direct influence on the current populations as a whole. This species is well known to thrive in areas of artificial cultivation.

No recommendations were made for this species.

### Wadi racer Platyceps rhodorachis

This species has a global distribution from Libya, east to Turkmenistan, including most rocky habitats on peninsular Arabia. *P. rhodorachis* was assessed on a regional level. The species represents one population covering an area of occupancy of over 3,275km², and an area of occurrence of over 40,000km².

P. rhodorachis represent one of the most common Arabian land snakes and was assessed as Least Concern.

There are no immediate threats facing population as a whole.

No recommendations were made for this species.

### Elegant racer Platyceps elegantissimus

This species is recorded from Palestine and Jordan, south to eastern and central Saudi Arabia. The recorded distribution of this species in Arabia represents one population. *P. elegantissimus* was assessed on a regional level. It has an area of occupancy of 425km², and a total area of occurrence of around 10,800km².

*P. elegantisimus* was assigned the status of Least Concern. Although seldom found and quite rare, this species is widespread and well-represented.

Threats in the form of human developments exist, and are increasing within its range, there are none however, posing a threat to the overall population.

No recommendations were made for this species.

### Thomas' racer Platyceps thomasi

This rare species is only recorded from the Dhofar region of Oman and the adjacent Yemen border. It occupies coastal plains and mountain habitat. It is endemic and was assessed on a global level. One population is considered to exist, with an area of occupancy of 50km<sup>2</sup>, and a total area of occurrence around 75km<sup>2</sup>.

*P. thomasi* was assigned Vulnerable status, due to the very limited distribution of this species and the fact that threats might affect a portion of the population in the form of coastal plain development.

Recommendations are made to intensify field studies in the general Dhofar region, and in southeastern Yemen. No specific conservation recommendations were made for this species.

### Manser's black snake Platyceps manseri

This rare endemic is recorded from southwestern Saudi Arabia and Western Yemen. It was assessed on a global level. *P. manseri* has an area of occupancy estimated at 25km<sup>2</sup>, and a total area of occurrence of 25km<sup>2</sup>. It is known from only 5 specimens within a very limited range.

There is some level of conflicting data regarding the taxonomy in relation to its close ally, *P. variabilis*.

*P. manseri* was provisionally assigned Vulnerable status, although details of specific threats could raise the assessment to Endangered.

No immediate threats to this species were currently recognized for this species, but its known range is so small that the area should be 'flagged' against future development.

Further sampling is recommended in the snake's area of occurrence, as well as further genetic studies to confirm its taxonomic status.

### Variable racer *Platyceps variabilis*

This species is endemic to western Yemen and was assessed on a global level. The species is known from the highland regions of Ta'iz and Sana'a and is considered relatively common locally. It is considered to be one population. *P. variabilis* has an area of occupancy of 50km<sup>2</sup>, and a total are of occurrence of 400km<sup>2</sup>.

P. variabilis was assigned Least Concern status.

No immediate threats were identified for this species.

Recommendation was made for further genetic studies throughout this species' range, as well as that of *P. manseri* to establish taxonomic status in relation to the closely allied *P. manseri*.

### Common egg eater Dasypeltis scabra

This common species is recorded throughout sub-Saharan Africa to Egypt, as well as western Yemen and Southern Saudi Arabia. One population is recognized. *D. scabra* was assessed on a regional level, had an area of occupancy of 275km², and a total area of occurrence of 1,775km².

*D. scabra* was assigned Least Concern status. Although not widespread in Arabia, the species is well represented and not considered particularly rare.

There are no immediate threats to the Arabian population of *D. scabra*.

The taxonomy of this species needs a Pan-African revision. Three new species were recently described from West Africa (Trape & Mane 2006), and further cryptic species are being revived in southern Africa (Broadley & Bates, in prep.). The taxonomic status of the Arabian population also requires re-assessment.

### Crowned dwarf snake Eirenis coronella coronella

This species is recorded throughout the northern Middle East, entering peninsular Arabia in the eastern province of Saudi Arabia, and was assessed on a regional level. There is thought to be one regional population of this species and it is well represented. The species has an area of occupancy of 75km<sup>2</sup>, and a total area of occurrence of 350km<sup>2</sup> within Arabia.

E. c. coronella was assigned Least Concern status.

There are no direct threats to the Arabian population of this species.

### Fennel's dwarf snake Eirenis coronella fenneli

This endemic subspecies is recorded from the Asir Mountains of Western Saudi Arabia. It was assessed on a global level. The area of occupancy is  $100 \mathrm{km}^2$ , with a total area of occurrence of  $1,425 \mathrm{km}^2$ .

E. c. fenneli was assigned Least Concern status.

Although considered locally rare, and known from few specimens, the habitat between localities is continuous and there are no perceived declines in range or population size.

There are no specific threats to E. c. fenelli.

A recommendation is made for taxonomic studies on this subspecies in the light of the possibility of it being elevated to species level. The most recent work has been morphological, and complimentary molecular studies are recommended.

### Crowned leaf-nosed snake Lytorhynchus diadema

This common species has been recorded from North Africa, the Mediterranean, the Middle East and Western Asia. Within Arabia, it is known from suitable habitat throughout the region. The Arabian distribution of this species represents one population. *L. diadema* was assessed on a regional level. It has an area of occupancy of 1,350km², and a total area of occurrence of more than 28,400km².

L. diadema was assigned Least Concern status.

There are no direct threats to the Arabian population of this species.

### Gasperetti's leaf-nosed snake Lytorhynchus gasperettii

This endemic species is recorded from the southeastern Asir Mountains of Saudi Arabia. It is only known from seven specimens, has an area of occurrence of 75km<sup>2</sup>, and an area of occupancy of 150km<sup>2</sup>. Records of this snake represent one population.

L. gasperettii was assessed on a global level and was assigned Vulnerable status.

The range of this snake is very restricted, but no immediate threats have been recognized to the population. Any future development, however, could have a marked impact on the species.

### Aden black-headed snake Rhynchocalamus arabicus

This snake is known from a single specimen in the region of Aden, Yemen. The holotype is well documented and the species was assessed on a global level. The known area of occurrence and the area of occupancy is less than 25km<sup>2</sup>.

R. arabicus was not assigned a conservation status as it is known from a single specimen. It was considered Data Deficient.

Possible threats to the species cannot be assessed due to the vague provenance of the type.

More intensive research and further sampling is recommended.

### Clifford's diadem snake Spalerosophis diadema cliffordi

This species is recorded from North Africa, as far east as Iran. It occurs in suitable habitat throughout the region. A single population is thought to occur in Arabia, and the species is considered very common, particularly in the west of its range. *S. d. cliffordi* was assessed on a regional level. It has an area of occurrence of 1,850km², with an area of occupancy of 36,800km².

S. d. cliffordi species was assigned Least Concern status.

There are no specific threats affecting the Arabian population as a whole.

### Arabian cat snake Telescopus dhara dhara

This species is known from North and East Africa through to the Middle East. In Arabia, it is known from the central mountains of Saudi Arabia and most of the mountain periphery. *T. d. dhara* was assessed on a regional level and its distribution within Arabia most likely represents one population. This species is considered common throughout much of its range. It has an area of occurrence of 1,550km², with an area of occupancy of 26,400km².

T. d. dhara was assigned the status of Least Concern.

There are no specific threats to the Arabian population of this species.

### Arabian house snake Lamprophis fuliginosus arabicus

This species is known from western Yemen, where is considered common. Its area of occupancy is estimated at 100km<sup>2</sup>, and its area of occurrence is around 575km<sup>2</sup>. *L. f. arabicus* was assessed on a global level. One population of this species is recognized.

L. f. arabicus was assigned Least Concern status.

No threats were identified for this species.

Recommendations are made for sampling the species for genetic studies, as revisions of this genus in Africa have revealed deep genetic divergences that will require reappraisal of the existing taxonomy and description of new species (C. Kelly, in prep.).

### Afro-Asian sand snake Psammophis schokari schokari

This common species is recorded from Northwest Africa, through the Middle East as far East as Nepal. In Arabia it is known from suitable habitat throughout the entire region in a single population. This species was assessed on a regional level. It has an area of occurrence of 3,475km², with an area of occupancy of 4,600km².

P. s. schokari was assigned Least Concern status.

There are no specific threats to the Arabian population of this species.

### False cobra, hooded malpolon Malpolon moilensis

This common snake is recorded from Northwest Africa to the Middle East. It is known from suitable habitat throughout peninsular Arabia. The species was assessed on a regional level. It has an area of occurrence of 2,650km², and a total area of occupancy of 44,000km². One population is thought to exist.

M. moilensis was assigned Least Concern status.

There are no direct threats facing the Arabian population.

### Anderson's burrowing asp Atractaspis (microlepidota) andersonnii

This endemic taxon is recorded from the Northern Asir Mountains of Saudi Arabia south to Yemen and east to Dhofar in Oman. The Hadramaut range in Yemen probably forms an ecological barrier which likely spits the species' distribution into at least two populations, one in Dhofar and Southeast Yemen, and one in the Eastern complex, penetrating some distance into the Hadramaut complex. It's occurrence within the Hadramaut complex is not clearly understood. It was assessed on a global level and has an area of occurrence of 250km², and an area of occupancy of 6,400km². The species is considered reasonably common throughout most of its range.

A. (m.) andersonii was assigned Least Concern status.

There are no direct threats to this species' populations at present.

Further taxonomic studies on the species are required as typical *A. microlepidota* is restricted to West Africa (Trape *et. al.* 2006), and East African and Arabian populations representatives may be specifically distinct.

### Ein-Geddi burrowing asp Atractaspis (microlepidota) engaddensis

This subspecies is recorded from Sinai through to the eastern and central mountains of Saudi Arabia, and is replaced by *A. (m.) andersoni* at the northernmost extremity of the Asir mountain complex. The species was assessed on a regional level and has an area of occurrence of 325km², and a total area of occupancy of 8,000km². The Arabian distribution of this species is considered a single population and represents over 60% of the global population.

A. (m.) engaddensisi was assigned Least Concern status.

There are no specific threats to the Arabian population of this subspecies.

### Arabian cobra Naja arabica

This endemic species is recorded from the southwestern mountains of Saudi Arabia and Yemen, through the Hadramaut to Dhofar in Oman. It was recently validated as a full species (Trape *et. al.* 2009). Its distribution within Hadramaut is fragmented and unclear, and there may be upwards of three distinct populations. This species was assessed on a global level. It has an area of occurrence of 1,400km<sup>2</sup>, with a total area of occupancy of 12,000km<sup>2</sup>.

N. arabica was assigned Least Concern status.

Threats were identified in the form of commercial collection of snakes for venom extraction (Saudi Arabia) and apparently for the pet industry (Saudi Arabia). None however have been confirmed to have an effect on the overall populations.

### Desert black snake, black desert cobra Walterinnesia aegyptia

This species is recorded from North Africa to the Middle East. Within Arabia, it is known from Northeast and Central Saudi Arabia with some occurrence in the Northwest. There is some speculation of the species' occurrence in Qatar (Per com: Fran Gillespie), but this is yet to be confirmed. It was assessed on a regional level and a single population was identified. It has an area of occurrence of  $425 \, \mathrm{km}^2$ , with an area of occupancy of  $12,400 \, \mathrm{km}^2$ . Although locally considered to be rare, this snake is well represented over a large range.

W. aegyptia was assigned Least Concern status.

Potential threats were identified in the form of the development of gravel plains in parts of its range. Recommendations included further field studies and intensive field work in Qatar and peripheral parts of its range.

### Puff adder Bitis arietans arietans

This widespread species is known throughout Sub-Saharan Africa, northeast Africa, the Asir Mountains of southwestern Saudi Arabia, Yemen as far east as Dhofar. The occurrence of this species in Arabia represents less than 1% of its global distribution. *B. a. arietans* was assessed on a regional level. *B. a. arietans* is considered common in southwestern Arabia, but less so in Dhofar. It has an area occurrence of 1,025km², and an area of occupancy of 7,200km². At least two populations are recognized, one in southwestern Arabia and the second in Dhofar. Its occurrence in the Hadramaut complex is not well understood, but informal accounts of the species' occurrence in the Seiun area suggest fragmented populations may occur there.

B. a. arietans was assigned Least Concern status.

No immediate threats were identified for the species as a whole, although coastal plain development in Dhofar may represent a potential threat in the future.

### Hoofien's horned viper Cerastes cerastes hoofieni

This endemic subspecies has a limited distribution in the coastal plains of southwestern Saudi Arabia and adjacent Yemen. It was assessed on a global level. It has an area of occurrence of 150km², and an area of occupancy of 1,350km². One population is recognized.

C. c. hoofteni was assigned Near Threatened status based on its limited distribution.

No immediate threats were identified for this subspecies.

Recommendations are made for genetic study on this subspecies to determine its exact taxonomic status, and to assess its entire range in relation with the sympatric Arabian horned viper *Cerastes gasperettii*.

### Arabian horned viper Cerastes gasperettii

This common and widespread near-endemic species is known throughout the Arabian Peninsula in vegetated sand deserts. It has an area of occupancy of 3,325km<sup>2</sup>, and an area of occurrence of 50,800km<sup>2</sup>. *C. gasparetti* was assessed on a global level.

C. gasperettii was assigned Least Concern status.

Threats were identified regionally in the form of off-road driving (notably in the UAE), but could not be confirmed to have a significant impact on the population as a whole.

### Northeast African saw-scaled viper Echis pyramidum

This represents a widespread and taxonomically unresolved complex, particularly in Southern Yemen. The species, as it is currently known, is found from northeast Africa, through Sinai, to western Saudi Arabia and Yemen. It has an area of occupancy of 550km², and an area of occurrence of 9,200km², and was assessed on a regional level. At present, one population is recognized.

E. pyramidum was assigned Least Concern status.

Various general threats were recognized throughout much of this species' range, but none were considered to have a direct impact on the population as a whole.

### Khosatzki's saw-scaled viper Echis khosatzkii

This species has recently been revived from the *E. pyramidum* complex and is known from the Dhofar region of southern Oman, and possibly in southwestern Yemen. It has a known area of occupancy of 150km<sup>2</sup>, and an area of occurrence of 525km<sup>2</sup>. One population of this species is recognized. *E. khosatzkii* was assessed on a global level.

*E. khosatzkii* was assigned Near Threatened status on the basis of a limited natural range, with relatively few records, and potential threats to a large potion of its known range. Threats were identified in the form of urban development, already in progress in parts of the Dhofar coastal plains, and planned for the future. As much of the range is at sea level, sea level fluctuations caused by global warming could also pose a threat to this species.

### Burton's carpet viper Echis coloratus coloratus

A widespread and common species, *E. coloratus* is known from northeast Africa, Sinai, and western Saudi Arabia to southern Arabia. Two populations are presently recognized, one along Western Saudi Arabia and Yemen, entering the Hadramaut, and a second, seemingly isolated population in Dhofar. It has a known area of occupancy of 1,525km², and an area of occurrence of 24,400km². It was assessed on a regional level.

E. c. coloratus was assigned Least Concern status

Although general threats affect this species, none are recognized to have a significant impact on the populations on the whole. Recommendations are made to intensify sampling in the areas between the areas (Hadramaut, Hauf, Western Dhofar) between populations and to obtain more genetic material.

### Oman carpet viper Echis omanensis

*E.omanensis* was described as a distinct species endemic to the Al Hajar Mountain complex of Northern Oman and the UAE (Babocsay 2004). It was previously confused with *E. coloratus*. One population is recognized extending the length of the Al Hajar Mountains, primarily on the Eastern watershed. It has a known area of occupancy of 875km², and a known area of occurrence of about 1,000km². *E. omanensis* was assessed on a global level.

E. omanensis was assigned Least Concern status.

Threats were identified in the form of massive coastal development throughout the region, as well as water-yielding wadis increasingly being used for recreational activities. Due to this species being widespread, resilient and non-specific in habitat requirements, these threats are not regarded as having a significant impact on the species as a whole.

### Sindh saw-scaled viper Echis carinatus sochureki

This common and widespread species is known from the Arabian Peninsula in vegetated sand deserts throughout the Eastern Province of Saudi Arabia, Qatar, the United Arab Emirates, and north-eastern Oman. Elsewhere it is known from Pakistan and coastal Iran. It has an area of occupancy in Arabia of 725km², and an area of occurrence in the region of 2,000km². It was assessed on a regional level, and was assigned Least Concern status.

Threats were identified regionally in the form of off-road driving (notably in the UAE), but could not be confirmed to have an impact on the population as a whole.

### Persian horned viper, False-horned viper Pseudocerastes persicus

This snake is known from the mountains and plateaus of Iran, Pakistan and Afghanistan. In Arabia it is known from the Al Hajar mountain complex at altitudes above 600m, but generally much higher. It has an area of occupancy of 175km², and an area of occurrence of around 400km². *P. persicus* was assessed on a regional level.

P. persicus was assigned Regionally Near Threatened status.

Threats are recognized in the form of mountain development, road building, quarrying and global warming, as this species seems to be dependant on the relatively cooler temperatures of the higher mountains.

### Field's horned viper, Field's false-horned viper Pseudocerastes fieldi

This snake is known from northern Iran through to Sinai and the extreme north of Saudi Arabia on the border with Jordan. It has an area of occupancy of 75km<sup>2</sup> and an area of occurrence of 2,100km<sup>2</sup>. *P. fieldi* was assessed on a regional level.

P. fieldi was assigned Least Concern status

No direct threats are recognized for this species within Arabia and the Arabian distribution represents only a small fraction of the global distribution.

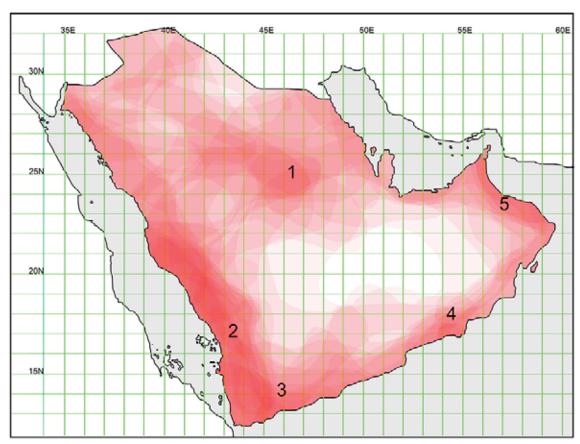
## 4. Geographical hot spots and areas of high study priority

By layering the distribution maps of assessed species, certain areas become clearly evident as snake 'hot-spots'. These are those parts of the Arabian Peninsula that contain vulnerable species, high species diversity and low levels of field studies and sampling. The most notable diversity hot-spots include western Yemen and Dhofar, in Oman.

### 4.1. Snake hot-spots

### 4.1.1. Diversity hot-spots

This map represents the layered distribution (area of occupancy) of the taxa assessed during the course of the workshop. The individual taxon distribution markers are set at 7% transparency increments, producing a 7% quantitative darkening with each overlap. Areas that reveal themselves as species rich include (1) Mountain hinterland near Riyadh, (2) Asir Mountains, (3) Southwestern Yemen, (4) Dhofar and (5) the Eastern Mountain complex.



**Figure 1.** Diversity hot-spots.

### 4.1.2. Species assigned near-threatened and vulnerable status

Figure 2 shows a collective layering of only species assigned to Near-threatened or Vulnerable status. When taking species diversity and rate of field study into consideration, this information would place particular priority to southwestern Yemen and Dhofar.

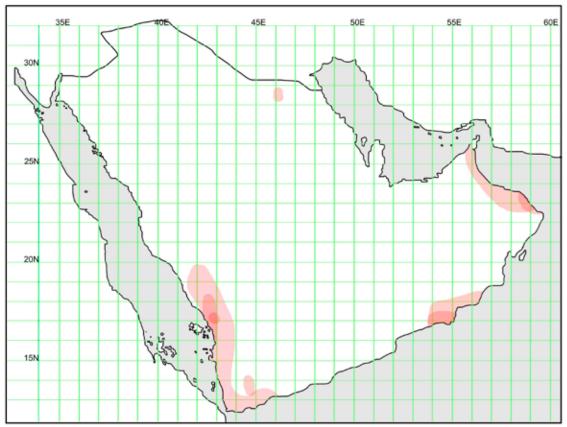


Figure 2. Hot-spots for Vulnerable and Near Threatened species.

### 4.2. Areas with little historical data

A review of the current literature revealed that there is a general lack of consistent sampling and publishing throughout the region. Some areas, however, have been subjected to far less sampling. The map above depicts the general areas historically subjected to less than normal collection.

- 1) Northern Saudi Arabia/Jordan border region
- 2) Northeastern Saudi Arabia/Kuwait border region and Eastern Province of Saudi Arabia
- 3) The Central Rub Al Khali sand desert complex
- 4) Southwestern Yemen
- 5) Hadramaut region of Yemen further to the Oman border
- 6) Dhofar
- 7) Coastal waters of the Arabian Gulf

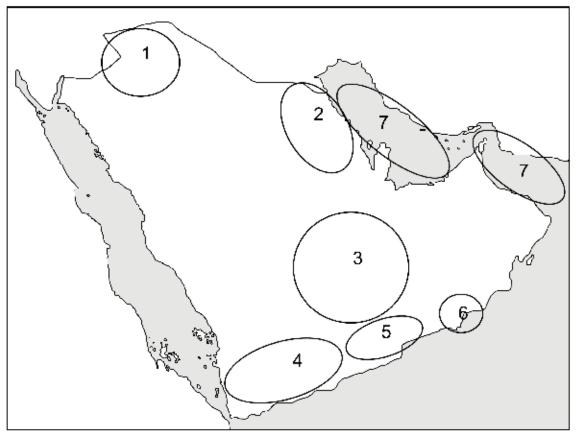


Figure 3. Areas with little historical data.

### 5. Threats

### 5.1. General threats

Most threats identified affect all species that have a range that fall within the threat zone. The majority of these threats do not appear to be great enough to have impact on entire taxa, or populations thereof. It was agreed to adopt a conservative approach when assessing threats as in most cases there is insufficient research to substantiate objective threat levels. Most reports of threats comprise anecdotal observations. A list of confirmed general threats that affect Arabian snakes is discussed below.

### 5.1.1. Quarrying

This activity is prevalent throughout mountainous areas of Saudi Arabia, Oman, UAE and Yemen. It is especially prevalent in the United Arab Emirates, where large-scale rock quarrying is being conducted in the eastern mountains to supply construction companies with building materials. This activity has amplified with the construction of artificial islands in Dubai and elsewhere. Apart from rock, quarrying for gypsum is conducted in medium to large scale in ecologically sensitive areas in Yemen, such as in the Hadramaut. Concerns are raised regarding the indiscriminate and often informal spread of quarrying without sufficient environmental impact assessments being conducted.

### 5.1.2. Urban development

A general lack of urban planning throughout the region has resulted in a random sprawl of urban structures into natural areas. Industrial areas often arise on desert gravel plains, and in turn give rise to smaller peripheral industry and human habitation. This creates a chain-reaction of roads and other infrastructure which effectively fragments the given habitat considerably. Coastlines and scenic mountain areas are being developed at an unprecedented rate to accommodate the tourism industry, particularly in Oman and UAE.

### 5.1.3. Off-road driving

The use of 4x4 vehicles and quad bikes for recreational purposes is a popular activity throughout the sand deserts of the region, particularly Saudi Arabia, Qatar, Oman and UAE. It is a well-advertised tourist activity that generates much foreign currency in some of these countries. It is also a very popular weekend activity of locals and resident expatriates alike. To a lesser extent, residents and locals use the desert for daily thoroughfare and contribute to the deterioration of the quality of the habitat.

The negative effects of off-road driving are both directly evident, and more complex and longer-term. Apart from reptiles being directly crushed from vehicle collisions, the surface of normally stable dunes is constantly being broken, allowing for very rapid erosion and dehydration of the dunes. Plants are natural dune-binding agents and cannot withstand repetitive traffic. Seeds establish better in stable dune conditions, so far less plants will be found in areas with high levels of off-road driving. As plants form the basis for all desert food webs, a decline in plant-eating species, many of which are primary prey items for snakes, will result in a decline in all other species, snakes included. The crust of sand found on stable dunes is essential for many prey species, such as lizards and rodents to dig burrows.

Off-road driving in the mountainous areas, commonly (and appropriately) referred to as wadi bashing, is another activity that is on the increase. It is uncertain to what extent this sport damages the environment, but the increase of human activity in remote areas generally results in a decline in the quality of the habitat.

### 5.1.4. Over-grazing

As with off-road driving, over-grazing by domestic livestock such as camels, goats, sheep, cattle and donkeys, causes a dramatic change in the desert flora profile. Apart from competing for food with indigenous herbivorous fauna, the reduction in dune-binding plants results in erosion. Other negative impacts from the presence of livestock includes continuous trampling of habitat (particularly where these herds are resident all year round), and the succession of inedible plants on the landscape.

### 5.1.5. Over-utilization of freshwater resources

This is a continuing problem that was identified as crucial to the several endemic freshwater fish, amphibian, chelonian and invertebrate species of Arabia in previous conservation meetings. Pumping of water for agriculture, domestic and municipal reasons have significantly lowered the water table throughout the region, and continue to do so. In some areas, like Bahrain, this has had the effect of existing freshwater bodies becoming salinated and nearing a quality that would be unfit to sustain the present ecology. The general lowering of the water table would naturally have a major impact on water-dependant snakes, but would also reduce the biodiversity locally, which will have an effect throughout the food web.

### 5.1.6. Global climate change

As much of the Arabian Peninsula is low-lying land, close to sea level, the increase of temperatures predicted globally will cause a massive reduction in habitat in these areas. Habitat will alter throughout the region and it is likely that species will experience major changes in their distribution and the size of their population. False-horned vipers, for example, tend to inhabit cooler higher mountains that the Oman carpet vipers avoid. A few degrees increase in temperature could result in an increase in carpet viper range and the Persian horned vipers being out-competed to extinction.

### 5.2. Specific threats

The following table illustrates the threats facing snakes assessed during this workshop.

- P- Represents threats taking place in the present
- F- Represents perceived threats for the future

If in *Italics* these are general threats that likely do not have an impact on a taxon as a whole, or populations thereof.

If **BOLD** these a specific threat that may have a negative impact on the taxon, or population.

\* - species where one population is being affected by a threat whilst others may not.

Species	Quarrying	Urban Dev.	Offroad Driving	Over-grazing	Fresh-water	Collecting	Climate change	Other
Myriopholis macrorhynchus		PF						
M. nursii		<b>P F*</b> <i>P F*</i>						
M. burii		PF						
Eryx jaculus			P F					Military activitry
Eryx jayakari		PF	PF	PF				
Platyceps ventromaculatus		PF		PF	PF			
P. rhodorachis	PF	PF			PF			
P. elegantissimus		PF						
P. variabilis		PF						
P. thomasi		P F		PF			P F	Restricted range
P. manseri		F						Restricted range
Dasypeltis scabra		F						
Eirenis c. coronella		PF	PF	PF				
E. c. fennelli		P F						Restricted range
Lamprophis fuliginosus arabicus		P F						
Lytorhynchus diadema		PF	PF	PF				
L. gasperettii		F						Restricted range

Species	Quarrying	Urban Dev.	Offroad Driving	Over-grazing	Fresh-water	Collecting	Climate change	Other
Malpolon moilensis		PF	PF	PF				
Psammophis schokari		PF	PF	PF				
Rhynchocalamus arabicus		F						Restricted range
Spalerosophis diadema cliffordi	P F	P F		PF				
Telescopus dhara	P F	PF						
Atractaspis (microlepidota) andersoni		P F						
Atractaspis (m.) engaddensis		PF						
Naja arabica	F	PF			PF	PF		
Walterinnesia aegyptia		PF	PF	PF		PF		
Bitis arietans arietans				PF				
Cerastes c. hoofieni		F	PF	PF				
C. gasperettii		PF	PF	PF		PF		
Echis pyramidum	F					PF		
E. khosatzkii		P F		PF			F	
E. carinatus sochureki		PF	PF	PF				
E. coloratus	PF	PF		PF	PF	PF		
E. omanensis	PF	PF		PF	PF			
Pseudocerastes persicus	PF	P F		PF			F	Restricted range
P. fieldi		PF						

### 6. Recommendations

### 6.1. Field study

The vast majority of records for snakes in Arabia are now more than 20 years old, with proportionately little having been contributed between the 1980's and the present. A recommendation is made for field workers, scientists.

### 6.2. Taxonomic studies

A strong recommendation is made to revise the taxonomic status, by means of genetic studies, of several taxa in the region. The following are appended specific recommendations for taxonomic studies:

- 1) Myriopholis. All members of this genus (previously placed in the genus Leptotyphlops) are recommended for taxonomic study.
- 2) Eirenis coronnella fenneli.
- 3) Atractaspis. Both species occurring in the region require intensive taxonomic work in light of their closest African allies having been revised and reclassified.

4) Echis. This genus is currently under revision and subject to intensive taxonomic scrutiny. A recommendation is made for the continuation of this in light of at least two species that may not have been described. The distributions and habitat requirements of species in Dhofar and adjacent Yemen is largely unknown, and intensifies collection in this area is recommended.

# 6.3. Recommendations for data deficient species not assessed, but confirmed from the Arabian Peninsula.

Snakes extant within the Arabian Peninsula and adjacent waters, but represented by insufficient data to make a conclusive assessment, were given individual recommendations, although in most cases general blanket recommendations apply to all concerned. The following is a list of these snakes, with specific recommendation appended to each:

### 6.3.1. Yemen Thread snake Myriopholis yemenicus

Intensified sampling of the genus *Myriopholis* throughout Yemen is recommended to ascertain the exact area of occurrence of this species, and its taxonomic relationship with other members of the genus. This taxa lacks specific locality data.

### 6.3.2. Aden black-headed snake Rhynchocalamus arabicus

Further sampling is required within the vicinity of Aden, Yemen, to ascertain the area of occurrence of this species. Presently it is only known from the type specimen.

### 6.3.3. Sea snakes, including the following species:

Stoke's sea snake Astrotia stokesii,

Beaked sea snake Enhydrina schistosa

Annulated sea snake Hydrophis cyanocinctus

Arabian Gulf sea snake Hydrophis lapemoides

Ornate sea snake Hydrophis ornatus ornatus

Yellow sea snake Hydrophis spiralis spiralis

Short sea snake Lapemis curtus

Small-headed sea snake Microcephalophis gracilis

Pelagic sea snake Pelamis platura

Viperine sea snake Preascutata viperina

A general recommendation is made for sea snakes throughout Arabian waters for further field research. Information is required for habitat requirements, life-cycles, population dynamics, distributions and population densities, migration and ultimately threats for Arabian *Hydrophiidae* in general and for specific taxa.

### 6.4. Recommendations for threats

### 6.4.1. Field surveys in areas perceived to be under threat.

It is recommended that formal environmental impact surveys be implemented in areas where environmental threats are perceived to occur, in order to ascertain the exact nature and extent of the perceived threat.

### 6.4.2. Environmental impact assessment.

It is recommended that environmental impact assessments (EIA's) be carried out prior to any form of human development or proposed activity within the region. This is a process whereby the level of threat to the environment or particular taxa can be predicted, so that measures can be taken to prevent excessive harm. This should be mandatory on a government or municipal level and make use of NGO's.

### 7. Actions

It is premature to report on actions as this still falls under the banner of recommendations. Only one action has been undertaken as a result of this conservation workshop.

Standardised guidelines for the collection, documentation and preservation of reptiles for scientific use have been prepared (see Appendix 2).

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### **APPENDIX 1**

### Taxon Data Sheets & Distribution Maps

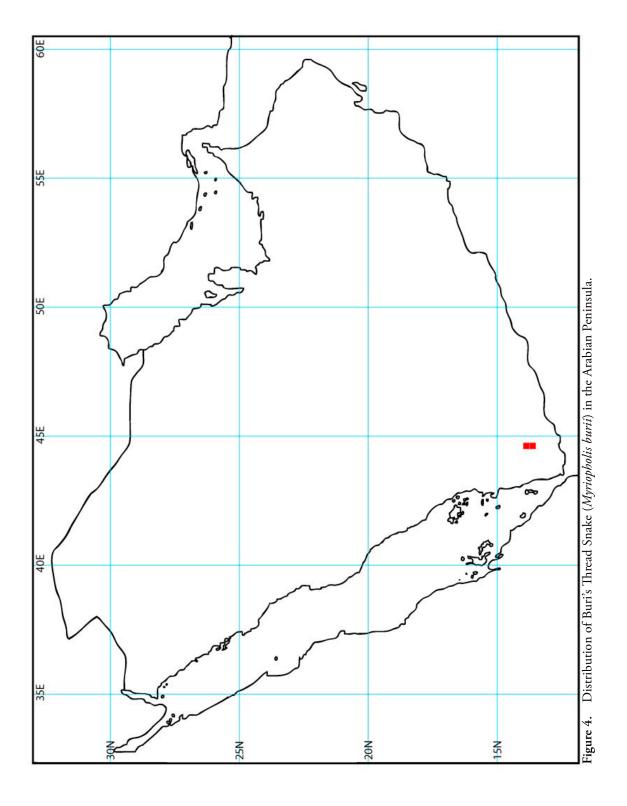
## <u>Conservation Workshop for the Fauna of Arabia</u> <u>Taxon Data Sheet</u>

Working Group: Snakes	Date: 3-5 February 2008
1. Taxonomy	
1A. Scientific Name (Genus, species & subspecies): Myriop	holis burii
Authority: (Boulenger)	<b>Date:</b> 1905
1B. Synonyms (with authority & date):	
1C. Common Name(s) with language/region: Buri's thread snake	
2. Distribution	
<b>2A. Historical Distribution</b> (last 100 years): NNE of Aden, Yemen	
<b>2B. Current Distribution</b> (illustrate on map): See 2A	
2C. Habitat of the taxon (ecosystem level): SW Arabian foothills: Savannah	
2D. Habitat specificity (elevation, etc.): Less than 100m Above sea level- mostly agricultural l	and
2E. Migration: Yes No Unknown	
If Yes, describe:	
3. Number of Populations & Subpopulations in wh	ich the Taxon is distributed:
Location of each:	Approx. Area Occupied: Approx. No. of Individuals:
1	25km2
4. Population Trends	
4A. Is the Population: () Increasing () Decreasing	g ○Stable ● Unknown
4B. If declining, what has been the rate of decline?	
Over how many years has the population declir	
4C. If stable or unknown, do you predict a future de	cline in the population size?  • Yes  No
If Yes, please specify rate and factors e.g. habita	
5. Habitat Status	
5A. Is the habitat distribution: Continuous C	Fragmented • Unknown
5B. Is there any change in the range of the habitat v If Yes, is it: O Decreasing in Area In	where the Taxon occurs?  Yes  No  Unknown creasing in Area
5C. If decreasing what has been the decline? Over how many years has this decline occured	

If Yes, what do you predict the Over how many years do you	nat decline	will be?	○ <20% ○ >20% ○ >50% ○	>80%	
5E. State the primary cause of thi	s change:				
5F. Is there any change in the quality:  5G. State the primary cause of th	O Decli		here the Taxon occurs? Yes I here the Taxon occurs?	No ● Unk	known
6. Threats					
Pollution Urban Development Road Kills Damming War Recreational activities Hunting (recreation or retail) Harvest for medicine Harvest for food/timber Poisoning Pesticides Persecution Trade of animals/parts Other (please specify):  6B. Would these threats result in Comment:	Present	Future	Disease Hybridization Decline in prey species Loss of habitat Genetic problems Grazing Habitat fragmentation Predation Interspecific competition Livestock competition (food, etc.) Livestock conflicts (retaliation kills) Introduced species (non-livestock) Nutritional disorders	Present	Future
7. Trade 7A. Is the Taxon in trade? Yes	s <b>( No</b>	○ Unk			
If Yes, is it: Cocal C  7B. Parts in trade: Skin Fur Meat Product  Comments/Other threats (ple	ts 🗌	l	ternational Commercial  Horn Bones  al Taxidermy Organs	☐ Gland	ds

8. Data Qualit	ty				
8A. Are the	estimates you have su	pplied based on:			
☐ Cen	sus or monitoring	General field studies		rmal field studies	∠ Literature
Hea	rsay/popular belief	☐ Museum studies/records	Ind	irect information f	rom trade, etc.
9. Studies (fie	ld) conducted over t	he last 10 years (indicate the yea	ar of study r	not the year of publica	ation):
Researc	chers	Location	Year	Topic	
10. Conservat	tion Status			_	
10A. IUCN R	ed List Category: G	lobal: Not listed	Re	gional: Not listed	
10B. Nationa Not listed	al Red Data Book:				
10C. Worksh	nop Assessment of Reg	gional Red List Category: Vulne	erable		
10D. CITES:	Not listed				
<b>10E. Nationa</b> Not listed	al Wildife Legislation:				
10F. Other L	egislation (please specify	·):			
10G. List exi	_	within the Taxon's range:		Country	Size (km²)
10H. Recom Area	mended Protected Are	eas for the Taxon:		Country	C: (I2)
Alea				Country	Size (km²)
	re any Regional Consei lease list them:	rvation/Protection Action Plans	s: O Yes	5 <b>(•</b> No	
11. Supportin	g Research				
11A. Is resea	arch recommended?	• Yes No			
If Yes, w	hat type of research w	ould you recommend?			
⊠ Surv	veys 🗌 Geneti		∠ Life	History P	ublic Awareness
☐ Trac	de Monito	oring Reintroduction	⊠ Hur	nan Impact	
☐ Oth	er (please specify):				
12. Managem	ent				
12A. What m	nanagement is recomn	nended for the Taxon?			
	management	☐ Wild population manage	gement	Captive bre	eding
	_	☐ Translocation	-	Sustainable	_
Public A	Awareness	<ul><li>Limiting Factor Manag</li></ul>	ement	Genome Re	esearch Banking
Law Enf	orcement	☐ Work in Local Commur	nities	Address Po	licy Makers
Other (p	please specify):				

13. Captive Breeding					
13A. Is captive breeding recommended fo	r the taxon: Yes	<ul><li>No</li></ul>			
13B. If captive breeding is recommeded, is	s it for:				
☐ Species recovery ☐ Reintrod	duction Rese	earch		Husbandry	/
	e live genome				
,	Yes No U	nknown			
If Yes, list the facilities:					
Facility	Country	Males	Females	Unknown	Total
13D. Does a coordinated Species Manager	ment Plan exist?			 vn	
If Yes, list the participating institutions	:				
If Not, is a Species Management Plan r	ecommended: \( \text{Yes}	○ No			
If Yes, list the institutions that should p	participate:				
13E. Level of captive breeding recommend	ded:				
Captive breeding program not ned	ccessary 🔲 Initiat	e program	within 3 yea	rs	
☐ Maintain existing program as it is	Intensify existing	program	Decrea	se existing p	orogam
13F. Are the techniques established for ca	otive breeding?				
Techniques are known for this or s	_	echniques	are known fo	or this or sim	nilar taxon
Techniques not known for this or	simialr taxon 🔲 Unkno	wn			
14. Sources/References (complete citation):					
Egan, D. 2007. Snakes of Arabia. A field guide Publishing.	to the Snakes of the Arabia	an Peninsula	and its Shor	es. Motivate	
Gasperetti, J. 1988. Snakes of Arabia. Funa of Sa	audi Arabia 9: 169-450.				
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Schatte, B & Gasparetti, J. Contribution to the h	nerpetofauna of Southwes	tern Arabia	. Fauna of Sai	udi Arabia. V	ol.14
Scortecci, G. 1932. Rettili dello Yemen. Atti dell Milano 71:39-49.	a. Societa Italiana di Scien:	ze Naturali e	e del Museo C	Civico Storia	Naturale di
Van der Kooij, J. 2001. The Herpetofauna of the	e Sultinate of Oman. Part 4	: terrestrial S	Snakes. Podai	rcus	
Broadley, D.G & Wallach, V. 2007. A revision of (Serpentes: Leptotyphlopidae). Zootaxa1408:		in northeast	ern Africa an	d southwest	tern Arabia
4.5 4.1					



Working Group: Snakes	C	Pate: 3-5 February 2008
1. Taxonomy		
1A. Scientific Name (Genus, species & subspecies): Myriopholis n	ursii	
Authority: Anderson	I	<b>Date:</b> 1896
<b>1B. Synonyms</b> (with authority & date): refer Gasparettii FSA VOI 9		
1C. Common Name(s) with language/region: Nurse's thread snake		
2. Distribution		
<b>2A. Historical Distribution</b> (last 100 years): SW Saudi Arabia, western Yemen and eastern Oman, near N	Muscat.	
<b>2B. Current Distribution</b> (illustrate on map): See 2A		
<b>2C.</b> Habitat of the taxon (ecosystem level): Varied: including SW Arabian foothills and savannah, coasta	al plains and agricultural lan	d.
<b>2D. Habitat specificity</b> (elevation, etc.):  Non-specific, found at varying altitudes.		
2E. Migration: Yes No Unknown		
If Yes, describe:		
3. Number of Populations & Subpopulations in which th	e Taxon is distributed:	
Location of each:	Approx. Area Occupied:	Approx. No. of Individuals:
Red Sea watershed and SW Yemen	> 75 000km2	Unk
Eastern Oman near Muscat	25km2	Unk
4. Population Trends		
4A. Is the Population: \(\) Increasing \(\) Decreasing \(\)	Stable • Unknown	
4B. If declining, what has been the rate of decline? ○<20	0% ()>20% ()>50%	○>80%
Over how many years has the population decline occ	ured?	
4C. If stable or unknown, do you predict a future decline i	n the population size?	Yes   No
If Yes, please specify rate and factors e.g. habitat loss,	trade, etc.:	

#### 5. Habitat Status

5A. Is the habitat distribution: 5B. Is there any change in the of the state of the	range of the I ng in Area n the decline this decline c cline in the h	Incre  Incre  Coccured?	ere the Taxon occurs? • Yes  No asing in Area % >20% >50% >80%		known
If Yes, what do you predict				>80%	
Over how many years do y	ou predict tr	ie decline v	viii occur? 10 years.		
<b>5E. State the primary cause of</b> Rapid urban development of O	_	st.			
5F. Is there any change in the o			nere the Taxon occurs?  • Yes	No OUnl	known
5G. State the primary cause of		9	( <b>p</b> . e vg		
Urban development.	tilis change.				
6. Threats					
	Present	Future		Present	Future
Pollution			Disease		
Urban Development	$\boxtimes$	$\boxtimes$	Hybridization		
Road Kills			Decline in prey species		
Damming			Loss of habitat	$\boxtimes$	$\boxtimes$
War			Genetic problems		
Recreational activities			Grazing		
Hunting (recreation or retail)			Habitat fragmentation		$\boxtimes$
Harvest for medicine			Predation		
Harvest for food/timber			Interspecific competition		
Poisoning			Livestock competition (food, etc.)		
Pesticides			Livestock conflicts (retaliation kills)		
Persecution			Introduced species (non-livestock)		
Trade of animals/parts			Nutritional disorders		
Other (please specify):  6B. Would these threats result  Comment:  Urban expansion in range of	-		d) population decline?	o 🔿 Unki	nown
7. Trade					
7A. Is the Taxon in trade? \( \) If Yes, is it: \( \) Local	Yes	○ Unkr	nown ernational Commercial		
7B. Parts in trade:  Skin Fur  Meat Produ	ucts 🔲 l	Hair Live Anima	Horn Bones Taxidermy Organs	☐ Glands	S

3. Data Quality				
8A. Are the estimates you have s	upplied based on:			
Census or monitoring		⊠ Info	ormal field studies	
☐ Hearsay/popular belief		Ind	lirect information	from trade, etc.
9. Studies (field) conducted over	the last 10 years (indicate the yea	r of study	not the year of public	ation):
Researchers	Location	Year	Topic	
-				
10A. IUCN Red List Category:	Global: Not listed	Re	gional: Not listed	
10B. National Red Data Book: Not listed				
10C. Workshop Assessment of Re	egional Red List Category: Near	Threaten	ed	
10D. CITES: Not listed				
<b>10E. National Wildife Legislation</b> Not listed				
10F. Other Legislation (please spec	ify):			
10G. List existing Protected Area Protected Area	s within the Taxon's range:		Country	Size (km²)
10H. Recommended Protected A	reas for the Taxon:			2
Area			Country	Size (km²)
10I. Are there any Regional Cons	overtion (Duoto stion Astion Dlan		s • No	Unknown
If Yes, please list them:	ervation/Frotection Action Flans	s. () ic	3 ( 110	Onknown
11. Supporting Research				
11A. Is research recommended?				
If Yes, what type of research	would you recommend?			
	tics X Taxonomic	Life	History 🔲 I	Public Awareness
☐ Trade ☐ Moni	toring Reintroduction	⊠ Huı	man Impact	
Other (please specify):				
12. Management				
12A. What management is recon	nmended for the Taxon?			
	☐ Wild population mana	gement	Captive b	reeding
☐ Monitoring	☐ Translocation		Sustainak	ole Use
Public Awareness	Limiting Factor Manag	ement	Genome	Research Banking
Law Enforcement	☐ Work in Local Commu	nities	Address F	Policy Makers
Other (please specify):				

13. Captive Breeding					
13A. Is captive breeding recommended for the tax	xon: OYes	No			
13B. If captive breeding is recommeded, is it for:					
Species recovery Reintroduction	Resea	arch		Husbandry	
☐ Education ☐ Preserve live ge	enome				
13C. Do Captive stocks already exist? Yes	No	known			
If Yes, list the facilities:					
Facility	Country	Males	Females	Unknown	Total
13D. Does a coordinated Species Management Pla	an exist?  Yes	● No	O Unknow		
If Yes, list the participating institutions:					
If Not, is a Species Management Plan recomm	nended: \(\cap \text{Yes}\)	<ul><li>No</li></ul>			
If Yes, list the institutions that should participa		<b>O</b> 111			
ii res, iist the institutions that should particip	acc.				
13E. Level of captive breeding recommended:					
Captive breeding program not neccessary	/ Initiate	program	within 3 yea	rs	
Maintain existing program as it is	Intensify existing p	rogram	☐ Decrea	se existing p	rogam
13F. Are the techniques established for captive br	eeding?				
Techniques are known for this or similar t	axon 🔲 Some te	chniques	are known fo	or this or sim	ilar taxon
Techniques not known for this or simialr to	taxon 🔀 Unknow	/n			
14. Sources/References (complete citation):					
Egan, D. 2007. Snakes of Arabia. A field guide to the Sr	nakes of the Arabian	Peninsula	and its Shore	es. Motivate P	ublishing.
Gasperetti, J. 1988. Snakes of Arabia. Fauna of Saudi Ar	rabia 9: 169-450				

### 14

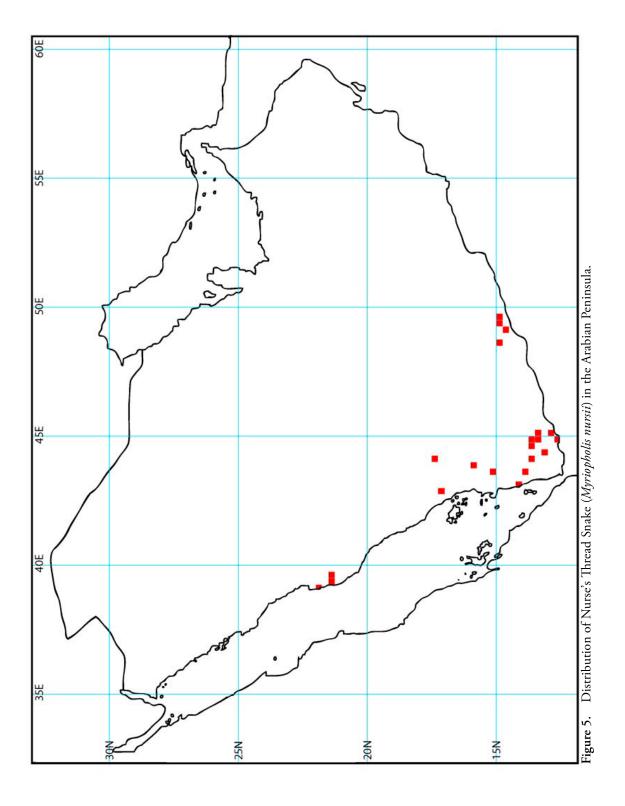
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Van der Kooij, J. 2001. The Herpetofauna of the Sultinate of Oman. Part 4: Terrestrial Snakes. Podarcus

Broadley, D. G & Wallach, V. 2007. A revision of the genus Leptotyphlops in northeastern Africa and southwestern Arabia (Serpentes: Leptotyphlopidae) Zootaxa 1408:1-78

### 15. Compilers



Working Group: Snakes	Date: 3-5 February 2008
1. Taxonomy	
1A. Scientific Name (Genus, species & subspecies):	Myriopholis macrorhynchus
Authority: (Jan)	<b>Date:</b> 1860
1B. Synonyms (with authority & date): see Gasparettii FSA VOI 9	
1C. Common Name(s) with language/region Large-snouted thread snake	:
2. Distribution	
<b>2A. Historical Distribution</b> (last 100 years): West Africa to Western Asia, including wide, s	cattered Arabian distrubtion
<b>2B.</b> Current Distribution (illustrate on map): See 2A	
2C. Habitat of the taxon (ecosystem level): Varied from coastal plain, montain watershed	to inland mountains.
2D. Habitat specificity (elevation, etc.): Fossorial- generalist	
2E. Migration:	known
If Yes, describe:	
3. Number of Populations & Subpopulation	s in which the Taxon is distributed:
Location of each:	Approx. Area Occupied: Approx. No. of Individuals:
	Over 20 000km2
4. Population Trends	
4A. Is the Population: \( \) Increasing \( \) Dec	creasing Stable • Unknown
	ccline? ( <20% ( )>50% ( )>80%
Over how many years has the populatio	
4C. If stable or unknown, do you predict a fu	
If Yes, please specify rate and factors e.g	
5. Habitat Status	
5A. Is the habitat distribution: Continue	ous
5B. Is there any change in the range of the h If Yes, is it: O Decreasing in Area	abitat where the Taxon occurs?  Yes No Unknown Increasing in Area
5C. If decreasing what has been the decline	?
Over how many years has this decline o	ccured?

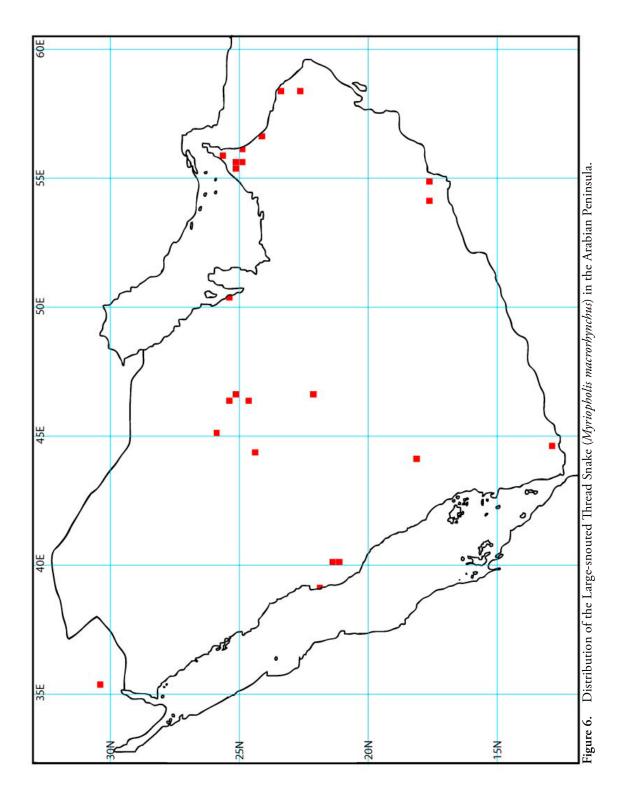
5D. Do you predict a future declin			• Yes • No	\$ <b>&gt; 900</b> %	
If Yes, what do you predict th				>80%	
Over how many years do you		ie decime	will occur? 20		
<b>5E. State the primary cause of thi</b> Urban and agricultural developme	_				
orban and agricultural developme	:110				
5F. Is there any change in the qua	ality of the	habitat wl	here the Taxon occurs?  • Yes	No ( Unk	known
If Yes, is the habitat quality:	•		○ Improving		
5G. State the primary cause of thi	is change:				
Urban and agricultural developme	ent				
6. Threats					
	Present	Future		Present	Future
Pollution			Disease		
Urban Development	$\boxtimes$	$\boxtimes$	Hybridization		
Road Kills			Decline in prey species		
Damming			Loss of habitat	$\boxtimes$	$\boxtimes$
War			Genetic problems		
Recreational activities			Grazing		
Hunting (recreation or retail)			Habitat fragmentation	$\boxtimes$	
Harvest for medicine			Predation		
Harvest for food/timber			Interspecific competition		
Poisoning			Livestock competition (food, etc.)		
Pesticides			Livestock conflicts (retaliation kills)		
Persecution			Introduced species (non-livestock)		
Trade of animals/parts			Nutritional disorders		
Other (please specify):					
6B. Would these threats result in	(perceived	l or inferre	d) population decline? Yes • N	lo 🔘 Unkr	nown
Comment:					
7. Trade					
	- 6 Na	O Hale			
7A. Is the Taxon in trade? Yes	Regiona	O Unk I O Int	ternational Commercial		
7B. Parts in trade:					
Skin Fur		Hair	☐ Horn ☐ Bones	☐ Gland	ls
☐ Meat ☐ Product		Live Anima			.=
Comments/Other threats (plea					
Comments/Other timeats (plea	ase specify):				

8. Data Q	uality				
8A. Are	the estimates you have so	upplied based on:			
	Census or monitoring	General field studies	☐ Info	mal field studie	s 🔀 Literature
	Hearsay/popular belief	Museum studies/records	☐ Indi	rect information	from trade, etc.
9. Studies	(field) conducted over	the last 10 years (indicate the yea	r of study n	ot the vear of publ	ication):
	searchers	Location	Year	Topic	,
	ocurencis .	Location	Tear	Торіс	
	rvation Status			_	
		~1. I. A. A. P. A. I.		. I black	1
	tional Red Data Book:	Global: Not listed	кес	<b>jional:</b> Not listed	
10C. Wo	orkshop Assessment of Re	gional Red List Category: Least	concern		
	TES: Not listed	<b>J</b>			
<b>10E. Nat</b> Not liste	ti <b>onal Wildife Legislation:</b> ed				
10F. Oth	ner Legislation (please speci	fy):			
	t existing Protected Areas tected Area	s within the Taxon's range:		Country	Size (km²)
	tected Area		<u> </u>	Country	Size (KIII )
10H. Re	commended Protected A	reas for the Taxon:			
Are	a			Country	Size (km²)
10L Aro	thoro any Pogional Cons	ervation/Protection Action Plans	- O Yes	● No	Unknown
	es, please list them:	ervation/Frotection Action Flans	s. () ics	( NO	Olikilowii
	23, picase list tricili.				
11. Suppo	orting Research				
11A. ls r	esearch recommended?				
If Ye	es, what type of research	would you recommend?			
	Surveys Gene	tics X Taxonomic	Life	History	Public Awareness
	Trade Moni	toring Reintroduction	Hum	nan Impact	
	Other (please specify):				
12. Manag	gement				
12A. Wh	at management is recom	mended for the Taxon?			
	pitat management	Wild population manag	gement	☐ Captive b	reeding
	nitoring	☐ Translocation	,	☐ Sustainal	_
_	olic Awareness	Limiting Factor Manage	ement		Research Banking
	/ Enforcement	Work in Local Commun			Policy Makers
	er (please specify):				
		n populations to ascertain status a	accurataly		
i ul	uner taxoriorriic researcif Ol	i populationis to ascertain status a	iccuratery		

13. Captive Breeding					
13A. Is captive breeding recommended for the tax	on: OYes	<ul><li>No</li></ul>			
13B. If captive breeding is recommeded , is it for:					
☐ Species recovery ☐ Reintroduction	☐ Resea	arch		Husbandry	,
☐ Education ☐ Preserve live ge	nome				
13C. Do Captive stocks already exist? Yes	No	known			
If Yes, list the facilities:					
Facility	Country	Males	Females	Unknown	Total
		_			
13D. Does a coordinated Species Management Pla	an exist?  Yes	<ul><li>No</li></ul>	Unknow	/n	
If Yes, list the participating institutions:					
If Not, is a Species Management Plan recomm	ended: \( \) Yes	<ul><li>No</li></ul>			
If Yes, list the institutions that should participa	ate:				
13E. Level of captive breeding recommended:					
Captive breeding program not neccessary	☐ Initiate	program	within 3 yea	rs	
	ntensify existing p	rogram	Decrea	se existing p	orogam
13F. Are the techniques established for captive bro	eeding?				
Techniques are known for this or similar to	axon 🔲 Some te	chniques	are known fo	or this or sim	ilar taxon
Techniques not known for this or simialr t	axon 🔀 Unknow	/n			
14. Sources/References (complete citation):					
Egan, D. 2007. Snakes of Arabia. A field guide to the Sn	akes of the Arabian	Peninsula	and its Shore	s. Motivate l	Publishina.
-			a.r.a.r.s 51.161.6		a.ə
Gasperetti, J. 1988. Snakes of Arabia. Fauna of Saudi Ara	abia 9: 169-450				
Schatte, B & Desvolgnes, A. 1999. The Herpetofauna of d'Histoire Naturelle. Geneve.	southern Yemen ar	nd the Soq	otra archipel	ago. Museur	n
Schatte, B & Gasparetti, J.A. Contribution to the herpet	ofauna of Southwes	stern Arabi	a. Fauna of S	audi Arabia.'	Vol 14
Scortecci, G. 1932. Rettili deilo Yemen. Atti deila. Societ Milano 71: 39-49	a Italiana di Scienze	e Naturalie	del Museo Ci	ivico Storia N	laturale di
Van der Kooij, J. 2001. The Herpetofauna of the Sultina	te of Oman. Part 4: 1	Terrestrial S	Snakes. Podar	cus	
Broadley, D. G & Wallach, V. 2007. A revision of the gen (Serpentes: Leptotyphlopidae) Zootaxa 1408:1-78	us Leptotyphlops ir	n northeast	tern Africa an	d southwest	ern Arabia
15. Compilers					

Haithem Al Aamri, Peter Arras, Neelofa Ali, Masaa Al Jumaily, Khaled Al Rasbi and Patrick Paillat

William Branch, Damien Egan, Tony Phelps, Declan O'Donovan, Gavin Nel, Saud A. Al Farraj, Pritpal Soorae, Ehad Eid,



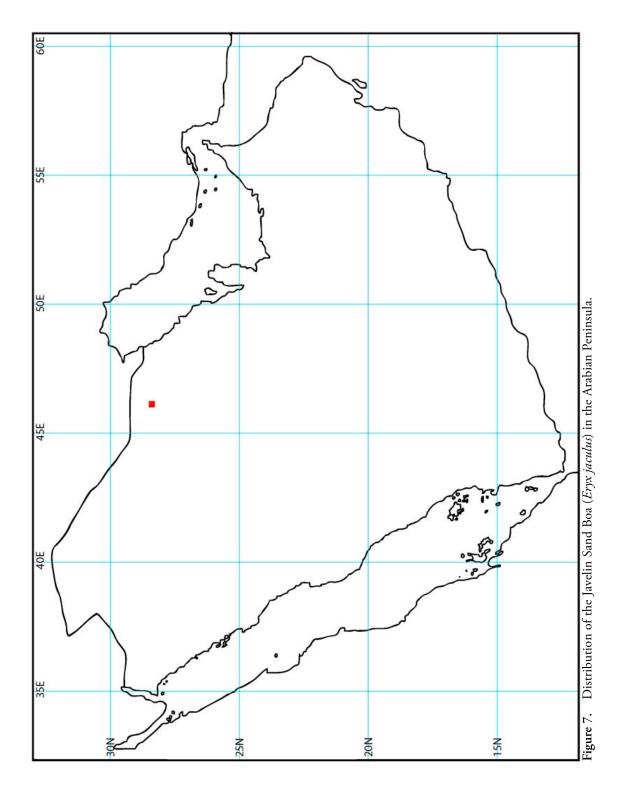
Working Group: Snakes	С	Pate: 3-5 February 2008
1. Taxonomy		
1A. Scientific Name (Genus, species & subspecies): Eryx jaculus		
Authority: (Hasselquist & Linnaeus)	1	<b>Date:</b> 1758
1B. Synonyms (with authority & date):		
1C. Common Name(s) with language/region: Javelin sand boa, Eurasian sand boa. (English)		
2. Distribution		
<b>2A. Historical Distribution</b> (last 100 years): North Africa and Mediterranean east to China. NE Saudi Ara	abia	
<b>2B. Current Distribution</b> (illustrate on map): See 2A.		
2C. Habitat of the taxon (ecosystem level): Arabian Desert and East Sahero-Arabian xeric woodland		
2D. Habitat specificity (elevation, etc.):		
Varied, but generally vegetated areas with loose soil or san	nd	
2E. Migration: Yes • No Unknown		
If Yes, describe:		
3. Number of Populations & Subpopulations in which tl	he Tayon is distributed:	
Location of each:	Approx. Area Occupied:	Approx. No. of Individuals:
1	25km2	2 confirmed specimens
4. Population Trends		
4A. Is the Population:  Increasing Decreasing 4B. If declining, what has been the rate of decline? <2		○>80%
Over how many years has the population decline occ		
4C. If stable or unknown, do you predict a future decline		Yes   No
If Yes, please specify rate and factors e.g. habitat loss	s, trade, etc.:	
5. Habitat Status		
<ul><li>5. Habitat Status</li><li>5A. Is the habitat distribution:</li></ul>	mented ( Unknown	

If Yes, is it: O Decreasing  5C. If decreasing what has been  Over how many years has the	the decline	? (<20	asing in Area %	ó	
5D. Do you predict a future decli If Yes, what do you predict t Over how many years do yo	hat decline	will be?		>80%	
5E. State the primary cause of th	is change:				
5F. Is there any change in the quality:  1f Yes, is the habitat quality:  5G. State the primary cause of the	<ul><li>Decli</li></ul>		ere the Taxon occurs?	No ⊜Unl	known
6. Threats					
Pollution Urban Development Road Kills Damming War Recreational activities Hunting (recreation or retail) Harvest for medicine Harvest for food/timber Poisoning Pesticides Persecution Trade of animals/parts Other (please specify):	Present	Future	Disease Hybridization Decline in prey species Loss of habitat Genetic problems Grazing Habitat fragmentation Predation Interspecific competition Livestock competition (food, etc.) Livestock conflicts (retaliation kills) Introduced species (non-livestock) Nutritional disorders	Present	Future
6B. Would these threats result in Comment:	(perceived	or inferred	l) population decline?	lo 🔿 Unk	nown
7. Trade					
7A. Is the Taxon in trade? • Ye If Yes, is it: C Local	Regional	Unkr (	nown ernational Commercial		
7B. Parts in trade:  Skin Fur  Meat Produc		Hair Live Anima	☐ Horn ☐ Bones  I ☐ Taxidermy ☐ Organs	☐ Gland	ds

Comments/Other threats (please specify):

8. Data Quality				
8A. Are the estimates you have so	upplied based on:			
Census or monitoring	General field studies		l field studies	∠ Literature
Hearsay/popular belief	☐ Museum studies/records	Indirect	information fro	om trade, etc.
9. Studies (field) conducted over	the last 10 years (indicate the yea	r of study not th	ne year of publicat	ion):
Researchers	Location	Year To	ppic	
10. Conservation Status				
10A. IUCN Red List Category: (	Global: Least concern	Region	al: Not listed	
10B. National Red Data Book: Not listed		_		
10C. Workshop Assessment of Re	gional Red List Category: Vulne	erable (regiona	al)	
10D. CITES: Not listed				
<b>10E. National Wildife Legislation:</b> Not listed				
<b>10F. Other Legislation</b> (please speci Least concern- CITES II	fy):			
10G. List existing Protected Areas	s within the Taxon's range:			
Protected Area		Со	ountry	Size (km²)
 10H. Recommended Protected A	reas for the Taxon:			
Area		Со	ountry	Size (km²)
101. Are there any Regional Conso	ervation/Protection Action Plans	: O Yes	● No (	Unknown
11. Supporting Research				
11A. Is research recommended?	• Yes    No			
If Yes, what type of research				
Surveys Gene		∠ Life Hist	ory 🔲 Pu	blic Awareness
Trade Moni	toring Reintroduction		Impact	
Other (please specify):				

12. Management		
12A. What management is recommen	ded for the Taxon?	
<ul> <li>☐ Habitat management</li> <li>☑ Monitoring</li> <li>☐ Public Awareness</li> <li>☐ Law Enforcement</li> <li>☐ Other (please specify):</li> </ul>	<ul> <li>Wild population management</li> <li>□ Translocation</li> <li>☑ Limiting Factor Management</li> <li>□ Work in Local Communities</li> </ul>	<ul><li>☐ Captive breeding</li><li>☐ Sustainable Use</li><li>☐ Genome Research Banking</li><li>☐ Address Policy Makers</li></ul>
13. Captive Breeding		
13A. Is captive breeding recommende	ed for the taxon: Yes No	
13B. If captive breeding is recommede	ed , is it for:	
Species recovery Rei	ntroduction Research	☐ Husbandry
Education Pre	serve live genome	
13C. Do Captive stocks already exist?	Yes No Unknown	
If Yes, list the facilities:		
Facility	Country Male	s Females Unknown Total
13D. Does a coordinated Species Man	agement Plan exist? Yes • No	○ Unknown
If Yes, list the participating institu	tions:	
If Not, is a Species Management P	lan recommended: ( Yes ( No	
If Yes, list the institutions that sho		
.,		
13E. Level of captive breeding recomm  Captive breeding program no  Maintain existing program as	t neccessary	n within 3 years  Decrease existing progam
13F. Are the techniques established for		Decrease existing progam
	s or similar taxon Some technique	s are known for this or similar taxon
Techniques not known for the		
14. Sources/References (complete citation	<del>-</del>	



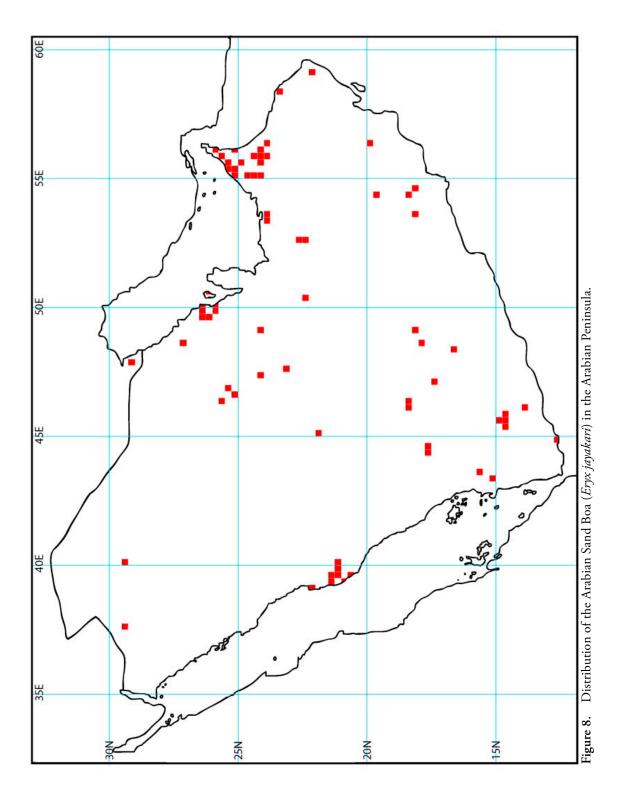
Working Group: Snakes	Date: 3-5 February 2008
1. Taxonomy	
1A. Scientific Name (Genus, species & subspecies): Eryx jayak	ari
Authority: Boulenger	<b>Date:</b> 1888
1B. Synonyms (with authority & date):	
1C. Common Name(s) with language/region: Arabian sand boa (English)	
2. Distribution	
<b>2A. Historical Distribution</b> (last 100 years): Endemic- throughout the Arabian Peninsula in suitable	habitat
<b>2B. Current Distribution</b> (illustrate on map): See 2A	
2C. Habitat of the taxon (ecosystem level): Sand desert	
2D. Habitat specificity (elevation, etc.): All soft sand desert	
2E. Migration: Yes No Unknown	
If Yes, describe:	
3. Number of Populations & Subpopulations in which	the Taxon is distributed:
Location of each:	Approx. Area Occupied: Approx. No. of Individuals:
Across the entire region	19 750 km2
4. Population Trends	
4A. Is the Population:   Increasing   Decreasing	Stable Ounknown
4B. If declining, what has been the rate of decline?	<20% () >20% () >50% () >80%
Over how many years has the population decline	occured?
4C. If stable or unknown, do you predict a future decli	ne in the population size?
If Yes, please specify rate and factors e.g. habitat le	oss, trade, etc.:
5. Habitat Status	
5A. Is the habitat distribution:   • Continuous • Fr	agmented C Unknown
5B. Is there any change in the range of the habitat who	

	If Yes, is it:	the decline	? • <20	asing in Area 1%	ò	
	5D. Do you predict a future decli If Yes, what do you predict the Over how many years do you	hat decline	will be?		>80%	
	<b>5E. State the primary cause of th</b> Urban development	is change:				
	5F. Is there any change in the qu If Yes, is the habitat quality:	-		nere the Taxon occurs? Yes	No OUnk	(nown
	<b>5G. State the primary cause of th</b> Urban sprawl, off road recreational	_	ghways.			
6.	. Threats					
		Present	Future		Present	Future
	Pollution			Disease		
	Urban Development	$\boxtimes$	$\boxtimes$	Hybridization		
	Road Kills			Decline in prey species		
	Damming			Loss of habitat	$\boxtimes$	$\boxtimes$
	War			Genetic problems		
	Recreational activities	$\boxtimes$	$\boxtimes$	Grazing		
	Hunting (recreation or retail)			Habitat fragmentation	$\boxtimes$	$\boxtimes$
	Harvest for medicine			Predation		
	Harvest for food/timber			Interspecific competition		
	Poisoning			Livestock competition (food, etc.)		
	Pesticides			Livestock conflicts (retaliation kills)		
	Persecution			Introduced species (non-livestock)		
	Trade of animals/parts		$\boxtimes$	Nutritional disorders		
	Other (please specify):					
	6B. Would these threats result in Comment:	(perceived	or inferred	d) population decline? ( Yes ( N	lo 🔿 Unkı	nown
7	. Trade					
	7A. Is the Taxon in trade? • Ye If Yes, is it: C Local	es ( No Regional	○ Unkı	nown ernational Commercial		
	7B. Parts in trade:					
	Skin Fur		Hair	☐ Horn ☐ Bones	Gland	łs
	☐ Meat ☐ Produc		Live Anima			.5
	Meat Floadc		LIVE AIIIIII	ii raxideritiy Organs		

Comments/Other threats (please specify):

Data Quality				
8A. Are the estimates you have su	applied based on:			
Census or monitoring	General field studies		rmal field studies	∠ Literature
	☐ Museum studies/records		irect information fr	om trade, etc.
Studies (field) conducted over t	the last 10 years (indicate the year	r of study ı	not the year of publica	tion):
Researchers	Location	Year	Topic	
			_	
. Conservation Status				
10A. IUCN Red List Category: 0	ilobal: Not listed	Re	gional: Not listed	
10B. National Red Data Book: Not listed				
10C. Workshop Assessment of Re	gional Red List Category: Least	concern	(Global)	
10D. CITES: Appendix 2				
<b>10E. National Wildife Legislation:</b> Not listed				
10F. Other Legislation (please specif	iv)*			
Torrotter Legislation (piease speen	<i>,</i> ,,			
10G List ovisting Protostod Aroas	within the Tayon's range			
10G. List existing Protected Areas Protected Area	within the raxon's range.		Country	Size (km²)
	siyah, Al Jalaliyah, Hawtat Bani Mahazat As Said, Uruk Bani Ma'ari as Al Khor, Abu Dhabi Oryx resen		,	
10H. Recommended Protected A	reas for the Taxon:			
Area			Country	Size (km²)
10I. Are there any Regional Conse	ervation/Protection Action Plans	: O Ye	s   No (	Unknown
If Yes, please list them:				
ii res, piease iist them:				
. Supporting Research				
11A. Is research recommended?	○ Yes			
If Yes, what type of research v	vould you recommend?			
Surveys Genet	cics Taxonomic	Life	History 🔲 Pu	ublic Awareness
☐ Trade ☐ Monit	oring Reintroduction	☐ Hur	nan Impact	
Other (please specify):				

12. Management					
12A. What management is recommen	ded for the Taxon?				
Habitat management	☐ Wild population management	Captive breeding			
Monitoring	Translocation	Sustainable Use			
Public Awareness	Limiting Factor Management	Genome Research Banking			
Law Enforcement	Work in Local Communities	Address Policy Makers			
Other (please specify):					
13. Captive Breeding					
13A. Is captive breeding recommende	d for the taxon: $\bigcirc$ Yes $\bigcirc$ 1	No			
13B. If captive breeding is recommede	0.55				
Species recovery Reir	ntroduction Research	☐ Husbandry			
	serve live genome	,			
13C. Do Captive stocks already exist?		vn			
If Yes, list the facilities:					
Facility	Country 1	Males Females Unknown Total			
BCEAW	UAE	? ? ? ?			
13D. Does a coordinated Species Man	agement Plan exist?   Yes				
If Yes, list the participating institut	-				
If Not, is a Species Management P		No			
If Yes, list the institutions that sho	uld participate:				
425					
13E. Level of captive breeding recomm		anana wikhin 2 wasan			
Captive breeding program no		gram within 3 years			
<ul><li>Maintain existing program as</li><li>13F. Are the techniques established for</li></ul>		am Decrease existing progam			
Techniques are known for this		iques are known for this or similar taxon			
Techniques not known for this	<del>_</del>	iques are known for this or similar taxon			
recliniques not known for this	on similar taxon onknown				
14. Sources/References (complete citation	n):				
Egan, D. 2007. Snakes of Arabia. A field gu Publishing.	iide to the Snakes of the Arabian Per	ninsula and its Shores. Motivate			
Gasperetti, J. 1988. Snakes of Arabia. Faun	a of Saudi Arabia 9: 169-450				



Working Group: Snakes	l	Date: 3-5 February 2008
1. Taxonomy		
1A. Scientific Name (Genus, species & subspecies): Platyceps	ventromaculatus	
Authority: (Gray)		<b>Date:</b> 1834
1B. Synonyms (with authority & date):		
1C. Common Name(s) with language/region: Hardwick's rat snake		
2. Distribution		
<b>2A. Historical Distribution</b> (last 100 years): Eastern Arabia to Pakistan, Iran and offshore islands		
<b>2B. Current Distribution</b> (illustrate on map): See 2A		
2C. Habitat of the taxon (ecosystem level): Varied: Arabian desert and east Sahero-Arabian xeric wo	oodlands. Persian Gulf desert a	nd semi desert
2D. Habitat specificity (elevation, etc.):  Generally close to sea level in plains, marshland and isla	and habitats	
2E. Migration: Yes • No Unknown		
If Yes, describe:		
3. Number of Populations & Subpopulations in whic	h the Taxon is distributed:	
Location of each:	Approx. Area Occupied:	Approx. No. of Individuals:
Mainland Arabia- Eastern Emirates and Oman	300km2	Unknown
Bahrain	25km2	Unknown
4. Population Trends		
4A. Is the Population: \(\begin{align*}\) Increasing \(\begin{align*}\) Decreasing	Stable	
4B. If declining, what has been the rate of decline?		○>80%
Over how many years has the population decline		
4C. If stable or unknown, do you predict a future decli		Yes • No
If Yes, please specify rate and factors e.g. habitat l		) 144 O 115
5. Habitat Status		
5A. Is the habitat distribution: Continuous © F	ragmented ( Unknown	
5B. Is there any change in the range of the habitat wh	nere the Taxon occurs?	es O No O Unknown
If Yes, is it: • Decreasing in Area	easing in Area	

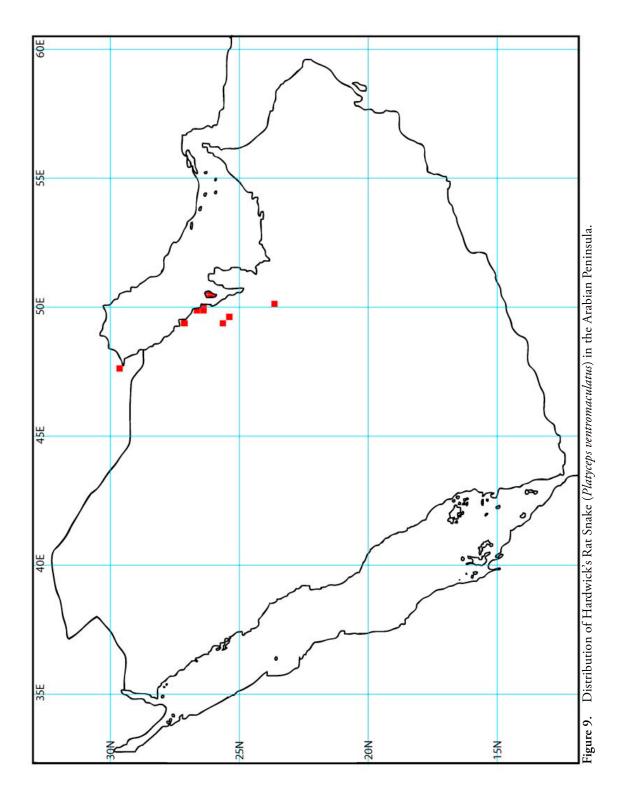
5C. If decreasing what has bee Over how many years has			%		
5D. Do you predict a future de If Yes, what do you predict Over how many years do y	t that decline	will be?		>80%	
<b>5E. State the primary cause of</b> Urban sprawl in both populatio	_				
, ,				No ( Unl	known
If Yes, is the habitat quality	y: 🜘 Decli	ining	☐ Improving		
5G. State the primary cause of Salination of freshwater marshe	_	ıtilization of	ground water.		
6. Threats					
	Present	Future		Present	Future
Pollution	$\boxtimes$	$\boxtimes$	Disease		
Urban Development	$\boxtimes$	$\boxtimes$	Hybridization		
Road Kills			Decline in prey species		
Damming			Loss of habitat	$\boxtimes$	$\boxtimes$
War			Genetic problems		
Recreational activities			Grazing		
Hunting (recreation or retail)			Habitat fragmentation		
Harvest for medicine			Predation		
Harvest for food/timber			Interspecific competition		
Poisoning			Livestock competition (food, etc.)		
Pesticides			Livestock conflicts (retaliation kills)		
Persecution			Introduced species (non-livestock)		
Trade of animals/parts			Nutritional disorders		
Other (please specify):					
6B. Would these threats result Comment:	in (perceived	or inferred	l) population decline? ( Yes ( No	o 🔵 Unki	nown
7. Trade					
7A. Is the Taxon in trade?  If Yes, is it: Local	Yes	○ Unkr	nown ernational Commercial		
7B. Parts in trade:					
Skin Fur		Hair Live Animal	☐ Horn ☐ Bones ☐ Taxidermy ☐ Organs	Glands	;
Comments/Other threats (		-			

8. Data Quality				
8A. Are the estimates you have sup	plied based on:			
	General field studies		mal field studies	∠ Literature
Hearsay/popular belief	Museum studies/records	☐ Indir	ect information f	rom trade, etc.
9. Studies (field) conducted over the	e last 10 years (indicate the yea	r of study no	ot the year of publica	ation):
Researchers	Location	Year	Topic	
P. Soorae	Abu Dhabi Islands			
10. Conservation Status				
10A. IUCN Red List Category: Gl	obal: Not listed	Reg	ional: Not listed	
<b>10B. National Red Data Book:</b> Not listed				
10C. Workshop Assessment of Reg	ional Red List Category: Least	concern		
10D. CITES: Not listed				
<b>10E. National Wildife Legislation:</b> Not listed				
10F. Other Legislation (please specify)	:			
10G. List existing Protected Areas v Protected Area	vithin the Taxon's range:		Country	Size (km²)
- Totected Area			Country	Size (KIII )
10H. Recommended Protected Are	as for the Taxon:			2
Area			Country	Size (km²)
10l. Are there any Regional Conser	vation/Protection Action Plans	: O Yes	<ul><li>No</li></ul>	Unknown
If Yes, please list them:				
11. Supporting Research				
11A. Is research recommended?				
If Yes, what type of research w	ould you recommend?			
Surveys Genetic	Taxonomic	Life H	History P	ublic Awareness
Trade Monito	ring Reintroduction	Hum	an Impact	
Other (please specify):				
12. Management				
12A. What management is recomn	nended for the Tayon?			
		gome::t	Cambine la	rooding
Habitat management	<ul><li>☐ Wild population mana</li><li>☐ Translocation</li></ul>	gement		_
<ul><li>☐ Monitoring</li><li>☐ Public Awareness</li></ul>		ıemon <del>t</del>		
Law Enforcement	☐ Limiting Factor Manag ☐ Work in Local Commu		_	Research Banking olicy Makers
Other (please specify):	☐ WOLK III FOCGI COIIIIII	inues	Addless P	oney makers

13. Captive Breeding					
13A. Is captive breeding recommended for the t	axon: • Yes	○ No			
13B. If captive breeding is recommeded, is it for	:				
☐ Species recovery ☐ Reintroduction ☐ Research ☐ Husbandry					
⊠ Education	genome				
13C. Do Captive stocks already exist? • Yes	○ No ○ Unk	nown			
If Yes, list the facilities:					
Facility	Country	Males	Females	Unknown	Total
BCEAW	UAE	3	2		5
13D. Does a coordinated Species Management F	Plan exist?  Yes	No	O Unknov	vn	
If Yes, list the participating institutions:					
If Not, is a Species Management Plan recom If Yes, list the institutions that should partici		No			
13E. Level of captive breeding recommended:			1111 2		
Captive breeding program not neccessa	,	. 3	within 3 yea		ro dom
Maintain existing program as it is  13F. Are the techniques established for captive I	Intensify existing pr	ogram	Decrea	se existing p	rogam
Techniques are known for this or similar	_	chniques a	are known fo	or this or sim	ilar tayon
Techniques not known for this or similar	_	•	ire known k	or tills or silli	nar taxorr
	Taxon D online				
14. Sources/References (complete citation):					
Egan, D. 2007. Snakes of Arabia. A field guide to the Publishing.	Snakes of the Arabian	Peninsula	and its Shor	es. Motivate	
Gasperetti, J. 1988. Snakes of Arabia. Fauna of Saudi	Arabia 9:169-450				

William Branch, Damien Egan, Tony Phelps, Declan O'Donovan, Gavin Nel, Saud A. Al Farraj, Pritpal Soorae, Ehad Eid, Haithem Al Aamri, Peter Arras, Neelofa Ali, Masaa Al Jumaily, Khaled Al Rasbi and Patrick Paillat

Van der Kooij, J. 2001. The Herpetofauna of the Sultinate of Oman. Part 4: Terrestrial Snakes. Podarcus.

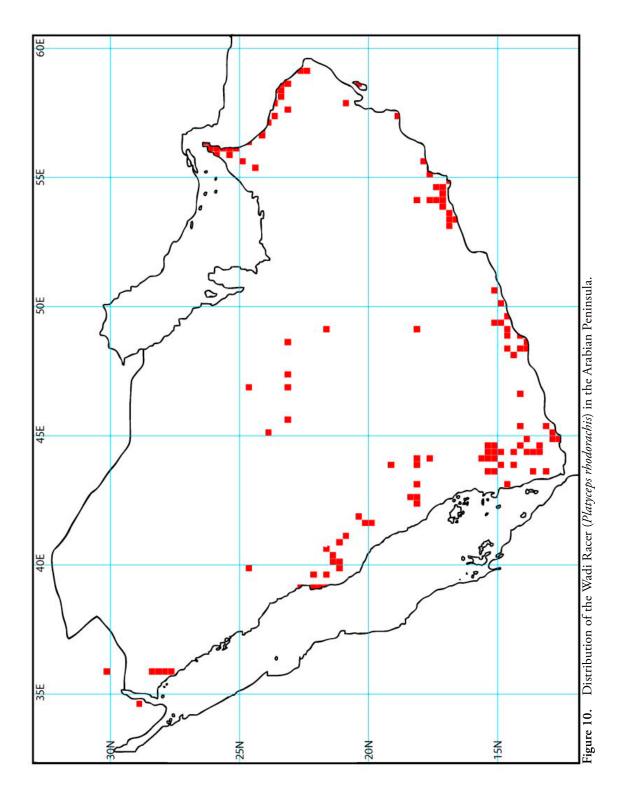


Working Group: Snakes	Date: 3-5 February 2008
1. Taxonomy	
1A. Scientific Name (Genus, species & subspecies): Platyo	ceps rhodorachis
Authority: (Jan)	<b>Date:</b> 1865
1B. Synonyms (with authority & date):	
1C. Common Name(s) with language/region: Wadi racer, Jan's cliff racer	
2. Distribution	
<b>2A. Historical Distribution</b> (last 100 years): From Libya to Turmenistan with distribution throug	hout the Arabian Peninsula
<b>2B. Current Distribution</b> (illustrate on map): See 2A	
2C. Habitat of the taxon (ecosystem level): Varied	
<b>2D. Habitat specificity</b> (elevation, etc.): Rocky areas at all altitudes as well as coastal plains a	nd agricultural land
2E. Migration: Yes • No Unknown	
If Yes, describe:	
.,	
3. Number of Populations & Subpopulations in w	hich the Taxon is distributed:
Location of each:	Approx. Area Occupied: Approx. No. of Individuals:
Throughout Arabian Peninsula in suitable habit	at
4. Population Trends	
4A. Is the Population:  Increasing Decreasing	ng
4B. If declining, what has been the rate of decline?	<20% <20% <>50% <>80%
Over how many years has the population decl	ine occured?
4C. If stable or unknown, do you predict a future d	ecline in the population size? Yes • No
If Yes, please specify rate and factors e.g. habit	at loss, trade, etc.:
5. Habitat Status	
5A. Is the habitat distribution:   • Continuous	Fragmented Ounknown
5B. Is there any change in the range of the habitat	
5C. If decreasing what has been the decline? •	-
Over how many years has this decline occured	

5D. Do you predict a future decl	ine in the h	abitiat?	● Yes ○ No		
If Yes, what do you predict t	hat decline	will be?	<b>●</b> <20% ○ >20% ○ >50% ○	>80%	
Over how many years do yo	u predict th	ne decline	will occur? 10		
<b>5E. State the primary cause of th</b> Urban development, stone quarr	_				
If Yes, is the habitat quality:	<ul><li>Decli</li></ul>		here the Taxon occurs? • Yes • Improving	No 🔿 Unk	known
<b>5G. State the primary cause of tl</b> Quarrying, Urban development	nis change:				
6. Threats					
	Present	Future		Present	Future
Pollution			Disease		
Urban Development	$\boxtimes$	$\boxtimes$	Hybridization		
Road Kills			Decline in prey species		
Damming			Loss of habitat	$\boxtimes$	$\boxtimes$
War			Genetic problems		
Recreational activities			Grazing		
Hunting (recreation or retail)			Habitat fragmentation		
Harvest for medicine			Predation		
Harvest for food/timber			Interspecific competition		
Poisoning			Livestock competition (food, etc.)		
Pesticides			Livestock conflicts (retaliation kills)		
Persecution			Introduced species (non-livestock)		
Trade of animals/parts			Nutritional disorders		
Other (please specify):					
6B. Would these threats result in Comment:	ı (perceived	l or inferre	d) population decline? Yes • N	o ( Unkı	nown
7. Trade					
7A. Is the Taxon in trade? \( \text{ Yo}\)  If Yes, is it: \( \text{ Local}\)	es <b>©</b> No C Regiona	◯ Unk I ◯ Int	nown ternational Commercial		
7B. Parts in trade:					
Skin Fur		Hair	☐ Horn ☐ Bones	☐ Gland	ds
☐ Meat ☐ Produc		Live Anima			
Comments/Other threats (pl					
comments/Other timeats (pr	cuse specify):				

8. Data Quality					
8A. Are the estimates you have sup	plied based on:				
Census or monitoring			ormal field studies		
Hearsay/popular belief	Museum studies/records	<del></del>			
9. Studies (field) conducted over th	e last 10 years (indicate the yea	r of study i	not the year of public	cation):	
Researchers	Location	Year	Topic		
10. Conservation Status					
10A. IUCN Red List Category: Glo	<b>bbal:</b> Not listed	Re	gional: Not listed		
10B. National Red Data Book: Not listed	wan wat isted	· · ·	gionali Heristea		
10C. Workshop Assessment of Regi	onal Red List Category: Least	concern			
10D. CITES: Not listed					
<b>10E. National Wildife Legislation:</b> Not listed					
10F. Other Legislation (please specify):					
10G. List existing Protected Areas w	vithin the Taxon's range:				
Protected Area	ge.		Country	Size (km²)	
Presumed to occur in all protect	ed areas within the region				
10H. Recommended Protected Are	as for the Taxon:			-	
Area			Country	Size (km²)	
10I. Are there any Regional Conserv	vation/Protection Action Plans	s: O Ye	s   No	Unknown	
If Yes, please list them:					
11. Supporting Research					
	● Yes ○ No				
If Yes, what type of research wo	•		_		
Surveys Genetic			,	Public Awareness	
☐ Trade ☐ Monito	ring Reintroduction	Hur	man Impact		
Other (please specify):					
12. Management					
12A. What management is recomm	ended for the Taxon?				
☐ Habitat management	☐ Wild population mana	igement	☐ Captive b	preeding	
Monitoring	☐ Translocation	J=e	☐ Sustainal	_	
☐ Public Awareness	Limiting Factor Management Genome Research Ba				
Law Enforcement	☐ Work in Local Commu		_	Policy Makers	
Other (please specify):		<del>-</del>		-,	

13. Captive Breeding					
13A. Is captive breeding recommended for the taxon:	<ul><li>Yes</li></ul>	○ No			
13B. If captive breeding is recommeded, is it for:					
☐ Species recovery ☐ Reintroduction	Resea	rch	☐ Husbandry		
⊠ Education	ne				
, ,	No Ounk	known			
If Yes, list the facilities:					
Facility	Country	Males	Females	Unknown	Total
BCEAW	UAE	?	?	?	?
13D. Does a coordinated Species Management Plan e If Yes, list the participating institutions:	xist?	● No	○ Unknov	vn	
If Not, is a Species Management Plan recommend  If Yes, list the institutions that should participate:	led: \( \text{Yes}	<ul><li>No</li></ul>			
13E. Level of captive breeding recommended:  Captive breeding program not neccessary	□ Initiate	program	within 3 yea	rc	
	nsify existing p	-		se existing p	rogam
13F. Are the techniques established for captive breed		- <b>J</b>			3
Techniques are known for this or similar taxon	3	chniques a	ire known fo	or this or sim	ilar taxor
Techniques not known for this or simialr taxo	n 🛚 Unknow	n			
14. Sources/References (complete citation):					
Egan, D. 2007. Snakes of Arabia. A field guide to the Snake Publishing.	es of the Arabian	ı Peninsula	and its sho	res. Motivate	
Gasperetti, J. 1988. Snakes of Arabia. Fauna of Saudi Arabia	9:169-450				
Werner, Y.L. 1991. Notable Herpetofaunal recordss from Tr	ansJordan. Zool	ogy in the	Middle East	Vol.5:37-41	
Van der Kooij, J. 2001. The Herpetofauna of the Sultinate o	f Oman. Part 4: 1	Terrestrial s	nakes. Podai	rcus.	
Schatte, B. & Gasparetti, J.A. Contribution to the herpetofal	una of Southwe	stern Arabi	a. Fauna of S	Saudi Arabia \	Vol.14
Schatte, B & Desvolgnes, A. 1999. The Herpetofauna of so d'Histoire Naturelle. Geneve.	outhern Yemen	and the Sc	qotra archip	oelago. Muse	eum



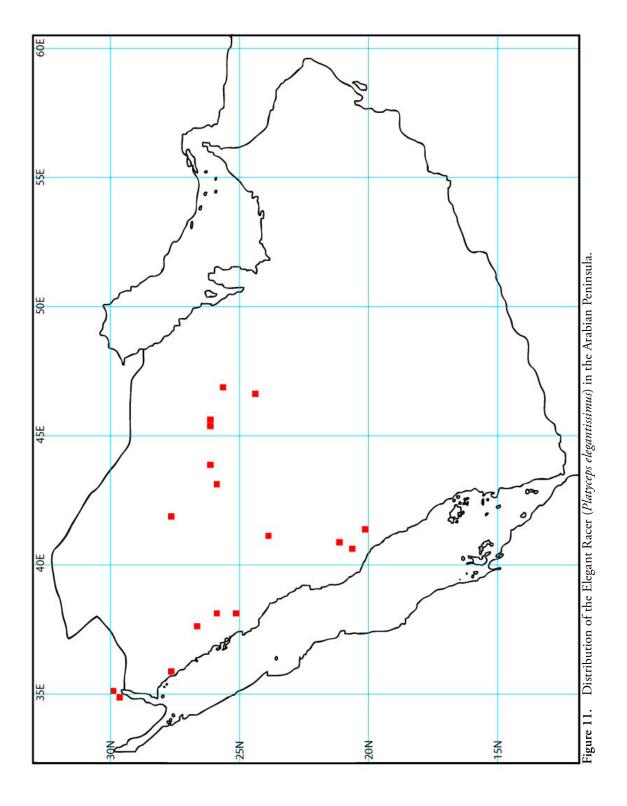
Working Group: Snakes		Date: 3-5 February 2008
1. Taxonomy		
1A. Scientific Name (Genus, species & subspecies): Platyceps ele	egantissimus	
Authority: (Gunther)		<b>Date:</b> 1878
1B. Synonyms (with authority & date):		
1C. Common Name(s) with language/region: Elegant racer		
2. Distribution		
<b>2A. Historical Distribution</b> (last 100 years): Palestine, Jordan and Western Saudi Arabia		
<b>2B.</b> Current Distribution (illustrate on map): See 2A		
<b>2C. Habitat of the taxon</b> (ecosystem level): Varied: Arabian desert and east Sahero-Arabian xeric wood desert. Southwestern Arabian foothills and savannah	dland, Red Sea Nubio-Sinian	tropical desert and semi
2D. Habitat specificity (elevation, etc.): Rocky foothills and plains. No specific altitude		
2E. Migration: Yes • No Unknown		
If Yes, describe:		
3. Number of Populations & Subpopulations in which t	he Taxon is distributed:	
Location of each:	Approx. Area Occupied:	Approx. No. of Individuals:
Western Saudi Arabia	425km2	Unknown
4. Population Trends		
4A. Is the Population: Increasing Decreasing Odecline? < 2  4B. If declining, what has been the rate of decline? < 2  Over how many years has the population decline of the stable or unknown, do you predict a future decline of the year, please specify rate and factors e.g. habitat los	20% >20% >50% ccured?	
5. Habitat Status		
5A. Is the habitat distribution:   Continuous  Frag	gmented ( Unknown	
5B. Is there any change in the range of the habitat where		es   No   Unknown

If Yes, is it: Decreasing  5C. If decreasing what has been  Over how many years has to	n the decline?	? (<20	asing in Area 9%	ı	
5D. Do you predict a future dec If Yes, what do you predict Over how many years do y	that decline	will be?		>80%	
5E. State the primary cause of t	his change:				
5F. Is there any change in the of If Yes, is the habitat quality 5G. State the primary cause of the state of the primary cause of the state of the primary cause of the state	: O Decli		nere the Taxon occurs? Yes O	No ⊚Unk	known
6. Threats					
Pollution Urban Development Road Kills Damming War Recreational activities Hunting (recreation or retail) Harvest for medicine Harvest for food/timber Poisoning Pesticides Persecution Trade of animals/parts Other (please specify):	Present	Future	Disease Hybridization Decline in prey species Loss of habitat Genetic problems Grazing Habitat fragmentation Predation Interspecific competition Livestock competition (food, etc.) Livestock conflicts (retaliation kills) Introduced species (non-livestock) Nutritional disorders	Present	Future
6B. Would these threats result in Comment:	n (perceived	or inferred	d) population decline? O Yes • N	o 🔿 Unki	nown
7. Trade					
7A. Is the Taxon in trade? \( \) \( \) \( \) \( \) Local	'es	○ Unkr	nown ernational ( ) Commercial		
7B. Parts in trade:  Skin Fur  Meat Produ		Hair Live Anima	☐ Horn ☐ Bones	☐ Gland	ls

Comments/Other threats (please specify):

. Data Quality				
8A. Are the estimates you have s	upplied based on:			
Census or monitoring	☐ General field studies		rmal field studies	∠ Literature
Hearsay/popular belief	☐ Museum studies/records	☐ Ind	irect information f	rom trade, etc.
. Studies (field) conducted over	the last 10 years (indicate the yea	r of study i	not the year of public	ation):
Researchers	Location	Year	Topic	
0. Conservation Status				
10A. IUCN Red List Category: 0	Global: Not listed	Re	gional: Not listed	
10B. National Red Data Book: Not listed				
10C. Workshop Assessment of Re	egional Red List Category: Least	concern		
10D. CITES: Not listed				
<b>10E. National Wildife Legislation:</b> Not listed				
10F. Other Legislation (please speci	fy):			
10G. List existing Protected Areas	s within the Taxon's range:			
Protected Area			Country	Size (km²)
At Taysiyah, Al Jandaliyah. Pos Harrat al Harrah (KSA)	ssibly Al Khufah, Al Tubayq and			
10H. Recommended Protected A	reas for the Taxon:			
Area			Country	Size (km²)
10l. Are there any Regional Cons	ervation/Protection Action Plans	s: () Ye	s   No	Unknown
If Yes, please list them:				
1. Supporting Research				
11A. Is research recommended?	• Yes No			
If Yes, what type of research	would you recommend?			
Surveys Gene	tics X Taxonomic	∠ife	History P	ublic Awareness
☐ Trade ☐ Moni	toring Reintroduction	☐ Hur	man Impact	
Other (please specify):				

12. Management		
12A. What management is recomm	nended for the Taxon?	
Habitat management	☐ Wild population management	Captive breeding
Monitoring	Translocation	Sustainable Use
☐ Public Awareness ☐ Law Enforcement	☐ Limiting Factor Management ☐ Work in Local Communities	☐ Genome Research Banking ☐ Address Policy Makers
Other (please specify):	work in Local Communities	Address Policy Makers
Garlet (pieuse specify).		
13. Captive Breeding		
13A. Is captive breeding recommer	nded for the taxon: Yes • No	
13B. If captive breeding is recommo	eded , is it for:	
Species recovery F	Reintroduction Research	Husbandry
☐ Education ☐ F	Preserve live genome	
13C. Do Captive stocks already exis	t? O Yes O No O Unknown	
If Yes, list the facilities:		
Facility	Country Male	s Females Unknown Total
If Yes, list the participating instill If Not, is a Species Management If Yes, list the institutions that some standard in the second in the s	t Plan recommended:  Yes  No hould participate:  mmended: not neccessary  Initiate program it is Intensify existing program d for captive breeding?	m within 3 years  Decrease existing progam s are known for this or similar taxon
14. Sources/References (complete cita	tion):	
Egan, D. 2007. Snakes of Arabia. A field	guide to the Snakes of the Arabian Peninsu	la and its Shores. Motivate Publishing.
Gasperetti, J. 1988. Snakes of Arabia. Fa	una of Saudi Arabia 9:169-450	
Werner, Y.L. 1991. Notable Herpetofaur	nal Records from TransJordan. Zoology in th	e Middle East. Vol.5:37-41
4.5. "		



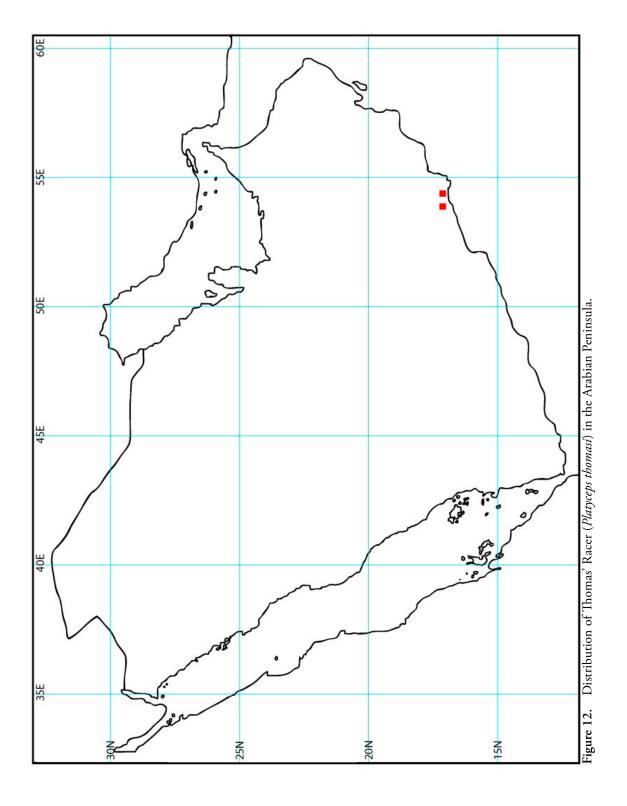
Working Group: Snakes		Date: 3-5 February 2008
1. Taxonomy		
1A. Scientific Name (Genus, species & subspecies): Platy	ceps thomasi	
Authority: (Parker)		<b>Date:</b> 1931
1B. Synonyms (with authority & date):		
1C. Common Name(s) with language/region: Thoma's racer		
2. Distribution		
<b>2A.</b> Historical Distribution (last 100 years): Dhofar, Oman and adjacent Yemen border		
<b>2B. Current Distribution</b> (illustrate on map): See 2A		
<b>2C.</b> Habitat of the taxon (ecosystem level): Oman monsoon bet		
2D. Habitat specificity (elevation, etc.):  Montain slopes, plateau and coastal plains		
2E. Migration: Yes • No Unknown	n	
If Yes, describe:		
ii res, describe.		
3. Number of Populations & Subpopulations in w	hich the Taxon is distributed:	
Location of each:	Approx. Area Occupied	: Approx. No. of Individuals:
Dhofar and Yemen border	50km2	Unknown
4. Population Trends		
4A. Is the Population: Olncreasing Opecreasing	ng ( Stable	
4B. If declining, what has been the rate of decline?	°	○>80%
Over how many years has the population dec	line occured?	
4C. If stable or unknown, do you predict a future of	lecline in the population size?	
If Yes, please specify rate and factors e.g. habi	tat loss, trade, etc.:	
5. Habitat Status		
5A. Is the habitat distribution:   • Continuous (	Fragmented ( Unknown	
5B. Is there any change in the range of the habitat		es No Unknown
5C. If decreasing what has been the decline? •	3	○ >80%
Over how many years has this decline occure		

5D. Do you predict a future declir If Yes, what do you predict th Over how many years do you	at decline	will be?		>80%	
<b>5E. State the primary cause of thi</b> Urban development of coastal plai	_	ar			
5F. Is there any change in the quality:  If Yes, is the habitat quality:  5G. State the primary cause of thi  Urban development in Dhofar coa	<ul><li>Decl</li><li>s change:</li></ul>		ere the Taxon occurs? Yes C	No ( Unk	known
6. Threats					
Pollution Urban Development Road Kills Damming War Recreational activities Hunting (recreation or retail) Harvest for medicine Harvest for food/timber Poisoning Pesticides Persecution Trade of animals/parts Other (please specify): Possible decline as result of global	Present	Future	Disease Hybridization Decline in prey species Loss of habitat Genetic problems Grazing Habitat fragmentation Predation Interspecific competition Livestock competition (food, etc.) Livestock conflicts (retaliation kills) Introduced species (non-livestock) Nutritional disorders	Present	Future
6B. Would these threats result in Comment:	(perceivec	l or inferred	l) population decline?    Yes    N	lo () Unkr	nown
7. Trade  7A. Is the Taxon in trade?  Yes	s ( No	⊜ Unkr	nown		
	Regiona	$\sim$	ernational Commercial  Horn Bones	☐ Gland	łs

. Data Quality  8A. Are the estimates you have supplied based on:			
on. Are the estimates you have supplied based on.			
☐ Census or monitoring ☐ General field studies	□ Inform	al field studies	
☐ Hearsay/popular belief ☐ Museum studies/recor	_	t information fro	
Studies (field) conducted over the last 10 years (indicate the	e year of study not	the year of publicat	ion):
Researchers Location	Year 1	opic	
D. Conservation Status			
	Dogio	nal. Not listed	
10A. IUCN Red List Category: Global: Not listed	Regio	nal: Not listed	
10B. National Red Data Book: Not listed			
10C. Workshop Assessment of Regional Red List Category: V	'ulnerable		
10D. CITES: Not listed			
<b>10E. National Wildife Legislation:</b> Not listed			
10F. Other Legislation (please specify):			
4			
10G. List existing Protected Areas within the Taxon's range:			
Protected Area	C	ountry	Size (km²)
Jebel Sanham, Dhofar		Oman	
10H. Recommended Protected Areas for the Taxon:			C: (I2)
Area		ountry	Size (km²)
101. Are there any Regional Conservation/Protection Action P	lans: () Yes	No	Unknown
If Yes, please list them:			
1. Supporting Research			
• • •			
11A. Is research recommended?   Yes No			
11A. Is research recommended? • Yes • No			
If Yes, what type of research would you recommend?	☐ Life His	story $\Box$ Pu	blic Awareness
If Yes, what type of research would you recommend?  ⊠ Surveys ☐ Genetics ⊠ Taxonomic	☐ Life His	, –	blic Awareness
If Yes, what type of research would you recommend?  Surveys Genetics Taxonomic Trade Monitoring Reintroducti	_	story	blic Awareness
If Yes, what type of research would you recommend?  ⊠ Surveys ☐ Genetics ⊠ Taxonomic	_	, –	blic Awareness
If Yes, what type of research would you recommend?  Surveys Genetics Taxonomic  Trade Monitoring Reintroducti  Other (please specify):	_	, –	blic Awareness
If Yes, what type of research would you recommend?  Surveys Genetics Taxonomic  Trade Monitoring Reintroducti  Other (please specify):	_	, –	blic Awareness
If Yes, what type of research would you recommend?  Surveys Genetics Taxonomic  Trade Monitoring Reintroducti  Other (please specify):  2. Management  12A. What management is recommended for the Taxon?	ion ⊠ Humai	n Impact	
If Yes, what type of research would you recommend?  Surveys Genetics Taxonomic Trade Monitoring Reintroducti Other (please specify):  2. Management  12A. What management is recommended for the Taxon?  Habitat management Wild population management	ion ⊠ Humai	Captive bre	eding
If Yes, what type of research would you recommend?  Surveys Genetics Taxonomic  Trade Monitoring Reintroducti  Other (please specify):  2. Management  12A. What management is recommended for the Taxon?  Habitat management Wild population management Translocation	ion 🔀 Humar	☐ Captive bre	eding BUse
If Yes, what type of research would you recommend?  Surveys Genetics Taxonomic  Trade Monitoring Reintroducti  Other (please specify):  2. Management  12A. What management is recommended for the Taxon?  Habitat management Wild population management	nanagement	☐ Captive bre	eding Use esearch Banking

13. Captive Breeding					
13A. Is captive breeding recommended for the taxon	: OYes	<ul><li>No</li></ul>			
13B. If captive breeding is recommeded, is it for:					
Species recovery Reintroduction	Rese	arch		Husbandry	
Education Preserve live geno	me				
13C. Do Captive stocks already exist? Yes	No O Un	known			
If Yes, list the facilities:					
Facility	Country	Males	Females	Unknown	Total
13D. Does a coordinated Species Management Plan	exist?  Yes	● No	Unknow	/n	
If Yes, list the participating institutions:					
If Not, is a Species Management Plan recommend	ded: OVes	No			
If Yes, list the institutions that should participate:		<b>C</b> NO			
ii res, iist the institutions that should participate.					
13E. Level of captive breeding recommended:					
Captive breeding program not neccessary	□ Initiate	orogram s	within 3 yea	rs	
	ensify existing p		_	se existing p	rogam
13F. Are the techniques established for captive breed		J		31	J
Techniques are known for this or similar taxo	n Some te	echniques a	are known fo	or this or sim	ilar taxon
Techniques not known for this or simialr taxo	on 🛚 Unknov	vn			
14 Sources/Defendences/					
<b>14. Sources/References (complete citation):</b> Egan, D. 2007. Snakes of Arabia. A field guide to the Snakes	os of the Arabia	a Paningula	and its Shore	os Motivato	
Publishing.	es of the Alabia	i r et iii isula	and its 5000	es. Molivale	
Gasperetti, J. 1988. Snakes of Arabia. Fauna of Saudi Arabi	a 9:169-450.				
Schatte, B & Desvolgnes, A. 1999. The Herpetofauna of sold'Histoire Naturelle, Geneve.	uthern Yemen a	nd the Soq	otra archipel	ago. Museun	n
Schatte, B & Gasparetti, J.A. A contribution to the herpeto	fauna of Southv	vestern Aral	oia. Fauna of	Saudi Arabia	. Vol 14.
Van der Kooij, J. 2001. The Herpetofauna of the Sultinate of	of Oman. Part 4:	Terrestrial S	nakes. Podar	Cus.	
15. Compilers					

#### 15

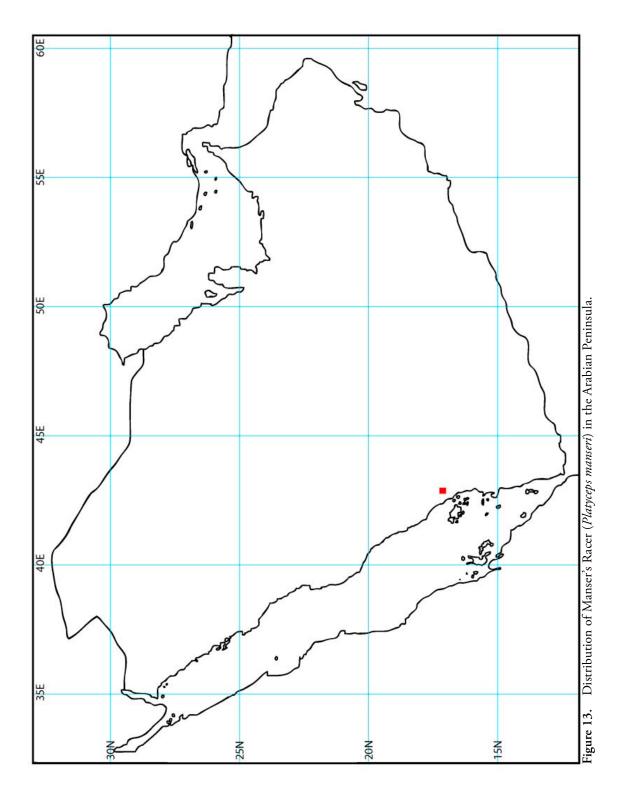


Working Group: Snakes	I	Date: 3-5 February 2008
1. Taxonomy		
1A. Scientific Name (Genus, species & subspecies): Platyceps mo	anseri	
Authority: (Leviton)		<b>Date:</b> 1986
1B. Synonyms (with authority & date):		
1C. Common Name(s) with language/region: Manser's black snake, Manser's racer (English)		
2. Distribution		
<b>2A. Historical Distribution</b> (last 100 years): From Jizan in SW Saudi Arabia to Al Hudaidah in adjoining	Yemen	
<b>2B. Current Distribution</b> (illustrate on map): See 2A		
<b>2C. Habitat of the taxon</b> (ecosystem level): SW Arabian foothills and savannah		
2D. Habitat specificity (elevation, etc.): Varied from vegetated coastal plain to rocky terrian		
2E. Migration: Yes • No Unknown		
If Yes, describe:		
155, 0556561		
3. Number of Populations & Subpopulations in which the	he Taxon is distributed:	
Location of each:	Approx. Area Occupied:	Approx. No. of Individuals:
SW Saudi Arabia to the Yemen border	25km2	Unknown
4. Population Trends		
4A. Is the Population: Olncreasing Opecreasing	Stable • Unknown	
4B. If declining, what has been the rate of decline? $\bigcirc$ <2	:0%	○>80%
Over how many years has the population decline oc	cured?	
4C. If stable or unknown, do you predict a future decline	in the population size? (	Yes No
If Yes, please specify rate and factors e.g. habitat loss	s, trade, etc.:	
5. Habitat Status		
5A. Is the habitat distribution: • Continuous   Frag	mented	
5B. Is there any change in the range of the habitat where If Yes, is it: O Decreasing in Area Increas	e the Taxon occurs?	s • No C Unknown
5C. If decreasing what has been the decline?  <20%	_	C >80%
Over how many years has this decline occured?		

5D. Do you predict a future dec If Yes, what do you predict Over how many years do yo	that decline	will be?	○ <20% ○ >20% ○ >50% (	>80%	
5E. State the primary cause of t	his change:				
5F. Is there any change in the q If Yes, is the habitat quality 5G. State the primary cause of t	: O Decli		nere the Taxon occurs?	)No ⊜Unk	known
6. Threats					
Pollution Urban Development Road Kills Damming War Recreational activities Hunting (recreation or retail) Harvest for medicine Harvest for food/timber Poisoning Pesticides Persecution Trade of animals/parts Other (please specify):	Present	Future	Disease Hybridization Decline in prey species Loss of habitat Genetic problems Grazing Habitat fragmentation Predation Interspecific competition Livestock competition (food, etc.) Livestock conflicts (retaliation kills) Introduced species (non-livestock) Nutritional disorders	Present	Future
6B. Would these threats result i Comment:	n (perceived	l or inferred	d) population decline? Yes •	No ( Unkı	nown
7. Trade					
7A. Is the Taxon in trade? Yes, is it: Local 7B. Parts in trade:	○ Regiona		ernational Commercial	□ Clana	l-
Skin Fur  Meat Produ  Comments/Other threats (p	cts	Hair Live Anima	☐ Horn ☐ Bones  Il ☐ Taxidermy ☐ Organs	☐ Gland	15
Comments/Other threats (p	rease specify):				

8. Da	ta Quality				
8A.	Are the estimates you have so	upplied based on:			
	Census or monitoring	General field studies		mal field studie	s 🔀 Literature
	Hearsay/popular belief		☐ Indir	ect informatior	n from trade, etc.
9. Stu	idies (field) conducted over	the last 10 years (indicate the yea	r of study no	ot the year of publ	ication):
	Researchers	Location	Year	Topic	
10. C	onservation Status				
10/	A. IUCN Red List Category: (	Global: Not listed	Regi	ional: Not listed	d
108	3. National Red Data Book: t listed		-3		
100	C. Workshop Assessment of Re	egional Red List Category: Vulne	erable		
10[	D. CITES: Not listed				
	E. National Wildife Legislation: It listed				
10F	F. Other Legislation (please speci	fy):			
100	G. List existing Protected Areas Protected Area	s within the Taxon's range:		Country	Size (km²)
				· · · · · · ·	5.25 ( )
10l	H. Recommended Protected A	reas for the Taxon:			
	Area			Country	Size (km²)
101	Are there any Regional Conso	ervation/Protection Action Plans	S: Yes	<ul><li>No</li></ul>	Unknown
11. S	upporting Research				
11/	A. Is research recommended?	• Yes O No			
	If Yes, what type of research	would you recommend?			
	☐ Surveys ☐ Gene	tics X Taxonomic	∠ Life F	listory	Public Awareness
	☐ Trade ☐ Moni	toring Reintroduction	☐ Hum	an Impact	
	Other (please specify):				
12. M	anagement				
12/	A. What management is recom	nmended for the Taxon?			
$\boxtimes$	Habitat management	☐ Wild population mana	gement	Captive	breeding
	Monitoring	☐ Translocation		Sustaina	able Use
	Public Awareness	∠ Limiting Factor Manage	jement	⊠ Genome	e Research Banking
	Law Enforcement	Work in Local Commu	nities	Address	Policy Makers
	Other (please specify):				
	Ascertain correct taxonomic s	tatus before assessing conservation	on status		

13. Captive Breeding					
13A. Is captive breeding recommended for the ta	axon: OYes	<ul><li>No</li></ul>			
13B. If captive breeding is recommeded , is it for:					
Species recovery Reintroduction	n 🔲 Resea	irch		Husbandry	
☐ Education ☐ Preserve live g	enome				
13C. Do Captive stocks already exist? Yes	○ No ○ Unk	known			
If Yes, list the facilities:					
Facility	Country	Males	Females	Unknown	Total
13D. Does a coordinated Species Management P If Yes, list the participating institutions:	lan exist?   Yes	● No	O Unknow	 /n	
If Not, is a Species Management Plan recommend of Yes, list the institutions that should participate of the Plan Recommend of the Pl		No     No			
13E. Level of captive breeding recommended:  Captive breeding program not neccessar  Maintain existing program as it is  13F. Are the techniques established for captive b	Intensify existing p		within 3 yea	rs se existing p	rogam
<ul><li>Techniques are known for this or similar</li><li>Techniques not known for this or similar</li></ul>	_	•	are known fo	or this or sim	ilar taxon
14. Sources/References (complete citation):					

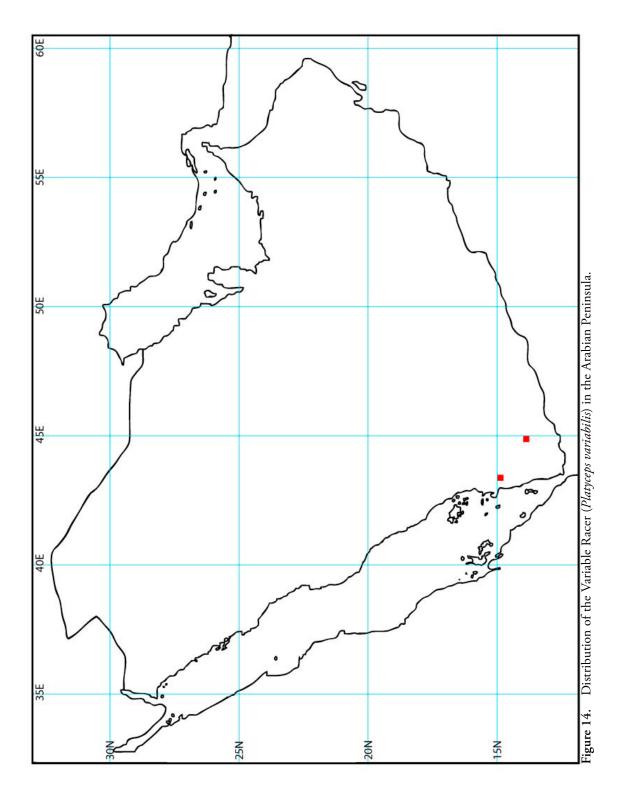


Working Group: Snakes		Date: 3-5 February 2008
1. Taxonomy		
1A. Scientific Name (Genus, species & subspecies): Plat	yceps variabilis	
Authority: (Boulenger)		<b>Date:</b> 1905
1B. Synonyms (with authority & date):		
1C. Common Name(s) with language/region: Variable racer		
2. Distribution		
<b>2A.</b> Historical Distribution (last 100 years): Southwestern Yemen		
<b>2B. Current Distribution</b> (illustrate on map): See 2A		
<b>2C. Habitat of the taxon</b> (ecosystem level): Southwestern Arabian foothills and Savannah, rock	ky areas from sea level to 1800m a.s	.l
<b>2D. Habitat specificity</b> (elevation, etc.): Rocky terrain, apparently with access to moist retre	eats	
2E. Migration: Yes No Unknov	vn	
If Yes, describe:		
,		
3. Number of Populations & Subpopulations in v	which the Taxon is distributed:	
Location of each:	Approx. Area Occupied:	Approx. No. of Individuals:
Southwestern corner of Yemen		Unknown
4. Population Trends		
4A. Is the Population: OIncreasing ODecreas	ing Stable • Unknown	
4B. If declining, what has been the rate of decline	e?	○>80%
Over how many years has the population de-	cline occured?	
4C. If stable or unknown, do you predict a future	decline in the population size? (	Yes   No
If Yes, please specify rate and factors e.g. hab	oitat loss, trade, etc.:	
5. Habitat Status		
5A. Is the habitat distribution:   • Continuous	○ Fragmented ○ Unknown	
5B. Is there any change in the range of the habita		es • No C Unknown
5C. If decreasing what has been the decline? (	<20%	
Over how many years has this decline occur	ed?	

5D. Do you predict a future decli If Yes, what do you predict the				>80%	
Over how many years do you	u predict th	ne decline v	will occur?		
<b>5E. State the primary cause of th</b> Small scale habitat loss through s	_	agriculture	but presumed insignificant		
5F. Is there any change in the qu If Yes, is the habitat quality:	ality of the		nere the Taxon occurs? Yes • Improving	No OUnk	known
5G. State the primary cause of th	is change:				
6. Threats					
	Present	Future		Present	Future
Pollution			Disease		
Urban Development		$\boxtimes$	Hybridization		
Road Kills			Decline in prey species		
Damming			Loss of habitat		$\boxtimes$
War			Genetic problems		
Recreational activities			Grazing		
Hunting (recreation or retail)			Habitat fragmentation		$\boxtimes$
Harvest for medicine			Predation		
Harvest for food/timber			Interspecific competition		
Poisoning			Livestock competition (food, etc.)		
Pesticides			Livestock conflicts (retaliation kills)		
Persecution			Introduced species (non-livestock)		
Trade of animals/parts Other (please specify):	Ш	Ш	Nutritional disorders		Ш
Other (please specify).					
6B. Would these threats result in Comment:	(perceived	d or inferred	d) population decline?	No 🔵 Unkr	nown
7. Trade					
7A. Is the Taxon in trade? Ye	es No Regiona		nown ernational Commercial		
7B. Parts in trade:					
Skin Fur		Hair	☐ Horn ☐ Bones	Gland	ls
☐ Meat ☐ Produc	ts 🗌	Live Anima	al Taxidermy Organs		
Comments/Other threats (ple	ease specify):				

8. Da	ta Quality				
8A	. Are the estimates you have s	upplied based on:			
	Census or monitoring	☐ General field studies		rmal field studies	Literature
	Hearsay/popular belief	☐ Museum studies/records	Indi	rect information	from trade, etc.
9. Stu	udies (field) conducted over	the last 10 years (indicate the yea	r of study n	ot the year of publi	cation):
	Researchers	Location	Year	Topic	
	Masa et al. Snakes in Yemen			_	
10. C	onservation Status				
10/	A. IUCN Red List Category: (	Global: Not listed	Reg	gional: Not listed	
	3. National Red Data Book: ot listed				
100	C. Workshop Assessment of Re	egional Red List Category: Least	concern		
101	D. CITES: Not listed				
	E. National Wildife Legislation: ot listed				
101	Other Legislation (please speci	fy):			
100	C. List ovisting Protected Area	s within the Tayon's range			
100	G. List existing Protected Areas  Protected Area	s within the Taxon's range:		Country	Size (km²)
				·	· · · · · · · · · · · · · · · · · · ·
101					_
101	<ul><li>H. Recommended Protected A Area</li></ul>	reas for the Taxon:		Country	Size (km²)
					5.25 ( /
101	. Are there any Regional Conso	ervation/Protection Action Plans	:: O Yes	• No	○ Unknown
11. S	upporting Research				
11/	A. Is research recommended?	• Yes No			
	If Yes, what type of research	would you recommend?			
		tics X Taxonomic	∠ Life	History	Public Awareness
		toring Reintroduction	Hun	nan Impact	
	Other (please specify):				
12. M	lanagement				
12/	A. What management is recom	mended for the Taxon?			
	Habitat management	Wild population manag	gement	Captive bi	_
	Monitoring	Translocation		Sustainab	
	Public Awareness	✓ Limiting Factor Manage     ✓ Work in Least Community		_	Research Banking
$\square$	Law Enforcement Other (please specify):	☐ Work in Local Commun	ittes	☐ Address P	olicy Makers

13. Captive Breeding	
13A. Is captive breeding recommended for the taxon: Yes No	
13B. If captive breeding is recommeded , is it for:	
☐ Species recovery ☐ Reintroduction ☐ Research ☐ Husbandry	
☐ Education ☐ Preserve live genome	
13C. Do Captive stocks already exist? Yes No Unknown	
If Yes, list the facilities:	
Facility Country Males Females Unknown Total	
	_
	_
13D. Does a coordinated Species Management Plan exist? Yes No Unknown	
If Yes, list the participating institutions:	
If Not, is a Species Management Plan recommended: Yes • No	
If Yes, list the institutions that should participate:	
ii res, iist the institutions that should participate.	
13E. Level of captive breeding recommended:	
☐ Captive breeding program not neccessary ☐ Initiate program within 3 years	
☐ Maintain existing program as it is ☐ Intensify existing program ☐ Decrease existing program	
13F. Are the techniques established for captive breeding?	
Techniques are known for this or similar taxon Some techniques are known for this or similar taxon	n
☐ Techniques not known for this or similar taxon ☐ Unknown	/11
Techniques not known of this of similar taxon. Sometimen	
14. Sources/References (complete citation):	
Egan, D. 2007. Snakes of Arabia. A field guide to the Snakes of the Arabian Peninsula and its Shores. Motivate Publishir	١g
Gasperetti, J. 1988. Snakes of Arabai. Fauna of Saudi Arabia 9:169-450	
Schatte, B & Desvolgnes, A. 1999. The Herpetofauna of southern Yemen and the Soqotra archipelago. Museum d'Histoire Naturelle. Geneve.	
Schatte, B & Gasparetti, J.A. Contributions to the herpetofauna of Southwestern Arabia. Fauna of Saudi Arabia. Vol.14	
Van der Kooij, J. 2001. The Herpetofauna of the Sultinate of Oman. Part 4: Terrestrial Snakes. Pordarcus.	

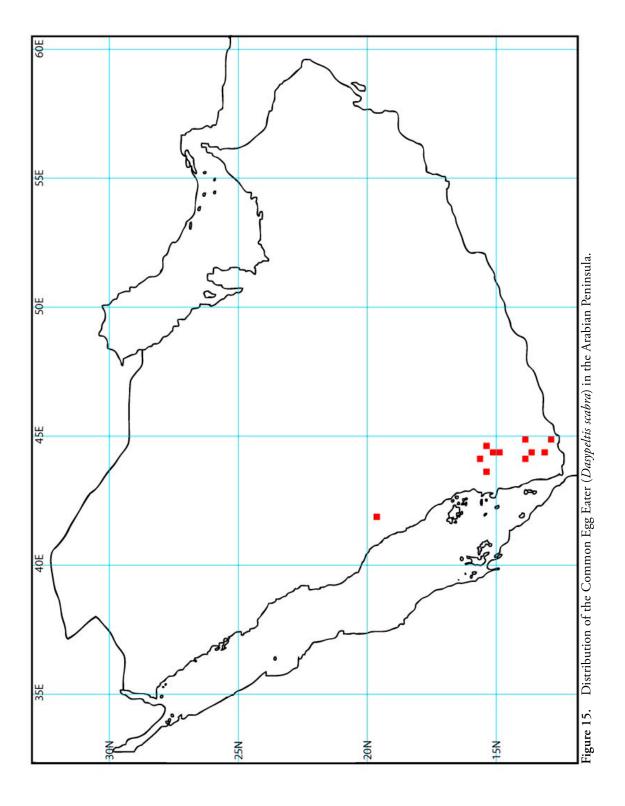


Working Group: Snakes	Date: 3-5 February 2008
1. Taxonomy	
1A. Scientific Name (Genus, species & subspecies): Dasypeltis	scabra
Authority: Linnaeus	<b>Date:</b> 1758
1B. Synonyms (with authority & date):	
1C. Common Name(s) with language/region: Common Egg Eater (English), Rhombic Egg Eater (English	ı).
2. Distribution	
<b>2A.</b> Historical Distribution (last 100 years): Western Yemen and southwestern Saudi Arabia.	
<b>2B.</b> Current Distribution (illustrate on map): See 2A.	
<b>2C. Habitat of the taxon</b> (ecosystem level): Southwestern Arabian foothill savannah and southweste	rn Arabian montane woodlands.
2D. Habitat specificity (elevation, etc.): Non-specific. Up to 200 m.a.s.l.	
2E. Migration: Yes No Unknown	
If Yes, describe:	
ii respective.	
3. Number of Populations & Subpopulations in which	the Taxon is distributed:
Location of each:	Approx. Area Occupied: Approx. No. of Individuals:
Southwestern Arabia, Saudi Arabia & Yemen	275 km <sup>2</sup> ~
4. Population Trends	
4A. Is the Population: \(\) Increasing \(\) Decreasing (	Stable Ounknown
4B. If declining, what has been the rate of decline?	<20%
Over how many years has the population decline of	occured?
4C. If stable or unknown, do you predict a future declir	ne in the population size? Yes • No
If Yes, please specify rate and factors e.g. habitat lo	ss, trade, etc.:
5. Habitat Status	
5A. Is the habitat distribution:   Continuous  Fra	agmented O Unknown
5B. Is there any change in the range of the habitat whe	
	asing in Area
5C. If decreasing what has been the decline?   < < 20	
Over how many years has this decline occured?	

5D. Do you predict a future decli  If Yes, what do you predict th  Over how many years do you	nat decline	will be? (		>80%	
5E. State the primary cause of thi	is change:				
5F. Is there any change in the qu If Yes, is the habitat quality: 5G. State the primary cause of th	O Decli		ere the Taxon occurs? Yes • Improving	No 🔵 Unk	nown
6. Threats					
Pollution Urban Development Road Kills Damming War Recreational activities Hunting (recreation or retail) Harvest for medicine Harvest for food/timber Poisoning Pesticides Persecution Trade of animals/parts Other (please specify):  6B. Would these threats result in	Present	Future	Disease Hybridization Decline in prey species Loss of habitat Genetic problems Grazing Habitat fragmentation Predation Interspecific competition Livestock competition (food, etc.) Livestock conflicts (retaliation kills) Introduced species (non-livestock) Nutritional disorders	Present	Future
Comment:  7. Trade  7A. Is the Taxon in trade? • Ye	s () No	○ Unkn	own		
If Yes, is it: Cocal (  7B. Parts in trade: Skin Fur Meat Product  Comments/Other threats (ple	ts 🖂	I • Inte	ernational Commercial  Horn Bones Taxidermy Organs	☐ Gland	s

8. Data Quality				
8A. Are the estimates you have su	upplied based on:			
Census or monitoring	General field studies		mal field studies	∠ Literature
Hearsay/popular belief	☐ Museum studies/records	⊠ Indi	ect information fr	om trade, etc.
9. Studies (field) conducted over	the last 10 years (indicate the yea	r of study n	ot the year of publica	tion):
Researchers	Location	Year	Topic	
10. Conservation Status			-	
10A. IUCN Red List Category: (	Global: Not Listed.	Red	ional: Not Listed.	
10B. National Red Data Book: Not Listed.		- 3		
10C. Workshop Assessment of Re	gional Red List Category: Least	Concern.		
10D. CITES: Not Listed.				
<b>10E. National Wildife Legislation:</b> Not Listed.				
10F. Other Legislation (please speci	fy):			
10G. List existing Protected Areas Protected Area	s within the Taxon's range:		Country	Size (km²)
10H. Recommended Protected A	reas for the Taxon:			
Area			Country	Size (km²)
10I. Are there any Regional Conse If Yes, please list them:	ervation/Protection Action Plans	s: O Yes	● No (	Unknown
11. Supporting Research				
11A. Is research recommended?				
If Yes, what type of research	would you recommend?			
☐ Surveys ☐ Gene	tics X Taxonomic	Life I	History 🗌 Pu	ıblic Awareness
☐ Trade ☐ Moni	toring Reintroduction	☐ Hum	ian Impact	
Other (please specify):				
12. Management				
12A. What management is recom	mended for the Taxon?			
Habitat management	Wild population manag	gement	Captive bre	eding
☐ Monitoring	☐ Translocation	-	Sustainable	_
☐ Public Awareness	Limiting Factor Manage	ement		search Banking
Law Enforcement	☐ Work in Local Commur		Address Pol	_
Other (please specify):				

13. Captive Breeding					
13A. Is captive breeding recommended for the ta	ixon: O Yes	<ul><li>No</li></ul>			
13B. If captive breeding is recommeded, is it for:					
Species recovery Reintroduction	n Resea	rch		Husbandry	,
Education Preserve live go	enome				
13C. Do Captive stocks already exist? Yes	No	nown			
If Yes, list the facilities:					
Facility	Country	Males	Females	Unknown	Total
		. ———			
13D. Does a coordinated Species Management Pl If Yes, list the participating institutions:	lan exist?  Yes	No     No	Unknov	vn	
If Not, is a Species Management Plan recomm If Yes, list the institutions that should particip  13E. Level of captive breeding recommended:  Captive breeding program not neccessary	oate:	-	within 3 yea		
<ul><li>Maintain existing program as it is</li><li>13F. Are the techniques established for captive be</li></ul>	Intensify existing pr	ogram	рестеа	se existing p	nogam
☐ Techniques not known for this or similar to Techniques are known for this or similar to Techniques not known for this or similar to Techniques are known for this or the Techniques are known for this or the Techniques are known for this or the Techniques are known for the Techn	taxon Some ted	-	are known fo	or this or sim	ilar taxon
14. Sources/References (complete citation):					
Egan, D. 2007. Snakes of Arabia: A field guide to the St Dubai. Gasparetti, J. 1988. Snakes of Arabia. <i>Fauna of Saudi Ar</i> Schätte, B. and Desvoignes, A. 1999. The Herpetofaun Naturelle. Geneve. Schätte, B. and Gasparetti, J.A. 1994. Contribution to t 348-432.	rabia 9: 169-405. na of southern Yemer	n and Soko	tra Archipela	ago. Museum	n d'Historie



Working Group: Snakes	Date: 3-5 February 2008
1. Taxonomy	
1A. Scientific Name (Genus, species & subspecies): Eirenis corone	lla coronella
Authority: (Schlegel)	<b>Date</b> : 1837
1B. Synonyms (with authority & date):	
1C. Common Name(s) with language/region: Crowned dwarf snake	
2. Distribution	
<b>2A.</b> Historical Distribution (last 100 years): Widespread in the Middle East, just entering Eastern Saudi A	rabia
<b>2B.</b> Current Distribution (illustrate on map): See 2A.	
<b>2C.</b> Habitat of the taxon (ecosystem level): Arabian Desert and East Sahero xeric woodlands	
2D. Habitat specificity (elevation, etc.): Alluvial plains and desert	
2E. Migration: Yes • No Unknown	
If Yes, describe:	
3. Number of Populations & Subpopulations in which the	e Taxon is distributed:
Location of each:	Approx. Area Occupied: Approx. No. of Individuals:
Eastern Province, Saudi Arabia	75km2
4. Population Trends	
4A. Is the Population: \(\) Increasing \(\) Decreasing \(\)S	table • Unknown
4B. If declining, what has been the rate of decline? <20	%
Over how many years has the population decline occu	ured?
4C. If stable or unknown, do you predict a future decline in	n the population size? Yes No
If Yes, please specify rate and factors e.g. habitat loss,	trade, etc.:
5. Habitat Status	
5A. Is the habitat distribution:   Continuous  Fragm	nented O Unknown
5B. Is there any change in the range of the habitat where t	
If Yes, is it: O Decreasing in Area Increasing	
5C. If decreasing what has been the decline? <20%	
Over how many years has this decline occured?	

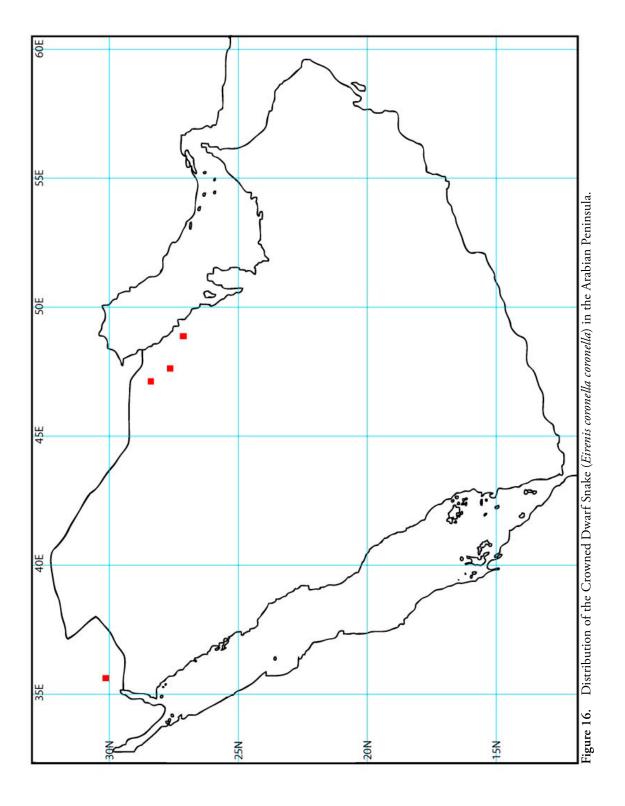
5D. Do you predict a future decli  If Yes, what do you predict th  Over how many years do you	nat decline	will be?	○ <20% ○ >20% ○ >50% ○	>80%	
5E. State the primary cause of thi	s change:				
5F. Is there any change in the qu If Yes, is the habitat quality: 5G. State the primary cause of th	O Decli	ining	here the Taxon occurs? Yes • I	No ⊜Unl	known
6. Threats					
Pollution Urban Development Road Kills Damming War Recreational activities Hunting (recreation or retail) Harvest for medicine Harvest for food/timber Poisoning Pesticides Persecution Trade of animals/parts Other (please specify):	Present	Future	Disease Hybridization Decline in prey species Loss of habitat Genetic problems Grazing Habitat fragmentation Predation Interspecific competition Livestock competition (food, etc.) Livestock conflicts (retaliation kills) Introduced species (non-livestock) Nutritional disorders	Present	Future
6B. Would these threats result in Comment:	(perceived	d or inferre	d) population decline? ( Yes ( N	o 🔿 Unk	nown
7. Trade  7A. Is the Taxon in trade? Ye  If Yes, is it: Local  7B. Parts in trade:	s	◯ Unk I ◯ In	nown ternational ( Commercial		
Skin Fur  Meat Product  Comments/Other threats (ple	ts	Hair Live Anim	Horn Bones	☐ Gland	ds

8. Data Quality				
8A. Are the estimates you have so	upplied based on:			
Census or monitoring	General field studies	⊠ Info	ormal field studies	∠ Literature
Hearsay/popular belief	☐ Museum studies/records	⊠ Ind	lirect information	from trade, etc.
9. Studies (field) conducted over	the last 10 years (indicate the yea	r of study	not the year of public	ation):
Researchers	Location	Year	Topic	
10. Conservation Status	<del></del>			
10A. IUCN Red List Category: (	Global: Not listed	Re	egional: Not listed	
10B. National Red Data Book: Not listed				
10C. Workshop Assessment of Re	egional Red List Category: Least	concern		
10D. CITES: Not listed				
<b>10E. National Wildife Legislation:</b> Not listed				
10F. Other Legislation (please speci	fy):			
10G. List existing Protected Areas Protected Area	s within the Taxon's range:		Country	Size (km²)
10H. Recommended Protected A	reas for the Tayon:			-
Area	reas for the Taxon.		Country	Size (km²)
10I. Are there any Regional Conso If Yes, please list them:	ervation/Protection Action Plans	s: O Ye	es • No	○ Unknown
11. Supporting Research				
11A. Is research recommended?	• Yes    No			
If Yes, what type of research	would you recommend?			
☐ Surveys ☐ Gene	tics X Taxonomic	Life	History 🔲 F	Public Awareness
☐ Trade ☐ Moni	toring Reintroduction	☐ Hu	man Impact	
Other (please specify):				
12. Management				
12A. What management is recom	nmended for the Taxon?			
☐ Habitat management	☐ Wild population mana	igement	☐ Captive b	reeding
Monitoring	☐ Translocation	J	Sustainal	_
Public Awareness	☐ Limiting Factor Manag	gement		Research Banking
Law Enforcement	☐ Work in Local Commu		_	Policy Makers
Other (please specify):				•

13. Captive Breeding					
13A. Is captive breeding recommended for the tax	on: OYes	<ul><li>No</li></ul>			
13B. If captive breeding is recommeded, is it for:					
Species recovery Reintroduction	☐ Resea	arch		Husbandry	
☐ Education ☐ Preserve live ge	nome				
13C. Do Captive stocks already exist? Yes	○No ○Unl	known			
If Yes, list the facilities:					
Facility	Country	Males	Females	Unknown	Total
13D. Does a coordinated Species Management Pla If Yes, list the participating institutions:	n exist? Yes	● No	Unknov		
If Not, is a Species Management Plan recommo		● No			
13E. Level of captive breeding recommended:	_				
Captive breeding program not neccessary			within 3 yea		
	ntensify existing p	rogram	☐ Decrea	se existing p	rogam
13F. Are the techniques established for captive brown for this or similar to Techniques not known for this or similar to	axon Some te	-	are known fo	or this or sim	ilar taxon
14. Sources/References (complete citation):					
Egan, D. 2007. Snakes of Arabia. A field guide to the St Publishing.	nakes of the Arabia	n Peninsula	and its Sho	res. Motivate	
Gasperetti, J. 1988. Snakes of Arabia. Fauna of Saudi Ara	abia 9:169-450				
Sivan, N. & Werner, Y.L. 2003. Revision of the Middle Ea (Colubriadae). Zoology of the Middle East 28:39-59.	astern dwarf snakes	commonly	assigned to	Eirenis coror	nella

William Branch, Damien Egan, Tony Phelps, Declan O'Donovan, Gavin Nel, Saud A. Al Farraj, Pritpal Soorae, Ehad Eid, Haithem Al Aamri, Peter Arras, Neelofa Ali, Masaa Al Jumaily, Khaled Al Rasbi and Patrick Paillat

Werner, Y.L. 1991. Notable Herpetofaunal Records from TransJordan. Zoology in the Middle East. Vol.5: 37-41

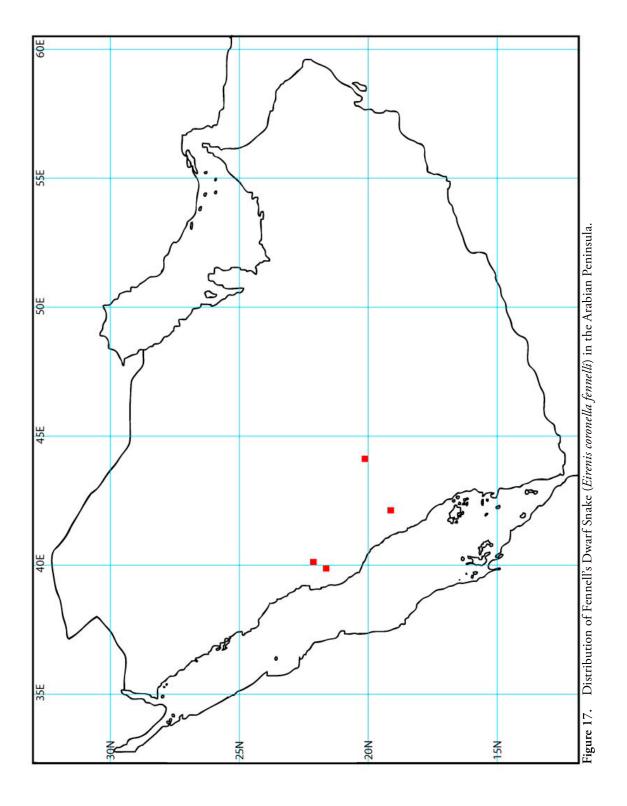


Working Group: Snakes	Date: 3-5 February 2008
1. Taxonomy	
1A. Scientific Name (Genus, species & subspecies): Eirenis coronella I	fennelli
Authority: Arnold	<b>Date</b> : 1982
1B. Synonyms (with authority & date):	
1C. Common Name(s) with language/region: Fennell's dwarf snake	
2. Distribution	
<b>2A.</b> Historical Distribution (last 100 years): Asir Mountains of Western Saudi Arabia	
<b>2B. Current Distribution</b> (illustrate on map): See 2A.	
<b>2C. Habitat of the taxon</b> (ecosystem level): Red sea, Nubia-Sinian tropical desert and semi-desert: Southwe coastal fog desert	estern Arabian foothills savannah: Arabian Peninsula
2D. Habitat specificity (elevation, etc.):  Generally above 200m above sea level in areas of good precipi	tation
2E. Migration: Yes • No Unknown	
If Yes, describe:	
3. Number of Populations & Subpopulations in which the To	axon is distributed:
Location of each: Ap	pprox. Area Occupied: Approx. No. of Individuals:
Asir Mountains: Western Saudi Arabia	
4. Population Trends	
4A. Is the Population: \(\) Increasing \(\) Decreasing \(\) Stab	ole
4B. If declining, what has been the rate of decline?   <20%	<pre>&gt;20% </pre> >50% >80%
Over how many years has the population decline occure	d?
4C. If stable or unknown, do you predict a future decline in the	ne population size? Yes • No
If Yes, please specify rate and factors e.g. habitat loss, tra-	de, etc.:
5. Habitat Status	
5A. Is the habitat distribution:   Continuous  Fragmen	ited ( Unknown
5B. Is there any change in the range of the habitat where the If Yes, is it: O Decreasing in Area Increasing	Taxon occurs?  Yes  No Unknown
5C. If decreasing what has been the decline? < <20% Cover how many years has this decline occured?	>20%

5D. Do you predict a future decli If Yes, what do you predict t Over how many years do yo	hat decline	will be?		>80%	
5E. State the primary cause of th Urban development, agriculture,	is change:	ie deeime v	······ occur		
5F. Is there any change in the qu If Yes, is the habitat quality: 5G. State the primary cause of th	O Decl		nere the Taxon occurs? Yes  Improving	No ( Unk	(nown
6. Threats					
Pollution Urban Development Road Kills Damming War Recreational activities Hunting (recreation or retail) Harvest for medicine Harvest for food/timber Poisoning Pesticides Persecution Trade of animals/parts Other (please specify):  6B. Would these threats result in Comment:	Present	Future	Disease Hybridization Decline in prey species Loss of habitat Genetic problems Grazing Habitat fragmentation Predation Interspecific competition Livestock competition (food, etc.) Livestock conflicts (retaliation kills) Introduced species (non-livestock) Nutritional disorders	Present	Future
7. Trade  7A. Is the Taxon in trade?  Year If Yes, is it:  Local  Comments/Other threats (ple	Regiona	◯ Unki I ◯ Int Hair Live Anima	cernational Commercial  Horn Bones	☐ Glanc	łs

3. Data Quality				
8A. Are the estimates you have s	upplied based on:			
☐ Census or monitoring ☐ General field studies ☐ Museum studies/records			ormal field studies	
			irect information	from trade, etc.
. Studies (field) conducted over the last 10 years (indicate the year of study not the year of publication):				
Researchers	Location	Year	Topic	
0. Conservation Status			_	
10A. IUCN Red List Category:	Global: Not listed	Re	gional: Not listed	
10B. National Red Data Book: Not listed				
10C. Workshop Assessment of Re	egional Red List Category: Least	concern		
10D. CITES: Not listed				
<b>10E. National Wildife Legislation</b> Not listed				
10F. Other Legislation (please spec	ify):			
10G. List existing Protected Area	s within the Taxon's range:		_	
Protected Area			Country	Size (km²)
10H. Recommended Protected A	reas for the Taxon:			
Area			Country	Size (km²)
101 A D .: 10	.: /D: A .: Dl		s • No	C. Halmania
10l. Are there any Regional Cons	ervation/Protection Action Plans	s: () re	S • NO	Unknown
If Yes, please list them:				
1. Supporting Research				
11A. Is research recommended?				
If Yes, what type of research	would you recommend?			
☐ Surveys ☐ Gene		☐ Life	History	Public Awareness
	toring Reintroduction	_	man Impact	
Other (please specify):	<u> </u>			
<ol> <li>Management</li> <li>12A. What management is recom</li> </ol>	nmended for the Taxon?			
		nemont	Captivo b	reeding
	☐ Wild population manag	gement	☐ Captive br	_
☐ Monitoring ☐ Public Awareness		ament		
Law Enforcement	☐ Limiting Factor Manag		_	Research Banking
	work in Local Commur	iitie5	Address Po	olicy Makers
Other (please specify):				

13. Captive Breeding					
13A. Is captive breeding recommended for the ta	xon: OYes	<ul><li>No</li></ul>			
13B. If captive breeding is recommeded , is it for:					
Species recovery Reintroduction	Resea	rch		Husbandry	
☐ Education ☐ Preserve live ge	enome				
13C. Do Captive stocks already exist? Yes	No	known			
If Yes, list the facilities:					
Facility	Country	Males	Females	Unknown	Total
	an exist?  Yes	● No		. ——— - /n	
If Yes, list the participating institutions:					
If Not, is a Species Management Plan recomm	andad: OVas	No			
If Yes, list the institutions that should particip		( NO			
ii res, list the institutions that should particip	ate:				
12E Loyal of captive breading recommended					
13E. Level of captive breeding recommended:  Captive breeding program not neccessar	v 🗆 Initiate	program	within 3 yea	rc	
☐ Captive breeding program not neccessary ☐ Initiate program within 3 years ☐ Maintain existing program as it is ☐ Intensify existing program ☐ Decrease existing program					
13F. Are the techniques established for captive by	, 3.			5 c c/5 c 9 p	
Techniques are known for this or similar t	3	chniques a	are known fo	or this or sim	ilar taxon
Techniques not known for this or simialr	_	-			
	<u> </u>				
14. Sources/References (complete citation):					
Egan, D. 2007. Snakes of Arabia. A field guide to the Sr	nakes of the Arabian	Peninsula	and its Shore	es. Motivate F	Publishing
Gasperetti, J. 1988. Snakes of Arabia. Fauna of Saudi A	rabia 9:169-450				
Sivan, N. & Werner, Y.L. 2003. Revision of the Middle Ea (Colubridae). Zoology of the Middle East 28: 39-59.	astern dwarf snakes o	commonly	assigned to	Eirenis coron	nella



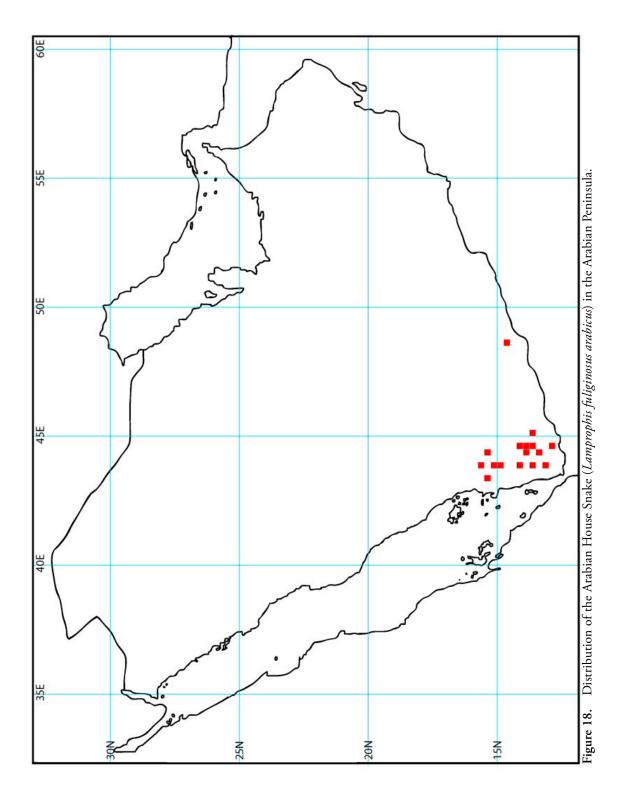
### <u>Conservation Workshop for the Fauna of Arabia</u> <u>Taxon Data Sheet</u>

Working Group: Snakes	Date: 3-5 February 2008
1. Taxonomy	
1A. Scientific Name (Genus, species & subspecies): Lamprophis	s fuliginosus arabicus
Authority: (Parker)	<b>Date:</b> 1930
1B. Synonyms (with authority & date):	
1C. Common Name(s) with language/region: Arabian house snake (English)	
2. Distribution	
2A. Historical Distribution (last 100 years): Western Yemen	
<b>2B. Current Distribution</b> (illustrate on map): See 2A	
<b>2C. Habitat of the taxon</b> (ecosystem level): Southwestern Arabian foothills savannah, Southwestern A	Arabian montane woodlands
2D. Habitat specificity (elevation, etc.): Sea level to 2000m- Generalist	
2E. Migration: Yes • No Unknown	
If Yes, describe:	
3. Number of Populations & Subpopulations in which	the Taxon is distributed:
Location of each:	Approx. Area Occupied: Approx. No. of Individuals:
Western Yemen	100km2
4. Population Trends	
4A. Is the Population: \(\bigcap\) Increasing \(\bigcap\) Decreasing \(\bigcap\)	Stable ( Unknown
4B. If declining, what has been the rate of decline? () <	20% ( >20% ( )>50% ( )>80%
Over how many years has the population decline o	ccured?
4C. If stable or unknown, do you predict a future decline	e in the population size? Yes No
If Yes, please specify rate and factors e.g. habitat los	ss, trade, etc.:
5. Habitat Status	
5A. Is the habitat distribution:   Continuous  Frag	gmented ( Unknown
5B. Is there any change in the range of the habitat wher	
5C. If decreasing what has been the decline? < <209	· ·
Over how many years has this decline occured?	

5D. Do you predict a future decl If Yes, what do you predict t Over how many years do yo	hat decline	will be?	○ <20% ○ >20% ○ >50% ○	>80%	
5E. State the primary cause of th	iis change:				
5F. Is there any change in the quality:  If Yes, is the habitat quality:  5G. State the primary cause of the Urban sprawl and infrastructure of	<ul><li>Declinis change:</li></ul>	ining	nere the Taxon occurs?	No ⊜Unk	known
6. Threats					
Pollution Urban Development Road Kills Damming War Recreational activities Hunting (recreation or retail) Harvest for medicine Harvest for food/timber Poisoning Pesticides Persecution Trade of animals/parts Other (please specify):	Present	Future	Disease Hybridization Decline in prey species Loss of habitat Genetic problems Grazing Habitat fragmentation Predation Interspecific competition Livestock competition (food, etc.) Livestock conflicts (retaliation kills) Introduced species (non-livestock) Nutritional disorders	Present	Future
<b>6B. Would these threats result in Comment:</b> Species successful even in un			d) population decline? O Yes   N	lo ( Unkı	nown
7. Trade  7A. Is the Taxon in trade?  Ye  If Yes, is it:  Local  7B. Parts in trade:  Skin Fur  Meat Product  Comments/Other threats (plane)	Regiona		ernational Commercial  Horn Bones	☐ Gland	ls
•	-				

8. Data Quality			
8A. Are the estimates you have supplied based on:			
☐ Census or monitoring ☐ General field studies [			∠ Literature
Hearsay/popular belief Museum studies/records			rom trade, etc.
D. Studies (field) conducted over the last 10 years (indicate the year o	of study r	not the year of public	ation):
Researchers Location Y	'ear	Topic	
Snakes in Yemen- Masa et al			
0. Conservation Status			
10A. IUCN Red List Category: Global: Not listed	Re	gional: Not listed	
10B. National Red Data Book: Not listed			
10C. Workshop Assessment of Regional Red List Category: Least co	oncern		
10D. CITES: Not listed			
10E. National Wildife Legislation: Not listed			
10F. Other Legislation (please specify):			
10G. List existing Protected Areas within the Taxon's range:			
Protected Area		Country	Size (km²)
<del></del>		<u> </u>	
10H. Recommended Protected Areas for the Taxon:		Country	c: (1 2)
Area		Country	Size (km²)
10l. Are there any Regional Conservation/Protection Action Plans:	○ Yes	s   No	Unknown
If Yes, please list them:			
1. Supporting Research			
11A. Is research recommended?    Yes    No			
If Yes, what type of research would you recommend?			
☐ Surveys ☐ Genetics ☐ Taxonomic ☐	Life	History P	ublic Awareness
☐ Trade ☐ Monitoring ☐ Reintroduction [	Hur	man Impact	
Other (please specify):			
2. Management			
12A. What management is recommended for the Taxon?			
☐ Habitat management ☐ Wild population manage	ement		reedina
Monitoring Translocation		☐ Sustainab	_
			050
Public Awareness       Limiting Factor Manager	ment	Genome F	Research Ranking
Public Awareness Limiting Factor Manager  Law Enforcement Work in Local Communit		_	Research Banking olicy Makers

13. Captive Breeding							
13A. Is captive breeding recomme	ended for the taxon:	• Yes	○ No				
13B. If captive breeding is recommeded , is it for:							
☐ Species recovery ☐ Reintroduction ☐ Research ☐ Husbandry							
Education Preserve live genome							
13C. Do Captive stocks already ex	ist? OYes •	No Ounl	known				
If Yes, list the facilities:							
Facility		Country	Males	Females	Unknown	Total	
13D. Does a coordinated Species	Management Plan e	vist? O Vos	● No				
If Yes, list the participating in:	_	Mist: () 165	( NO	OTIKITOV	VII		
es, not the participating							
If Not, is a Species Manageme	ent Plan recommend	led: O Yes	<ul><li>No</li></ul>				
If Yes, list the institutions that	should participate:						
13E. Level of captive breeding red	commended:						
Captive breeding program	m not neccessary		program	within 3 yea	rs		
Maintain existing program	m as it is 🔲 Inte	nsify existing p	rogram	Decrea	se existing p	rogam	
13F. Are the techniques establish	ed for captive breed	ing?					
▼ Techniques are known for the second control of the seco	r this or similar taxo	n 🔲 Some te	chniques a	are known fo	or this or sim	ilar taxon	
Techniques not known for	or this or simialr taxo	on 🔲 Unknow	'n				
14. Sources/References (complete ci	tation)*						
Egan, D. 2007. Snakes of Arabia. A fie		as of the Arabian	. Panincula	and its Shor	as Motivata		
Publishing.	ia gaide to the shake	23 OF THE ATABIAN	i i Cillisula	and its 51101	cs. Motivate		
Gasperetti, J. 1988. Snakes of Arabia. I	Fuana of Suaid Arabia	a 9: 169-450					
Schatte, B & Desvolgnes, A. 1999. The d'Histoire Naturelle. Geneve	Herpetofauna of sou	uthern Yemen ar	nd the Soq	otra archipel	ago. Museun	n	
Schatte, B & Gasparetti, J.A. Contribut	ion to the herpetofau	una of Southwes	stern Arabi	a. Fauna of S	audi Arabia. \	/ol 14.	

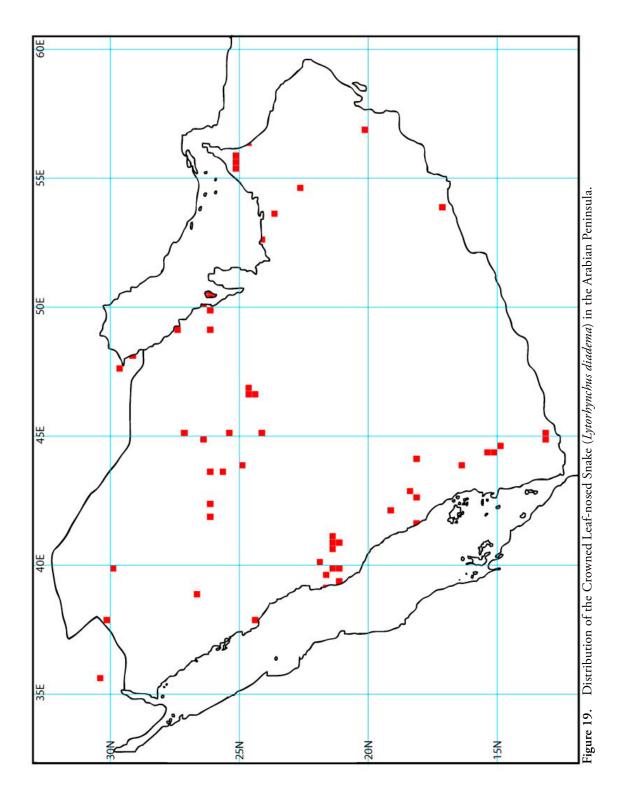


Working Group: Snakes	Date: 3-5 February 2008				
1. Taxonomy					
1A. Scientific Name (Genus, species & subspecies): Lytorhync	hus diadema				
Authority: Dumeril, Bibron & Dumeril	<b>Date:</b> 1854				
1B. Synonyms (with authority & date):					
1C. Common Name(s) with language/region: Crowned leaf nosed snake					
2. Distribution					
<b>2A. Historical Distribution</b> (last 100 years): North Africa, Mediterranean, Meddle East and Western A	sia. Throughout Arabian Peninsula in suitable level 2000m				
<b>2B. Current Distribution</b> (illustrate on map): See 2 A					
<b>2C. Habitat of the taxon</b> (ecosystem level):  Arabian Desert and East Sahero Arabian xeric woodlands Arabian foothills savannah. SW Arabian montain woodla	s. Red Sea Nudio-Sinian tropical desert and semi desert. SW ands.				
2D. Habitat specificity (elevation, etc.): Generally sandy desert from sea level to 2000m					
2E. Migration: Yes No Unknown					
If Yes, describe:					
3. Number of Populations & Subpopulations in which	the Taxon is distributed:				
Location of each:	Approx. Area Occupied: Approx. No. of Individuals:				
Throughout Arabian Peninsula	1350 km2				
4. Population Trends					
4A. Is the Population: \(\) Increasing \(\) Decreasing (	Stable  ○ Unknown				
4B. If declining, what has been the rate of decline?					
Over how many years has the population decline	occured?				
4C. If stable or unknown, do you predict a future decli	ne in the population size? ( Yes • No				
If Yes, please specify rate and factors e.g. habitat lo	oss, trade, etc.:				
5. Habitat Status					
5A. Is the habitat distribution:   Continuous  Fra	agmented ( ) Unknown				
5B. Is there any change in the range of the habitat who					
5C. If decreasing what has been the decline? • <20	_				
Over how many years has this decline occured? 10					

5D. Do you predict a future decl	ine in the h	abitiat?	Yes No		
If Yes, what do you predict t	hat decline	will be?		>80%	
Over how many years do yo	u predict th	ne decline	will occur? 10		
<b>5E. State the primary cause of th</b> Urban development, Urban sprav	_				
5F. Is there any change in the qu	uality of the	habitat w	here the Taxon occurs? • Yes	No ( Unk	known
If Yes, is the habitat quality:	<ul><li>Decl</li></ul>	ining	○ Improving		
5G. State the primary cause of the	his change:				
Urban sprawl, desert egredation	through live	stock dam	age		
6. Threats					
	Present	Future		Present	Future
Pollution			Disease		
Urban Development	$\boxtimes$	$\boxtimes$	Hybridization		
Road Kills			Decline in prey species		
Damming			Loss of habitat	$\boxtimes$	$\boxtimes$
War			Genetic problems		
Recreational activities			Grazing	$\bowtie$	$\boxtimes$
Hunting (recreation or retail)			Habitat fragmentation	$\bowtie$	$\boxtimes$
Harvest for medicine			Predation		
Harvest for food/timber			Interspecific competition		
Poisoning			Livestock competition (food, etc.)		
Pesticides			Livestock conflicts (retaliation kills)		
Persecution			Introduced species (non-livestock)		
Trade of animals/parts		$\boxtimes$	Nutritional disorders		
Other (please specify):					
<b>6B. Would these threats result in Comment:</b> Would not significantly affect			ed) population decline? Yes	lo 🔵 Unkr	nown
7. Trade					
7A. Is the Taxon in trade?   You lf Yes, is it:   Local	es No Regiona	◯ Unk I ◯ In	known ternational Commercial		
7B. Parts in trade:					
Skin Fur Meat Produc	cts 🔀	Hair Live Anim	Horn Bones  al Taxidermy Organs	☐ Gland	ls

Data Quality				
8A. Are the estimates you have s	upplied based on:			
Census or monitoring	☐ General field studies	⊠ Info	ormal field studies	∠ Literature
		⊠ Ind	irect information f	rom trade, etc.
Studies (field) conducted over	the last 10 years (indicate the year	er of study	not the year of nublica	ation):
Researchers	Location	Year	Topic	
Massa et Al: Snakes of Yemer				
. Conservation Status	<u> </u>			
· ,	Global: Not listed	Re	gional: Not listed	
10B. National Red Data Book: Not listed				
10C. Workshop Assessment of Re	egional Red List Category: Least	concern		
10D. CITES: Not listed				
<b>10E. National Wildife Legislation:</b> Not listed				
10F. Other Legislation (please speci	fy):			
10G. List existing Protected Area	s within the Taxon's range			
Protected Area			Country	Size (km²)
			<u> </u>	
10H. Recommended Protected A	reas for the Taxon:			_
Area			Country	Size (km²)
10I. Are there any Regional Cons	ervation/Protection Action Plans	s: () Ye	s O No	Unknown
If Yes, please list them:				
Comment to a December				
. Supporting Research				
11A. Is research recommended?	Yes No			
If Yes, what type of research	•			
Surveys	tics X Taxonomic	Life	History P	ublic Awareness
	toring Reintroduction	⊠ Hui	man Impact	
Other (please specify):				
. Management				
_	umanded for the Tayon?			
12A. What management is recom		_		10
Habitat management	☐ Wild population mana	gement	Captive bre	_
Monitoring	Translocation		Sustainable	
Public Awareness	Limiting Factor Manag		_	esearch Banking
Law Enforcement	Work in Local Commun	nities	Address Po	licy Makers
Other (please specify):				

13. Captive Breeding						
13A. Is captive breeding reco	mmended for the taxo	n: OYes	No			
13B. If captive breeding is rec	ommeded , is it for:					
☐ Species recovery ☐ Reintroduction ☐ Research ☐ I						
☐ Education ☐ Preserve live genome						
13C. Do Captive stocks alread	ly exist? Yes	○No ○Unl	known			
If Yes, list the facilities:						
Facility		Country	Males	Females	Unknown	Total
13D. Does a coordinated Spe	cies Management Plan	exist?  Yes	<ul><li>No</li></ul>	○ Unknov	vn	
If Yes, list the participatin	g institutions:					
Techniques not know	that should participate g recommended: gram not neccessary gram as it is  Intolement Int	e: ☐ Initiate tensify existing p eding? con ☐ Some te	rogram echniques a		rs se existing p or this or sim	
14. Sources/References (comple	ete citation):					
Egan, D. 2007. Snakes of Arabia. A	A field guide to the Snak	kes of the Arabian	Peninsula	and its Shore	es. Motivate F	Publishing.
Gasperetti, J. 1988. Snakes of Ara	bia. Fauna of Saudi Arak	oia 9: 169-450				
Schatte, B & Desvolgnes, A. 1999 d'Histoire Naturelle. Geneve.	The Herpetofauna of so	outhern Yemen a	nd the Soq	otra archipel	ago. Museur	n
Schatte, B & Gasparetti, J.A. Conti	ibution to the herpetof	auna of Southwe	stern Arabi	a. Fauna of S	audi Arabia. \	Vol 14



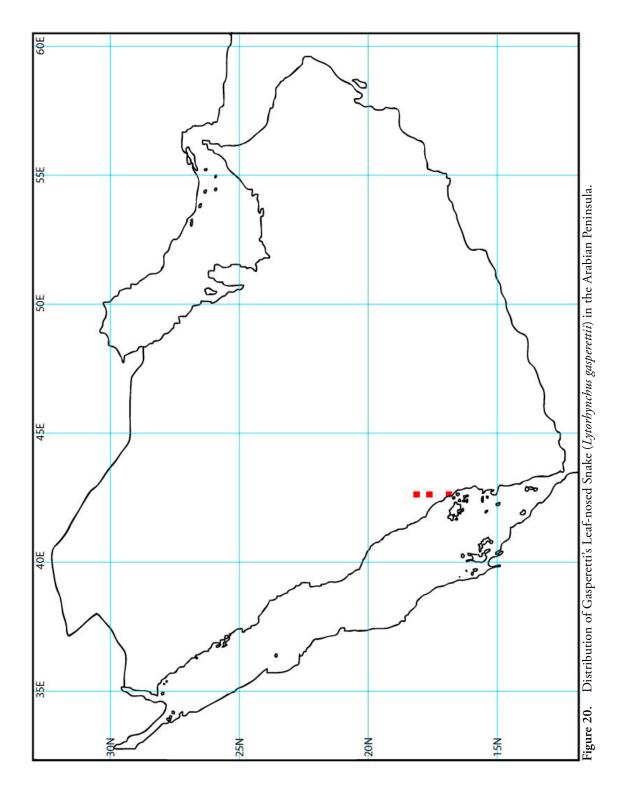
### <u>Conservation Workshop for the Fauna of Arabia</u> <u>Taxon Data Sheet</u>

Working Group: Snakes		Date: 3-5 February 2008
1. Taxonomy		
1A. Scientific Name (Genus, species & subspecies): Lytorhynchu	ıs gasperettii	
Authority: Leviton		<b>Date:</b> 1977
1B. Synonyms (with authority & date):		
1C. Common Name(s) with language/region: Gasperetti's leaf-nosed snake (English)		
2. Distribution		
<b>2A. Historical Distribution</b> (last 100 years): SW Saudi Arabia- Asir Mountains		
<b>2B. Current Distribution</b> (illustrate on map): See 2A		
<b>2C. Habitat of the taxon</b> (ecosystem level): SW Arabian foothills savannah		
2D. Habitat specificity (elevation, etc.):  Montane slopes and rocky valleys		
2E. Migration: Yes • No Unknown		
If Yes, describe:		
3. Number of Populations & Subpopulations in which t	he Taxon is distributed:	
Location of each:	Approx. Area Occupied	l: Approx. No. of Individuals:
SW Saudi Arabia	75km2	7 known to science
4. Population Trends	-	
4A. Is the Population: \(\cap \) Increasing \(\cap \) Decreasing \(\cap \)	Stable • Unknown	
4B. If declining, what has been the rate of decline? C<2		5 ()>80%
Over how many years has the population decline oc	cured?	
4C. If stable or unknown, do you predict a future decline	in the population size?	○ Yes
If Yes, please specify rate and factors e.g. habitat loss	s, trade, etc.:	
5. Habitat Status		
5A. Is the habitat distribution:   • Continuous  • Frag	mented ( Unknown	
5B. Is there any change in the range of the habitat where If Yes, is it: Decreasing in Area Increas	e the Taxon occurs? O	'es ● No ○ Unknown
5C. If decreasing what has been the decline? <20%	5	○ >80%
Over how many years has this decline occured?		

5D. Do you predict a future decli If Yes, what do you predict th Over how many years do you	nat decline	will be?		>80%	
5E. State the primary cause of thi	s change:				
5F. Is there any change in the quality:  1f Yes, is the habitat quality:  5G. State the primary cause of the	O Decl		ere the Taxon occurs? Yes • Improving	No OUnk	known
6. Threats					
Pollution Urban Development Road Kills Damming War Recreational activities Hunting (recreation or retail) Harvest for medicine Harvest for food/timber Poisoning Pesticides Persecution Trade of animals/parts Other (please specify):	Present	Future	Disease Hybridization Decline in prey species Loss of habitat Genetic problems Grazing Habitat fragmentation Predation Interspecific competition Livestock competition (food, etc.) Livestock conflicts (retaliation kills) Introduced species (non-livestock) Nutritional disorders	Present	Future
Comment:			I) population decline?    Yes   Notentially detrimental to the taxon	√lo ( Unkr	าown
7. Trade					
7B. Parts in trade:  Skin Fur	Regiona	Hair	ernational Commercial  Horn Bones	☐ Gland	ds
☐ Meat ☐ Product  Comments/Other threats (ple		Live Anima	I 🔲 Taxidermy 🔲 Organs		

B. Data Quality				
8A. Are the estimates you have s	upplied based on:			
Census or monitoring	☐ General field studies	⊠ Info	rmal field studies	∠ Literature
Hearsay/popular belief	☐ Museum studies/records	☐ Ind	irect information	from trade, etc.
Studies (field) conducted over	the last 10 years (indicate the year	ır of study ı	not the vear of public	cation):
Researchers	Location	Year	Topic	,
0. Conservation Status			_	
10A. IUCN Red List Category:	Global: Not listed	Re	gional: Not listed	
10B. National Red Data Book: Not listed	Globali Not iisted	iic	gionali Hot iistea	
10C. Workshop Assessment of Re	egional Red List Category: Vulne	erable		
10D. CITES: Not listed				
<b>10E. National Wildife Legislation:</b> Not listed				
10F. Other Legislation (please spec	ify):			
10G. List existing Protected Area	s within the Taxon's range:			
Protected Area			Country	Size (km²)
10H. Recommended Protected A	reas for the Taxon:			
Area			Country	Size (km²)
10I. Are there any Regional Cons	orgation/Protection Action Plans	- O Vo	s	
• -	ervation/Protection Action Plans	s: O re	S ( NO	Olikilowii
If Yes, please list them:				
I. Supporting Research				
11A. Is research recommended?				
If Yes, what type of research	0 111			
Surveys Gene	•	⊠ Life	History 🔲 I	Public Awareness
	itoring Reintroduction		nan Impact	
Other (please specify):	nemitroduction	Z Hai	puct	
2. Management				
12A. What management is recom	nmended for the Taxon?			
Habitat management	☐ Wild population manag	gement	Captive br	reeding
Monitoring	☐ Translocation		Sustainabl	e Use
Public Awareness	Limiting Factor Manage	ement	⊠ Genome R	esearch Banking
Law Enforcement	Work in Local Commur	nities	Address Po	olicy Makers
Other (please specify):				

13. Captive Breeding							
13A. Is captive breeding reco	mmended for the taxor	n: OYes	No				
13B. If captive breeding is recommeded, is it for:							
☐ Species recovery ☐ Reintroduction ☐ Research ☐ Husbandry							
☐ Education ☐ Preserve live genome							
13C. Do Captive stocks alread	dy exist? Yes	No OUn	known				
If Yes, list the facilities:							
Facility		Country	Males	Females	Unknown	Total	
13D. Does a coordinated Spe	cios Managomont Plan	ovist? O Vos	● No	Unknow			
If Yes, list the participatir	_	exist: () res	( NO	Olikilow	VII		
ii res, iist the participatii	ig matications.						
If Not, is a Species Manag	gement Plan recommen	ded: OYes	<ul><li>No</li></ul>				
If Yes, list the institutions	that should participate	:					
13E. Level of captive breedin	g recommended:						
Captive breeding pro	gram not neccessary	Initiate	program	within 3 yea	rs		
Maintain existing pro	ogram as it is 🔲 Inte	ensify existing p	rogram	Decrea	se existing p	rogam	
13F. Are the techniques esta	olished for captive breed	ding?					
Techniques are know	vn for this or similar taxo	on Some te	chniques a	are known fo	or this or sim	ilar taxon	
Techniques not know	wn for this or simialr tax	on 🛛 Unknow	/n				
14 C							
14. Sources/References (complete of Arabia		as of the Arabian	Doningula	and its Chars	os Mativata F	) ubliching	
Egan, D. 2007. Snakes of Arabia.	A field guide to the shake	es of the Arabian	Periirisula	and its snore	es. Motivate r	ublishing.	
Comparatti I 1000 Control of Aug	bio Formo of Corrdi Arabi	0.160 450					
Gasperetti, J. 1988. Snakes of Arabia. Fauna of Saudi Arabia 9:169-450							
Schatte, B & Gasparetti, J.A. Cont	ribution to the herpetofa	una of Southwe	stern Arabi	a. Fauna of S	audi Arabia. \	/ol.14	
15. Compilers							
•	onv Phelps. Declan O'Dor	novan. Gavin Nel	. Saud A. Al	Farrai, Pritna	al Soorae. Fha	ıd Fid.	
/illiam Branch, Damien Egan, Tony Phelps, Declan O'Donovan, Gavin Nel, Saud A. Al Farraj, Pritpal Soorae, Ehad Eid, aithem Al Aamri, Peter Arras, Neelofa Ali, Masaa Al Jumaily, Khaled Al Rasbi and Patrick Paillat							

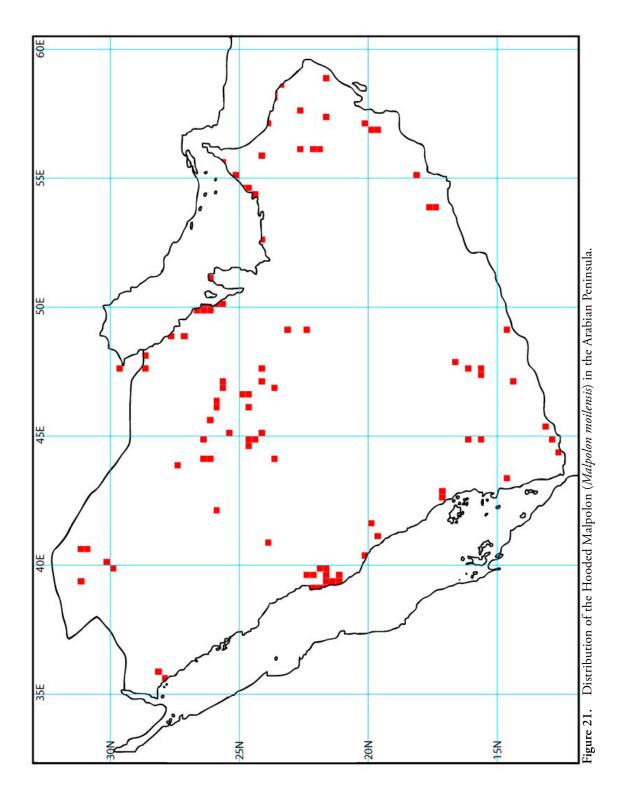


Working Group: Snakes		Date: 3-5 February 2008
1. Taxonomy		
1A. Scientific Name (Genus, species & subspecies): Malpoloi	n moilensis	
Authority: Reuss		<b>Date:</b> 1834
1B. Synonyms (with authority & date):		
1C. Common Name(s) with language/region: Hooded malpolon, Moila snake, False cobra (English)		
2. Distribution		
<b>2A. Historical Distribution</b> (last 100 years):  NW Africa to Middle East- Throughout Arabian Peninsu	ıla in suitable habitat	
<b>2B. Current Distribution</b> (illustrate on map): See 2A		
2C. Habitat of the taxon (ecosystem level):  Arabian desert and east Sahero-Arabian xeric woodland Arabian foothills savannah. Gulf of Oman desert and ser		opical desert and semi-desert. SW
2D. Habitat specificity (elevation, etc.): Sand and gravel desert from sea level to 2000m+		
2E. Migration: Yes • No Unknown		
If Yes, describe:		
3. Number of Populations & Subpopulations in which	th the Taxon is distribute	d:
Location of each:	Approx. Area Occupi	ed: Approx. No. of Individuals:
Throughout the Arabian Peninsula	2650km2	Unknown
4. Population Trends		
4A. Is the Population: \(\) Increasing \(\) Decreasing	Stable  ☐ Unknown	
4B. If declining, what has been the rate of decline?		0% ()>80%
Over how many years has the population decline	occured?	
4C. If stable or unknown, do you predict a future decl		' ∩ Yes
If Yes, please specify rate and factors e.g. habitat		
5. Habitat Status		
5A. Is the habitat distribution:   Continuous  F	ragmented ( Unknown	1
5B. Is there any change in the range of the habitat what If Yes, is it:   Decreasing in Area  Increase.	nere the Taxon occurs? •	Yes No Unknown
5C. If decreasing what has been the decline? • <2	•	% ( >80%
Over how many years has this decline occured?		0 :

5D. Do you predict a future decli If Yes, what do you predict th Over how many years do you	nat decline	will be?		>80%	
<b>5E. State the primary cause of thi</b> Urban sprawl and Urban develop	_				
5F. Is there any change in the qu If Yes, is the habitat quality: 5G. State the primary cause of th Urban sprawl, development, over-	<ul><li>Decl</li><li>is change:</li></ul>		here the Taxon occurs? • Yes  Improving	No ○Unl	known
6. Threats					
Pollution Urban Development Road Kills Damming War Recreational activities Hunting (recreation or retail) Harvest for medicine Harvest for food/timber Poisoning Pesticides Persecution Trade of animals/parts Other (please specify):	Present	Future	Disease Hybridization Decline in prey species Loss of habitat Genetic problems Grazing Habitat fragmentation Predation Interspecific competition Livestock competition (food, etc.) Livestock conflicts (retaliation kills) Introduced species (non-livestock) Nutritional disorders	Present	
Comment: Non-specific habitat requiren			d) population decline? C Yes	o ( Unkı	nown
7. Trade  7A. Is the Taxon in trade? • Ye  If Yes, is it: Local •  7B. Parts in trade:  Skin Fur  Meat Product  Comments/Other threats (ple	Regiona  □ ts   □	○ Unk I <b>⑥</b> Int Hair Live Anima	ternational Commercial	☐ Gland	ds

8. Data Quality			
8A. Are the estimates you have s	upplied based on:		
Census or monitoring	☐ General field studies		d studies 🔀 Literature
Hearsay/popular belief	☐ Museum studies/records		ormation from trade, etc.
9. Studies (field) conducted over	the last 10 years (indicate the year	or of study not the ve	ar of publication)*
Researchers	Location	Year Topic	
Masa et al. Snakes of Yemen	Location	Teal Topic	
10. Conservation Status			
10A. IUCN Red List Category: (	Global: Not listed	Regional: 1	Not listed
10B. National Red Data Book: Not listed	Siobali Moc Istea	negronan i	to instead
10C. Workshop Assessment of Re	gional Red List Category: Least	concern	
10D. CITES: Not listed			
<b>10E. National Wildife Legislation:</b> Not listed			
10F. Other Legislation (please speci	fy):		
10G. List existing Protected Area  Protected Area  All protected areas within the		Counti	ry Size (km²)
10H. Recommended Protected A Area	reas for the Taxon:	Count	ry Size (km²)
10I. Are there any Regional Const	ervation/Protection Action Plans	S: Yes •	No C Unknown
11. Supporting Research			
11A. Is research recommended?	• Yes No		
If Yes, what type of research	would you recommend?		
☐ Surveys ⊠ Gene	tics X Taxonomic	Life History	Public Awareness
Trade Moni	toring Reintroduction	Human Imp	act
Other (please specify):			
12. Management			
12A. What management is recom	mended for the Taxon?		
Habitat management	☐ Wild population mana	gement 🕅 C	Captive breeding
Monitoring	☐ Translocation	_	Sustainable Use
Public Awareness	Limiting Factor Manag		Genome Research Banking
☐ Law Enforcement	☐ Work in Local Commur	<u>—</u>	Address Policy Makers
Other (please specify):			•

13. Captive Breeding					
13A. Is captive breeding recommended for the taxon:	• Yes	○No			
13B. If captive breeding is recommeded, is it for:					
☐ Species recovery ☐ Reintroduction ☐ Research ☐ Husbandry					
⊠ Education					
	No OUnl	known			
If Yes, list the facilities:					
Facility	Country	Males	Females	Unknown	Total
BCEAW	UAE	?	?	?	?
13D. Does a coordinated Species Management Plan e If Yes, list the participating institutions:	exist?  Yes	<b>●</b> No	○ Unknov	vn	
If Not, is a Species Management Plan recommend		<ul><li>No</li></ul>			
If Yes, list the institutions that should participate:					
13E. Level of captive breeding recommended:  ☐ Captive breeding program not neccessary ☐ Maintain existing program as it is ☐ Inte  13F. Are the techniques established for captive breed	nsify existing p	-	within 3 yea	rs se existing p	orogam
☐ Techniques are known for this or similar taxo ☐ Techniques not known for this or similar taxo	n Some te		are known fo	or this or sim	ilar taxon
14. Sources/References (complete citation):					
Egan, D. 2007. Snakes of Arabia. A field guide to the Snake	s of the Arabian	Peninsula	and its Shore	es. Motivate F	Publishing.
Gasperetti, J. 1988. Snakes of Arabia. Fauna of Saudi Arabia	a 9:169-450				
Schatte, B & Desvolgnes, A. 1999. The Herpetofauna of soud'Histoire Naturelle. Geneve.	uthern Yemen a	nd the Soq	otra archipel	ago. Museun	n
Schatte, B & Gasperetti, J.A. Contribution to the herpetofal	una of Southwe	stern Arabia	a. Fauna of S	audi Arabia. \	Vol. 14
Van der Kooij, J. 2001. The Herpetofauna of the Sultinate o	of Oman. Part 4: <sup>-</sup>	Terrestrial S	nakes. Poda	rcus.	
Werner, Y.L. 1991. Notable Herpetofaunal Records from Tr	ansJordan. Zool	ogy in the I	Middle East.	Vol 5: 37-41	
15. Compilers					

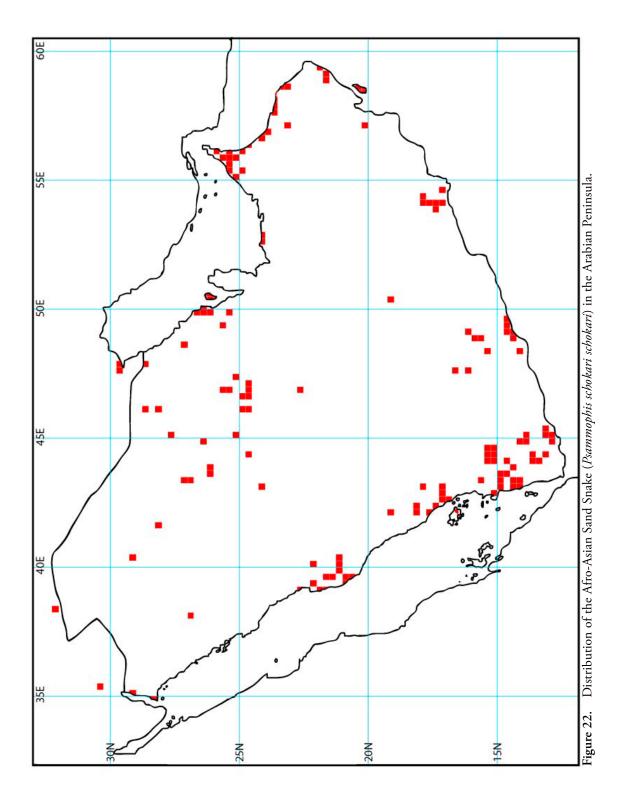


Working Group: Snakes	Date: 3-5 February 2008
1. Taxonomy	
1A. Scientific Name (Genus, species & subspecies): Psammoph	nis schokari schokari
Authority: (Forskal)	<b>Date:</b> 1775
1B. Synonyms (with authority & date):	
1C. Common Name(s) with language/region: Afro-Asian sand snake (English)	
2. Distribution	
<b>2A. Historical Distribution</b> (last 100 years): NW Africa through Middle East as far as Nepal	
<b>2B. Current Distribution</b> (illustrate on map): See 2A	
<b>2C. Habitat of the taxon</b> (ecosystem level): Varied: Arabian Desert and east Sahero-Arabian xeric wood desert. Southwestern Arabian foothills savannah; Gulf of Control of Cont	
2D. Habitat specificity (elevation, etc.): All elevations- Non-specific habitat requirements	
2E. Migration: Yes • No Unknown	
If Yes, describe:	
3. Number of Populations & Subpopulations in which	the Taxon is distributed:
Location of each:	Approx. Area Occupied: Approx. No. of Individuals:
Throughout the Arabian Peninsula	
4. Population Trends	
4A. Is the Population: \(\) Increasing \(\) Decreasing (	Stable O Unknown
4B. If declining, what has been the rate of decline?	:20%
Over how many years has the population decline o	ccured?
4C. If stable or unknown, do you predict a future declin	e in the population size? Yes • No
If Yes, please specify rate and factors e.g. habitat lo	ss, trade, etc.:
5. Habitat Status	
5A. Is the habitat distribution:   Continuous  Fra	gmented ( Unknown
5B. Is there any change in the range of the habitat whe	re the Taxon occurs? Yes • No Unknown
	asing in Area %
5C. If decreasing what has been the decline? <a></a> < < 20' Over how many years has this decline occured?	% ( >20% ( >50% ( >80%

5D. Do you predict a future decli If Yes, what do you predict the Over how many years do you 5E. State the primary cause of the	nat decline u predict th	will be?	○ <20% ○ >20% ○ >50% ○	>80%	
	ality of the  Decli is change:	ining	rhere the Taxon occurs? ● Yes ○ N ○ Improving	No ⊜Unł	known
6. Threats	Present	Future		Present	Future
Pollution Urban Development Road Kills Damming War Recreational activities Hunting (recreation or retail) Harvest for medicine Harvest for food/timber Poisoning Pesticides Persecution Trade of animals/parts Other (please specify):			Disease Hybridization Decline in prey species Loss of habitat Genetic problems Grazing Habitat fragmentation Predation Interspecific competition Livestock competition (food, etc.) Livestock conflicts (retaliation kills) Introduced species (non-livestock) Nutritional disorders		
6B. Would these threats result in Comment:	(perceived	l or inferre	ed) population decline? O Yes	o 🔿 Unki	nown
7. Trade  7A. Is the Taxon in trade? • Ye  If Yes, is it: Local (  7B. Parts in trade:  Skin Fur  Meat Product  Comments/Other threats (ple	Regiona  Lts   Regiona	○ Unk I <b>⑥</b> In Hair Live Anim	ternational Commercial  Horn Bones	☐ Gland	ds

8. Data Quality				
8A. Are the estimates you have supp	lied based on:			
Census or monitoring	General field studies		mal field studies	∠ Literature
Hearsay/popular belief	Museum studies/records		ect information fro	m trade, etc.
9. Studies (field) conducted over the	last 10 years (indicate the yea	r of study no	ot the year of publicati	on):
Researchers	Location	Year	Topic	
Masa et al Snakes in Yemen				
10. Conservation Status				
10A. IUCN Red List Category: Glob	oal: Not listed	Rea	ional: Not listed	
10B. National Red Data Book: Not listed		- 3		
10C. Workshop Assessment of Regio	nal Red List Category: Least	concern		
10D. CITES: Not listed	3 ,			
<b>10E. National Wildife Legislation:</b> Not listed				
10F. Other Legislation (please specify):				
10G. List existing Protected Areas wi Protected Area  All protected area within the regi			Country	Size (km²)
— — — — — — — — — — — — — — — — — — —	OII			
10H. Recommended Protected Area: Area	s for the Taxon:		Country	Size (km²)
10I. Are there any Regional Conserva If Yes, please list them:	ation/Protection Action Plans	: O Yes	● No (	Unknown
11. Supporting Research				
11A. Is research recommended?	Yes O No			
If Yes, what type of research wou	uld you recommend?			
☐ Surveys ☐ Genetics		Life l	History 🔲 Pul	blic Awareness
☐ Trade ☐ Monitori	ng Reintroduction	Hum	an Impact	
Other (please specify):				
12. Management				
12A. What management is recomme	ended for the Taxon?			
Habitat management	☐ Wild population mana	gement		eding
Monitoring	☐ Translocation	J	Sustainable	_
☐ Public Awareness	☐ Limiting Factor Manag	ement		search Banking
Law Enforcement	☐ Work in Local Commu		Address Pol	_
Other (please specify):		-		,

13. Captive Breeding					
13A. Is captive breeding recommended for the taxon 13B. If captive breeding is recommeded, is it for:	: • Yes	○ No			
☐ Species recovery ☐ Reintroduction ☐ Preserve live genor				Husbandry	
Facility	Country	Males	Females	Unknown	Total
BCEAW	UAE	?	?		?
13D. Does a coordinated Species Management Plan 6 If Yes, list the participating institutions:	exist? \( \text{Yes}	● No	OUnknow	/n	
If Not, is a Species Management Plan recommend If Yes, list the institutions that should participate:		<ul><li>No</li></ul>			
13E. Level of captive breeding recommended:  ☐ Captive breeding program not neccessary  ☐ Maintain existing program as it is  ☐ Intel  13F. Are the techniques established for captive breed  ☐ Techniques are known for this or similar taxo  ☐ Techniques not known for this or similar taxo	ensify existing politing?  In Some te	rogram chniques a	_	se existing p	
<b>14. Sources/References (complete citation):</b> Egan, D. 2007. Snakes of Arabia. A field guide to the Snake Publishing.	es of the Arabian	Peninsula	and its Shor	es. Motivate	
Gasperetti, J. 1988. Snakes of Arabia. Fauna of Saudi Arabia	a 9: 169-450				
Schatte, B & Desvolgnes, A. 1999. The Herpetofauna of soid d'Histoire Naturelle. Geneve.	uthern Yemen ar	nd the Soq	otra archipel	ago. Museur	n
Schatte, B & Gasparetti, J.A. Contribution to the herpetofa	una of Southwes	tern Arabia	a. Fauna of S	audi Arabia V	/ol 14.
Van der Kooij, J. 2001. The Herpetofauna of the Sultinate of	of Oman. Part 4: 1	errestrial S	nakes. Podai	Cus.	
Werner, Y.L. 1991. Notable Herpetofaunal Records from T	ransJordan. Zoc	logy in the	e Middle Eas	t. Vol5:37-41	

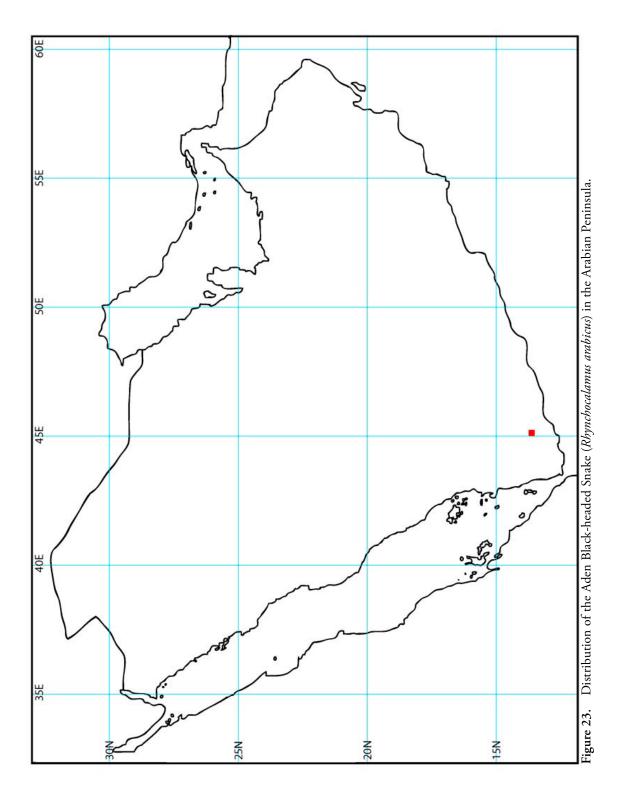


Working Group: Snakes	Date: 3-5 February 2008	
1. Taxonomy		
1A. Scientific Name (Genus, species & subspecies): Rhynchocalamus a	arabicus	
Authority: Schmidt	<b>Date:</b> 1933	
1B. Synonyms (with authority & date):		
1C. Common Name(s) with language/region: Aden black-headed sea snake		
2. Distribution		
<b>2A.</b> Historical Distribution (last 100 years): Single specimen known from general vicinity of Aden		
<b>2B.</b> Current Distribution (illustrate on map): See 2A		
2C. Habitat of the taxon (ecosystem level): Unknown		
2D. Habitat specificity (elevation, etc.): Unknown		
2E. Migration: Yes • No Unknown		
If Yes, describe:		
ii respuesense.		
3. Number of Populations & Subpopulations in which the Tax	xon is distributed:	
Location of each: App	orox. Area Occupied: Approx. No. of Individua	als:
Specimen found near Aden	1	
4. Population Trends		
4A. Is the Population: Olncreasing ODecreasing OStable	e <b>©</b> Unknown	
4B. If declining, what has been the rate of decline? ○ <20%	>20% >50% >80%	
Over how many years has the population decline occured:	?	
4C. If stable or unknown, do you predict a future decline in the	e population size? Yes • No	
If Yes, please specify rate and factors e.g. habitat loss, trade	e, etc.:	
5. Habitat Status		
5A. Is the habitat distribution: Continuous Fragmente	ed 💿 Unknown	
5B. Is there any change in the range of the habitat where the T	Taxon occurs?  Yes  No  Unknown	1
If Yes, is it: O Decreasing in Area Increasing in		
5C. If decreasing what has been the decline? < <20% Over how many years has this decline occured?	>20% ( )>50% ( )>80%	

nat decline	will be?	○ <20% ○ >20% ○ >50% ○	>80%	
s change:				
O Decl		here the Taxon occurs? ( ) Yes ( )	No	known
		Disease Hybridization Decline in prey species Loss of habitat Genetic problems Grazing Habitat fragmentation Predation Interspecific competition Livestock competition (food, etc.) Livestock conflicts (retaliation kills) Introduced species (non-livestock) Nutritional disorders		Future
(perceived	l or inferre	d) population decline?	o 🖲 Unk	nown
Regiona  I	l ○ In·	ternational Commercial	☐ Gland	ds
	predict the predic	predict the decline s change:  ality of the habitat w Declining is change:  Present Future  Pr	anat decline will be?	ant decline will be? < <20%

8. Data Quality				
8A. Are the estimates you have su	pplied based on:			
Census or monitoring	☐ General field studies	☐ Inform	mal field studies	∠ Literature
Hearsay/popular belief	☐ Museum studies/records	Indir	ect information f	rom trade, etc.
9. Studies (field) conducted over t	he last 10 years (indicate the yea	r of study no	ot the year of public	ation):
Researchers	Location	Year	Topic	
10. Conservation Status				
10A. IUCN Red List Category: G	lobal: Not listed	Regi	ional: Not listed	
<b>10B. National Red Data Book:</b> Not listed				
10C. Workshop Assessment of Reg	gional Red List Category: Data	deficient		
10D. CITES: Not listed				
<b>10E. National Wildife Legislation:</b> Not listed				
10F. Other Legislation (please specify	y):			
10G. List existing Protected Areas	within the Taxon's range:			
Protected Area			Country	Size (km²)
10H. Recommended Protected Ar	eas for the Taxon:			
Area			Country	Size (km²)
101. Are there any Regional Conse	rvation/Protection Action Plans	· O Yes	No	
If Yes, please list them:	rvation/11otection/Action/11ans	j. () ies	(c) 11.0	O GIMILOWIII
71				
11. Supporting Research				
11A. Is research recommended?				
If Yes, what type of research w	<u></u>		— -	
Surveys Genet		∑ Life F	_	ublic Awareness
☐ Trade ☐ Monit ☐ Other (please specify):	oring Reintroduction	⊠ Hum	an Impact	
Citier (please specify):				
12. Management				
12A. What management is recom	mended for the Taxon?			
Habitat management	☐ Wild population mana	gement	Captive b	reeding
Monitoring	☐ Translocation		Sustainab	le Use
Public Awareness				Research Banking
Law Enforcement	Work in Local Commu	nities	Address P	olicy Makers
Other (please specify):				

13. Captive Breeding					
13A. Is captive breeding recommended for the tax	xon: OYes	<ul><li>No</li></ul>			
13B. If captive breeding is recommeded , is it for:					
☐ Species recovery ☐ Reintroduction	☐ Rese	earch		Husbandry	
☐ Education ☐ Preserve live ge	enome				
13C. Do Captive stocks already exist? Yes	○ No ○ Ur	nknown			
If Yes, list the facilities:					
Facility	Country	Males	Females	Unknown	Total
13D. Does a coordinated Species Management Plant If Yes, list the participating institutions:	an exist? Yes	● No	O Unknow	 /n	
If Not, is a Species Management Plan recomm		<ul><li>No</li></ul>			
13E. Level of captive breeding recommended:					
Captive breeding program not neccessary	/ Initiat	e program	within 3 yea	rs	
Maintain existing program as it is	Intensify existing	program	☐ Decrea	se existing p	rogam
13F. Are the techniques established for captive br	eeding?				
Techniques are known for this or similar t	axon 🔲 Some t	echniques a	are known fo	or this or sim	ilar taxon
Techniques not known for this or simialr	taxon 🔀 Unkno	wn			
14. Sources/References (complete citation):					



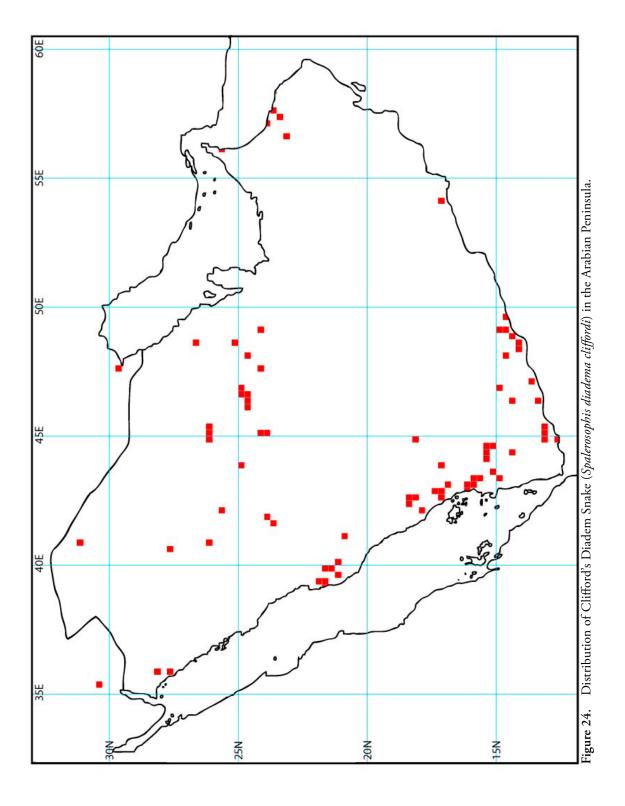
Working Group: Snakes		Date: 3-5 February 2008
1. Taxonomy		
1A. Scientific Name (Genus, species & subspecies): Spalerosophis	diadema cliffordi	
Authority: Schlegel		<b>Date:</b> 1837
1B. Synonyms (with authority & date):		
1C. Common Name(s) with language/region: Clifford's diadem snake, Diadem rat snake		
2. Distribution		
<b>2A. Historical Distribution</b> (last 100 years): From North Africa to Iran and throughout Arabia in suitable	habitat	
<b>2B. Current Distribution</b> (illustrate on map): See 2A		
<b>2C. Habitat of the taxon</b> (ecosystem level): Varied: Arabian Desert and east Sahero-Arabian xeric woodl desert; Southwestern Arabian foothills savannah; Southwest		•
2D. Habitat specificity (elevation, etc.): From sea level to more than 3000m a.s.l. Found in most rock	ky habitats	
2E. Migration: Yes No Unknown		
If Yes, describe:		
,		
3. Number of Populations & Subpopulations in which th	e Taxon is distributed:	
Location of each:	Approx. Area Occupied	l: Approx. No. of Individuals:
Throughout the Arabian Peninsula in suitable habitat	1850km2	Unknown
4. Population Trends		
<ul> <li>4A. Is the Population:  Decreasing  Decreasing  Secretary</li> <li>4B. If declining, what has been the rate of decline?  &lt;20</li> <li>Over how many years has the population decline occ</li> <li>4C. If stable or unknown, do you predict a future decline in the secretary of the secretary</li></ul>	0% >20% >50% ured?  n the population size?	
5. Habitat Status		
5A. Is the habitat distribution:   • Continuous  • Fragn	nented ( Unknown	
5B. Is there any change in the range of the habitat where If Yes, is it:   Decreasing in Area Increasi		es No Unknown
5C. If decreasing what has been the decline?    Over how many years has this decline occured?		○ >80%

5D. Do you predict a future dec	line in the h	abitiat?	• Yes No		
If Yes, what do you predict	that decline	will be?	<b>●</b> <20% ○ >20% ○ >50% ○	>80%	
Over how many years do yo	ou predict th	ne decline	will occur? 10		
<b>5E. State the primary cause of tl</b> Urban development and rock qu	_				
, , , , , , , , , , , , , , , , , , , ,	•			No OUnl	known
If Yes, is the habitat quality:		ining	Improving		
<b>5G. State the primary cause of t</b> Urban development and rock qu	_				
6. Threats					
	Present	Future		Present	Future
Pollution			Disease		
Urban Development	$\boxtimes$	$\boxtimes$	Hybridization		
Road Kills			Decline in prey species		
Damming			Loss of habitat	$\boxtimes$	$\boxtimes$
War			Genetic problems		
Recreational activities			Grazing		
Hunting (recreation or retail)			Habitat fragmentation		$\boxtimes$
Harvest for medicine			Predation		
Harvest for food/timber			Interspecific competition		
Poisoning			Livestock competition (food, etc.)		
Pesticides			Livestock conflicts (retaliation kills)		
Persecution			Introduced species (non-livestock)		
Trade of animals/parts			Nutritional disorders		
Other (please specify):					
6B. Would these threats result in Comment:	n (perceivec	l or inferre	d) population decline? C Yes . N	o 🔿 Unki	nown
7. Trade					
7A. Is the Taxon in trade?   If Yes, is it:   Local	es \( \) No \( \) Regiona	◯ Unk I ⊚ Int	nown ternational Commercial		
7B. Parts in trade:					
Skin Fur Meat Produ Comments/Other threats (p	cts 🖂	Hair Live Anima	Horn Bones  al Taxidermy Organs	☐ Gland	ls

8. Data Quality						
8A. Are the estimates you have su	upplied based on:					
<ul><li>☐ Census or monitoring</li><li>☐ General field studies</li><li>☐ Museum studies/records</li></ul>						
			rect information f	from trade, etc.		
9. Studies (field) conducted over	the last 10 years (indicate the yea	r of study n	ot the year of public	ation):		
Researchers	Location	Year	Topic			
10. Conservation Status	<del></del>					
10A. IUCN Red List Category: (	Global: Not listed	Red	gional: Not listed			
10B. National Red Data Book: Not listed						
10C. Workshop Assessment of Re	gional Red List Category: Least	concern				
10D. CITES: Not listed						
<b>10E. National Wildife Legislation:</b> Not listed						
10F. Other Legislation (please specif	ý):					
10G. List existing Protected Areas Protected Area	within the Taxon's range:		Country	Size (km²)		
At Taysiya ,Al Kunfah, Al Tubay	/q		KSA			
10H. Recommended Protected A	reas for the Taxon:			-		
Area		-	Country	Size (km²)		
				_		
10I. Are there any Regional Conse	ervation/Protection Action Plans	: O Yes	⊙ No	Unknown		
If Yes, please list them:						
11. Supporting Research						
11A. Is research recommended?						
If Yes, what type of research v	would you recommend?					
☐ Surveys ☐ Gener	tics X Taxonomic	Life	History 🔲 P	Public Awareness		
☐ Trade ☐ Monit	coring Reintroduction	☐ Hun	nan Impact			
Other (please specify):						
12. Management						
12A. What management is recom	mended for the Taxon?					
☐ Habitat management	☐ Wild population manag	gement		eeding		
☐ Monitoring	☐ Translocation	-	Sustainable	_		
☐ Public Awareness	Limiting Factor Manage	ement	☐ Genome R	esearch Banking		
Law Enforcement	☐ Work in Local Commur			olicy Makers		
Other (please specify):						

13. Captive Breeding					
13A. Is captive breeding recommended for the taxon:	• Yes	○ No			
13B. If captive breeding is recommeded, is it for:					
Species recovery Reintroduction	⊠ Resea	rch		Husbandry	
⊠ Education					
, ,	No OUnl	nown			
If Yes, list the facilities:					
Facility	Country	Males	Females	Unknown	Total
BCEAW	UAE	?	?	?	?
13D. Does a coordinated Species Management Plan e If Yes, list the participating institutions:	exist?  Yes	● No	○ Unknow	vn	
If Not, is a Species Management Plan recommend	led: OYes	<ul><li>No</li></ul>			
If Yes, list the institutions that should participate:					
13E. Level of captive breeding recommended:  ☐ Captive breeding program not neccessary ☐ Maintain existing program as it is ☐ Inte  13F. Are the techniques established for captive breed ☐ Techniques are known for this or similar taxo ☐ Techniques not known for this or similar taxo	nsify existing politing?  Ing?  Some te	rogram chniques a	_	se existing p	
14. Sources/References (complete citation):					
Egan, D. 2007. Snakes of Arabia. A field guide to the Snake	s of the Arabian	Peninsula	and its Shore	es. Motivate F	Publishing.
Gasperetti, J. 1988. Snakes of Arabia. Fauna of Saudi Arabia	a 9: 169-450.				
Schatte, B & Desvolgnes, A. 1999. The Herpetofauna of sou d'Histoire Naturelle. Geneve	uthern Yemen ar	nd the Soq	otra archipel	ago. Museun	n
Schatte, B & Gasparetti, J.A. Contribution to the herpetofac	una of Southwes	stern Arabia	a. Fauna of S	audi Arabia. \	/ol 14.
Van der Kooij, J. 2001. The Herpetofauna of the Sultinate of	of Oman. Part 4: 1	Terrestrial S	nakes. Poda	rcus.	
Werner, Y.L. 1991. Notable Herpetofaunal Records from Tr	ansJordan. Zool	ogy in the I	Middle East. '	Vol.5 37-41	
15. Compilers					

#### 15

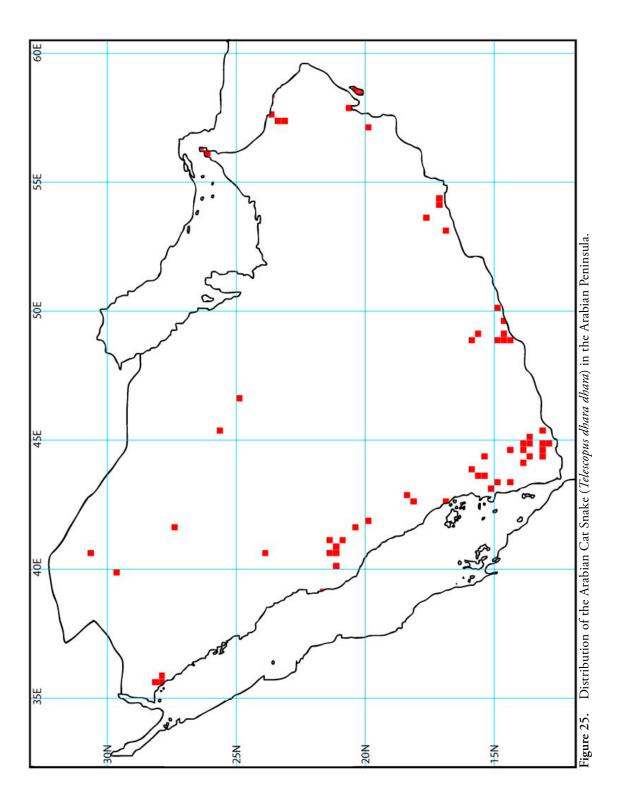


Working Group: Snakes	ſ	Date: 3-5 February 2008
1. Taxonomy		
1A. Scientific Name (Genus, species & subspecies): Telescopus	s dhara dhara	
Authority: (Forskal)		<b>Date:</b> 1775
1B. Synonyms (with authority & date):		
1C. Common Name(s) with language/region: Arabian cat snake		
2. Distribution		
<b>2A. Historical Distribution</b> (last 100 years): North and East Africa through to the Middle East. In Arab mountains around Riyadh	oia, known from the mountain	periphery and Central
<b>2B. Current Distribution</b> (illustrate on map): See 2A		
<b>2C. Habitat of the taxon</b> (ecosystem level):  Varied: Arabian Desert and east Sahero-Arabian xeric wo desert; Southwestern Arabian savannah; Southwestern A		
2D. Habitat specificity (elevation, etc.): All elevations in rocky or gravel plain. Non-specific habita	at requirements.	
2E. Migration: Yes No Unknown		
If Yes, describe:		
3. Number of Populations & Subpopulations in which	the Taxon is distributed:	
Location of each:	Approx. Area Occupied:	Approx. No. of Individuals:
Mountain Periphery and central mountains	26550km2	
4. Population Trends		
4A. Is the Population: \(\int\) Increasing \(\int\) Decreasing (	● Stable	
48. If declining, what has been the rate of decline?		C > 800%
Over how many years has the population decline:		<b>0</b> 200%
4C. If stable or unknown, do you predict a future declir		Yes • No
If Yes, please specify rate and factors e.g. habitat lo	oss, trade, etc.:	
5. Habitat Status		
5A. Is the habitat distribution:   Continuous  Fra	agmented ( Unknown	
5B. Is there any change in the range of the habitat who	ere the Taxon occurs?	es 🔿 No 💍 Unknown
If Yes, is it:   Decreasing in Area  Incre	easing in Area	

5C. If decreasing what has been Over how many years has t					
5D. Do you predict a future dec If Yes, what do you predict Over how many years do yo	that decline	will be?	• <20% \( >20\) \( >50\)	>80%	
<b>5E. State the primary cause of tl</b> Urban development, quarrying	nis change:				
5F. Is there any change in the q	<ul><li>Decli</li></ul>		ere the Taxon occurs?	No ( Unk	(nown
<b>5G. State the primary cause of t</b> Quarrying and Urban developm	_				
6. Threats					
	Present	Future		Present	Future
Pollution			Disease		
Urban Development	$\boxtimes$	$\boxtimes$	Hybridization		
Road Kills			Decline in prey species		
Damming			Loss of habitat		
War  Recreational activities			Genetic problems		
Hunting (recreation or retail)			Grazing  Habitat fragmentation		
Harvest for medicine			Predation		
Harvest for food/timber			Interspecific competition		
Poisoning			Livestock competition (food, etc.)		
Pesticides			Livestock conflicts (retaliation kills)		
Persecution			Introduced species (non-livestock)		
Trade of animals/parts			Nutritional disorders		
Other (please specify):					
6B. Would these threats result in Comment:	n (perceived	or inferred	) population decline? ( Yes • No	o ( Unkı	nown
7. Trade					
7A. Is the Taxon in trade?   Y	es 🔘 No	O Unkn	own		
If Yes, is it: C Local	Regional	l • Inte	ernational Commercial		
7B. Parts in trade:					
Skin Fur		Hair	☐ Horn ☐ Bones	☐ Gland	ls
☐ Meat ☐ Produc	cts 🔲 L	ive Animal	☐ Taxidermy ☐ Organs		
Comments/Other threats (p	lease specify):				

Data Quality				
8A. Are the estimates you have su	ipplied based on:			
Census or monitoring	☐ General field studies	Info	rmal field studies	
Hearsay/popular belief		⊠ Ind	irect information fr	om trade, etc.
studies (field) conducted over t	the last 10 years (indicate the year	ar of study i	not the year of publica	tion):
Researchers	Location	Year	Topic	
Masa et al Snakes of Yemen				
Conservation Status				
0A. IUCN Red List Category: 0	ilobal: Not listed	Re	gional: Not listed	
<b>0B. National Red Data Book:</b> Not listed				
OC. Workshop Assessment of Re	gional Red List Category: Least	t concern		
<ul><li>OD. CITES: Not listed</li><li>OE. National Wildife Legislation:</li></ul>				
Not listed				
OG. List existing Protected Areas  Protected Area	within the faxon's range.		Country	Size (km²)
Al Tubaya, Al Khunfah, At Tays	iya		KSA	
Arabian oryx reserve, Jebel Sar	nham		Oman	
Wadi Helo, Khor Kalba			UAE	
0H. Recommended Protected A	reas for the Taxon:			2
Area			Country	Size (km²)
	ervation/Protection Action Plan	s: O Ye	s ( No (	Unknown
If Yes, please list them:				
Supporting Research				
1A. Is research recommended?	• Yes O No			
1A. Is research recommended? If Yes, what type of research v				
	vould you recommend?	☐ Life	History 🗌 Pu	ıblic Awareness
• •	would you recommend?		History	ıblic Awareness

12. Management		
12A. What management is recommend	ded for the Taxon?	
Habitat management	☐ Wild population manageme	ent 🔀 Captive breeding
Monitoring	☐ Translocation	Sustainable Use
Public Awareness	Limiting Factor Manageme	nt 🔀 Genome Research Banking
Law Enforcement	☐ Work in Local Communities	Address Policy Makers
Other (please specify):		
13. Captive Breeding		
13A. Is captive breeding recommende	( · · · · · · · · · · · · · · · · · · ·	○No
13B. If captive breeding is recommede	d , is it for:	
Species recovery Rein	troduction 🔀 Resear	ch 🔀 Husbandry
	erve live genome	
13C. Do Captive stocks already exist?	● Yes	nown
If Yes, list the facilities:		
Facility	Country	Males Females Unknown Total
BCEAW	UAE	1 1
13D. Does a coordinated Species Mana	gement Plan exist? (Yes	● No ○ Unknown
If Yes, list the participating institut	ons:	
If Not, is a Species Management Pl		No     No     No
13E. Level of captive breeding recomm	ended:	
Captive breeding program not	neccessary Initiate	program within 3 years
<ul><li>Maintain existing program as i</li></ul>	t is  Intensify existing pro	ogram Decrease existing progam
13F. Are the techniques established fo	r captive breeding?	
Techniques are known for this	or similar taxon 🔲 Some tec	hniques are known for this or similar taxon
Techniques not known for this	or simialr taxon 🔲 Unknown	ı
14. Sources/References (complete citation	):	
Egan, D. 2007. Snakes of Arabia. A field gu Publishing.		Peninsula and its Shores. Motivate
Gasperetti, J. 1988. Snakes of Arabia. Fauna	of Saudi Arabia 9:169-450	
Schatte, B & Desvolgnes, A. 1999. The Herp d'Histoire Naturelle. Geneve	etofauna of southern Yemen and	d the Soqotra archipelago. Museum
Schatte, B & Gasparetti, J. A. Contribution	to the herpetofauna of Southwe	stern Arabia. Fauna of Saudi Arabia. Vol 14.
Van der Kooij, J. 2001. The Herpetofauna o	of the Sultinate of Oman. Part 4: T	errestrial snakes. Podarcus.
Werner, Y.L. 1991. Notable Herpetofaunal	Records from TransJordan. Zook	ogy in the Middle East. Vol 5: 37-41



## <u>Conservation Workshop for the Fauna of Arabia</u> <u>Taxon Data Sheet</u>

Working Group: Snakes		Date: 3-5 February 2008
1. Taxonomy		
1A. Scientific Name (Genus, species & subspecies): Atractaspis (r	nicrolepidota) andersoni	
Authority: Boulenger		<b>Date:</b> 1905
1B. Synonyms (with authority & date):		
1C. Common Name(s) with language/region: Anderson's burrowing Asp (English)		
2. Distribution		
<b>2A. Historical Distribution</b> (last 100 years): From the northern Asir Mountains to southwestern Yemen, Hadramaut.	east to Dhofar. Distributio	on likely to split up in
<b>2B.</b> Current Distribution (illustrate on map): See 2A.		
2C. Habitat of the taxon (ecosystem level): Varied: Arabian desert and east Sahero-Arabian xeric woodl Southwestern Arabian foothill savannah and southwestern		
2D. Habitat specificity (elevation, etc.):  Non-specific habitat requirements. Favours loose soil, from	sea level up to 2000 m.a.s.	l.
2E. Migration: Yes • No Unknown		
If Yes, describe:		
3. Number of Populations & Subpopulations in which the	ie Taxon is distributed:	2
Location of each:	Approx. Area Occupied:	Approx. No. of Individuals:
Asir Mountains and southwestern Yemen	7,500 km²	~
Southeastern Yemen & Dhofar, Oman	6,400 km²	~
4. Population Trends		
4A. Is the Population: \( \) Increasing \( \) Decreasing \( \)	Stable Ounknown	
4B. If declining, what has been the rate of decline? (<2)		
Over how many years has the population decline occ		
4C. If stable or unknown, do you predict a future decline	in the population size? (	Yes • No
If Yes, please specify rate and factors e.g. habitat loss	, trade, etc.:	
5. Habitat Status		
5A. Is the habitat distribution: Continuous Frag	mented ( Unknown	
5B. Is there any change in the range of the habitat where		es O No O Unknown
If Yes, is it:		

5C. If decreasing what has bee Over how many years has			%		
5D. Do you predict a future de If Yes, what do you predic Over how many years do y	t that decline	will be? (	• <20% \( >20\) \( >50\)	>80%	
<b>5E. State the primary cause of</b> Urban development, particularl	_	al plains in I	Dhofar.		
5F. Is there any change in the o			ere the Taxon occurs?	No ( Unl	known
5G. State the primary cause of Urban development on the coa	this change:		, improving		
6. Threats					
Pollution Urban Development Road Kills Damming War Recreational activities Hunting (recreation or retail) Harvest for medicine Harvest for food/timber Poisoning Pesticides Persecution Trade of animals/parts Other (please specify):	Present	Future	Disease Hybridization Decline in prey species Loss of habitat Genetic problems Grazing Habitat fragmentation Predation Interspecific competition Livestock competition (food, etc.) Livestock conflicts (retaliation kills) Introduced species (non-livestock) Nutritional disorders	Present	Future
6B. Would these threats result Comment: 7. Trade	in (perceived	or inferred	) population decline? ( Yes <b>⑥</b> No	o () Unki	nown
<ul><li>7A. Is the Taxon in trade?</li></ul>	Yes	○ Unkn	own ernational Commercial		
Skin Fur Meat Produ Comments/Other threats (	ucts 🔲 L	lair ive Animal	Horn Bones Taxidermy Organs	☐ Glands	5

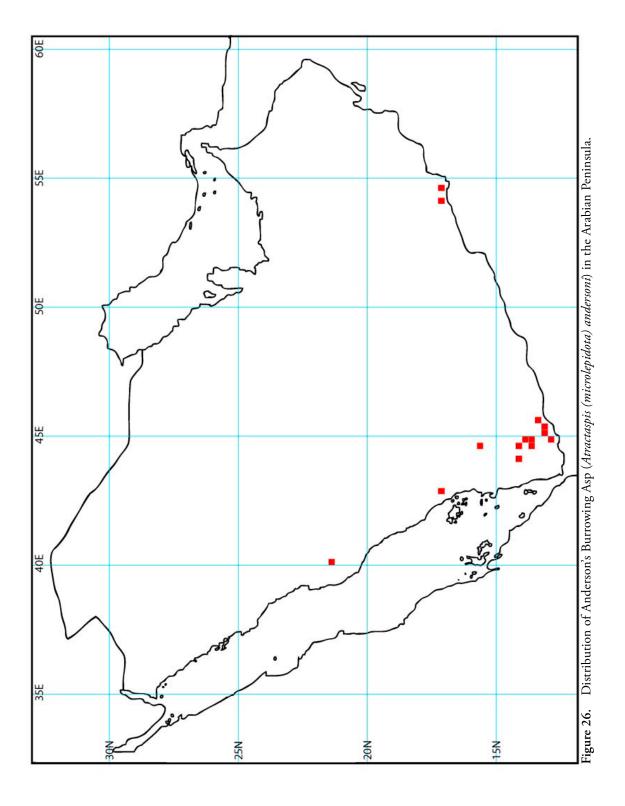
8A. Are the estimates you have s	upplied based on:			
Census or monitoring	☐ General field studies		rmal field studie	es 🔀 Literature
	Museum studies/records	Ind	irect information	n from trade, etc.
itudies (field) conducted over	the last 10 years (indicate the year	r of study i	not the year of pub	lication):
Researchers	Location	Year	Topic	
Conservation Status				
IOA. IUCN Red List Category:	Global: Not Listed.	Re	gional: Not Liste	ed.
<b>OB. National Red Data Book:</b> Not Listed.				
IOC. Workshop Assessment of Re	egional Red List Category: Least	Concern.		
OD. CITES: Not Listed.				
<b>OE. National Wildife Legislation:</b> Not Listed.				
10F. Other Legislation (please spec	ify):			
0G. List existing Protected Area	s within the Taxon's range:			
Protected Area			Country	Size (km²)
Jabel Samhan			Oman	3,460
0H. Recommended Protected A	reas for the Taxon:			
				Size (km²)
Area			Country	Size (KIII )
			· · · · · · · · · · · · · · · · · · ·	
I Ol. Are there any Regional Cons If Yes, please list them:	ervation/Protection Action Plans	s: Ye	· · · · · · · · · · · · · · · · · · ·	O Unknown
Ol. Are there any Regional Cons If Yes, please list them:  Supporting Research	ervation/Protection Action Plans  • Yes	s: O Ye	· · · · · · · · · · · · · · · · · · ·	
Ol. Are there any Regional Cons If Yes, please list them:  Supporting Research  1A. Is research recommended? If Yes, what type of research	● Yes ○ No would you recommend?		s   No	
OI. Are there any Regional Cons If Yes, please list them:  Supporting Research  1A. Is research recommended? If Yes, what type of research  Surveys  Gene		⊠ Life	s   No  History	
Ol. Are there any Regional Cons If Yes, please list them:  Supporting Research  1A. Is research recommended? If Yes, what type of research Surveys Gene Trade Moni	● Yes ○ No would you recommend?	⊠ Life	s   No	○ Unknown
OI. Are there any Regional Cons If Yes, please list them:  Supporting Research  1A. Is research recommended? If Yes, what type of research  Surveys  Gene		⊠ Life	s   No  History	○ Unknown
OI. Are there any Regional Cons If Yes, please list them:  Supporting Research  1A. Is research recommended? If Yes, what type of research Surveys Gene Trade Moni Other (please specify):		⊠ Life	s   No  History	○ Unknown
IOI. Are there any Regional Cons If Yes, please list them:  Supporting Research ITA. Is research recommended? If Yes, what type of research Surveys Gene Trade Moni Other (please specify):		⊠ Life	s   No  History	○ Unknown
Ol. Are there any Regional Cons If Yes, please list them:  Supporting Research  1A. Is research recommended? If Yes, what type of research Surveys Gene Trade Moni Other (please specify):  Management		⊠ Life □ Hur	s   No  History	O Unknown  Public Awareness
OI. Are there any Regional Cons If Yes, please list them:  Supporting Research  1A. Is research recommended? If Yes, what type of research Surveys Gene Trade Moni Other (please specify):  Management  2A. What management is recom		⊠ Life □ Hur	s   No  History   man Impact	O Unknown  Public Awareness
IOI. Are there any Regional Cons If Yes, please list them:  Supporting Research  I1A. Is research recommended? If Yes, what type of research Surveys Gene Trade Moni Other (please specify):  Management  I2A. What management is recommended?		⊠ Life □ Hur gement	S No  History  man Impact  Captive k	O Unknown  Public Awareness
IOI. Are there any Regional Cons If Yes, please list them:  Supporting Research  I1A. Is research recommended? If Yes, what type of research Surveys Gene Moni Other (please specify):  Management  I2A. What management is recom Habitat management Monitoring	● Yes  ○ No would you recommend? etics  ○ Taxonomic itoring  □ Reintroduction  mended for the Taxon? □ Wild population manage □ Translocation	⊠ Life □ Hur gement	S No  History  man Impact  Captive k Sustainal Genome	O Unknown  Public Awareness  preeding ple Use

13. Captive Breeding					
13A. Is captive breeding recommended for the taxo	on: OYes	No			
13B. If captive breeding is recommeded , is it for:					
☐ Species recovery ☐ Reintroduction ☐ Education ☐ Preserve live gen	☐ Resea	arch		Husbandry	,
		known			
If Yes, list the facilities:					
Facility	Country	Males	Females	Unknown	Total
	a exist? O Vos				
If Yes, list the participating institutions:	rexist: ( ) les	( NO	Olikilov	VII	
If Yes, list the institutions that should participat  13E. Level of captive breeding recommended:  Captive breeding program not neccessary		e program v	vithin 3 yea	rs	
	tensify existing p	-	-	se existing p	orogam
13F. Are the techniques established for captive bree		3		31	3
Techniques are known for this or similar tax	_	chniques a	re known fo	or this or sim	ıilar taxon
Techniques not known for this or simialr ta	xon Unknow	/n			
14. Sources/References (complete citation):					
Egan, D. 2007. Snakes of Arabia: A field guide to the Sna Dubai.		Peninsula a	and its Shore	es. Motivate f	<sup>p</sup> ublishing
Gasparetti, J. 1988. Snakes of Arabia. Fauna of Saudi Arab Schätte, B. and Desvoignes, A. 1999. The Herpetofauna of Naturelle. Geneve.		n and Sokot	ra Archipela	ago. Museum	ı d'Historie
Schätte, B. and Gasparetti, J.A. 1994. Contribution to the 348-432.	herpetofauna of !	Southwest /	Arabia. <i>Faun</i>	a of Saudi Ard	abia 14:
Scortecci, G. 1932. Rettili dello Yemen. Atti della Societá	Italiana di Scienze	e Naturali e d	del Museo C	livico di Stori	a Naturale

centrale. Bull Soc. Herp. Fr. 199: 5-16.

William Branch, Damien Egan, Tony Phelps, Declan O'Donovan, Gavin Nel, Saud A. Al Farraj, Pritpal Soorae, Ehad Eid, Haithem Al Aamri, Peter Arras, Neelofa Ali, Masaa Al Jumaily, Khaled Al Rasbi and Patrick Paillat

Trape, J.-F., Mané, Y. and Ineich, I. 2006. Atractaspis microlepidota, A. micropholis et A. watsoni en Afrique occidentaie et



## <u>Conservation Workshop for the Fauna of Arabia</u> <u>Taxon Data Sheet</u>

Working Group: Snakes		Date: 3-5 February 2008
1. Taxonomy		
1A. Scientific Name (Genus, species & subspecies): Atractaspi.	s (microlepidota) engaddensis	
Taxonomy  1A. Scientific Name (Genus, species & subspecies): Atractaspis (microlepidota) engadde Authority: Haas  1B. Synonyms (with authority & date):  1C. Common Name(s) with language/region: Ein Geddi Burrowing Asp (English)  Distribution  2A. Historical Distribution (last 100 years): From the Sinai to the western and central mountains of Saudi Arabia.  2B. Current Distribution (illustrate on map): See 2A.  2C. Habitat of the taxon (ecosystem level): Varied: Arabian desert and east Sahero-Arabian xeric woodlands, Red Sea Nubio-Sidesert. Southwestern Arabian foothills savannah, southwestern Arabian montane  2D. Habitat specificity (elevation, etc.): From sea level up to 2000 m.a.s.l. + non-specific habitat requirements but favours  2E. Migration: Yes No Unknown  If Yes, describe:  Number of Populations & Subpopulations in which the Taxon is distribute  Location of each: Approx. Area Occup  Sinai south to the Asir Mountains as far as Taif. 8,125 km²		<b>Date:</b> 1950
1B. Synonyms (with authority & date):		
1C. Common Name(s) with language/region: Ein Geddi Burrowing Asp (English)		
2. Distribution		
<b>2A. Historical Distribution</b> (last 100 years): From the Sinai to the western and central mountains of S	audi Arabia.	
<b>2B.</b> Current Distribution (illustrate on map): See 2A.		
2D. Habitat specificity (elevation, etc.): From sea level up to 2000 m.a.s.l. + non-specific habitat re	equirements but favours loos	se soil conditions.
2E. Migration: Yes • No Unknown		
If Yes, describe:		
3. Number of Populations & Subpopulations in which	the Taxon is distributed:	
Location of each:	Approx. Area Occupied:	Approx. No. of Individuals:
Sinai south to the Asir Mountains as far as Taif.	8,125 km²	~
4. Population Trends		
	Stable OUnknown	
,		
		O : 22/1
		Yes • No
•	• •	) les (© No
ii res, picase specify fate and factors e.g. habitatio	33, trade, etc	
5. Habitat Status		
5A. Is the habitat distribution:   Continuous  Fra	agmented ( Unknown	
5B. Is there any change in the range of the habitat whe		es
5C. If decreasing what has been the decline?	%	
Over how many years has this decline occured?		

5D. Do you predict a future declin	ne in the h	abitiat?	Yes No		
If Yes, what do you predict th	at decline	will be?	<b>●</b> <20% ○ >20% ○ >50% ○	>80%	
Over how many years do you	predict th	ne decline	will occur?		
<b>5E. State the primary cause of thi</b> Urban and agricultural expansion.	s change:				
5F. Is there any change in the qua	ality of the	habitat w	where the Taxon occurs? • Yes • N	No OUnl	known
If Yes, is the habitat quality:	<ul><li>Decl</li></ul>	ining	Improving		
<b>5G. State the primary cause of thi</b> Urban and agricultural sprawl.	s change:				
6. Threats					
	Present	Future		Present	Future
Pollution			Disease		
Urban Development	$\boxtimes$	$\boxtimes$	Hybridization		
Road Kills			Decline in prey species		
Damming			Loss of habitat	$\boxtimes$	
War			Genetic problems		
Recreational activities			Grazing		
Hunting (recreation or retail)			Habitat fragmentation		$\boxtimes$
Harvest for medicine			Predation		
Harvest for food/timber			Interspecific competition		
Poisoning			Livestock competition (food, etc.)		
Pesticides			Livestock conflicts (retaliation kills)		
Persecution			Introduced species (non-livestock)		
Trade of animals/parts			Nutritional disorders		
	(perceivec	l or inferre	ed) population decline?	o 🔿 Unk	nown
Comment: 7. Trade					
7A. Is the Taxon in trade? Yes	Regiona	O Unl	known aternational Commercial		
7B. Parts in trade:  Skin Fur  Meat Product  Comments/Other threats (plea	s	Hair Live Anim	☐ Horn ☐ Bones	☐ Gland	ds

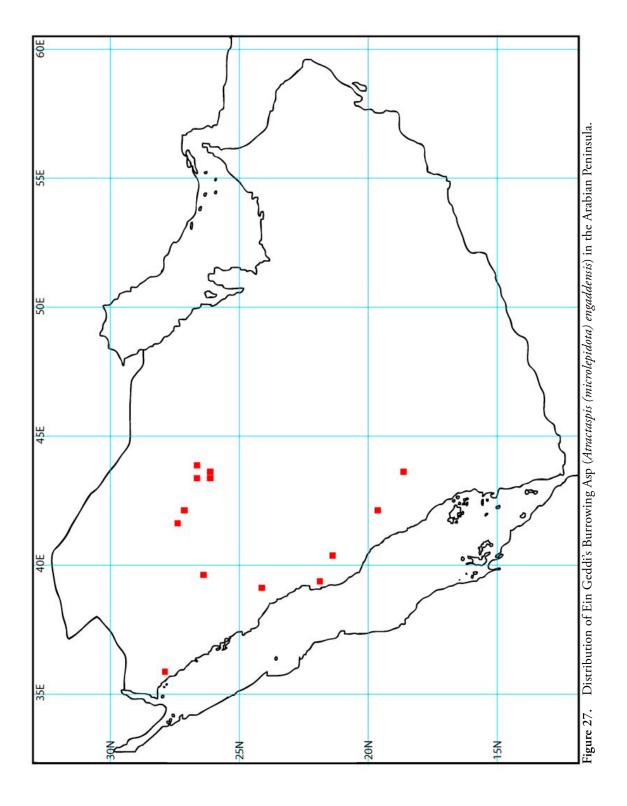
8. Da	ta Quality				
8A.	. Are the estimates you have so	upplied based on:			
	Census or monitoring	General field studies	☐ Inform	mal field studies	∠ Literature
	Hearsay/popular belief	☐ Museum studies/records	Indire	ect information fro	om trade, etc.
9. Stu	udies (field) conducted over	the last 10 years (indicate the yea	r of study no	t the year of publicat	ion):
	Researchers	Location	Year	Topic	
10. C	onservation Status				
10/	A. IUCN Red List Category: (	Global: Not Listed.	Regi	onal: Not Listed.	
	3. National Red Data Book: ot Listed.				
100	C. Workshop Assessment of Re	gional Red List Category: Least	Concern.		
10[	D. CITES: Not Listed.				
	E. National Wildife Legislation: ot Listed.				
10	F. Other Legislation (please speci	fy):			
100	G. List existing Protected Areas Protected Area	s within the Taxon's range:		Country	Size (km²)
	Hawtat Bani Tamim		Sã	audi Arabia	~
10	H. Recommended Protected A	reas for the Taxon:		Constant	c: (1 2)
	Area			Country	Size (km²)
101	. Are there any Regional Conso	ervation/Protection Action Plans	5: Yes	● No (	Unknown
11. S	upporting Research				
11/	A. Is research recommended?				
	If Yes, what type of research	would you recommend?			
	☐ Surveys ☐ Gene	tics X Taxonomic	Life H	listory 🔲 Pu	blic Awareness
	☐ Trade ☐ Moni	toring Reintroduction	Hum	an Impact	
	Other (please specify):				
12. M	lanagement				
12/	A. What management is recom	mended for the Taxon?			
	Habitat management	☐ Wild population manag	gement	Captive bree	edina
	Monitoring	☐ Translocation	,	Sustainable	_
	Public Awareness	Limiting Factor Manage	ement		earch Banking
	Law Enforcement	☐ Work in Local Commur		Address Poli	_
	Other (please specify):			<u> </u>	

13. Captive Breed	ding							
13A. Is captive b	reeding reco	mmended for	the taxon:	Yes	<ul><li>No</li></ul>			
13B. If captive b	reeding is rec	ommeded , is	it for:					
Species	recovery	Reintroc	luction	Rese	arch		Husbandry	,
☐ Education	on	Preserve	live genor	me				
13C. Do Captive	stocks alread	ly exist?	Yes	No OUn	known			
If Yes, list th	e facilities:							
Facility				Country	Males	Females	Unknown	Total
13D. Does a coc	rdinated Spe	cies Managen	nent Plan e	exist? OYes				
	e participatin				() <b>.</b>	0 0		
If Not, is a S	pecies Manag	ement Plan r	ecommend	led: OYes	<ul><li>No</li></ul>			
If Yes, list th	e institutions	that should p	articipate:					
13E. Level of cap	otive breeding	g recommend	led:					
	breeding pro	gram not nec	cessary	Initiate	e program	within 3 yea	irs	
☐ Maintai	n existing pro	gram as it is	☐ Inte	nsify existing p	orogram	Decrea	se existing p	orogam
13F. Are the tec	hniques estab	olished for cap	otive breed	ing?				
☐ Technic	ques are know	n for this or s	imilar taxo	n 🔲 Some te	echniques a	are known f	or this or sim	nilar taxon
▼ Technic	ques not knov	vn for this or	simialr taxo	on Unknov	vn			
14. Sources/Refe	rences (comple	ete citation):						
Egan, D. 2007. Snal Dubai.	kes of Arabia: A	A field guide to	o the Snake	s of the Arabiar	n Peninsula	and its Shore	es. Motivate l	Publishing,
Gasparetti, J. 1988.								
Schätte, B. and Des Naturelle. Geneve.	-	199. The Herpe	etofauna of	southern Yeme	n and Soko	tra Archipela	ago. Museum	n d'Historie
Schätte, B. and Gas 348-432.		94. Contributi	on to the h	erpetofauna of	Southwest	Arabia. Faun	a of Saudi Ard	abia 14:
Scortecci, G. 1932.	Rettili dello Ye	men. Atti dell	a Societá Ita	aliana di Scienze	e Naturali e	del Museo C	Civico di Stori	a Naturale,

Milano 71: 39-49.

Trape, J.-F., Mané, Y. and Ineich, I. 2006. Atractaspis microlepidota, A. micropholis et A. watsoni en Afrique occidentaie et centrale. Bull Soc. Herp. Fr. 199: 5-16.

### 15. Compilers

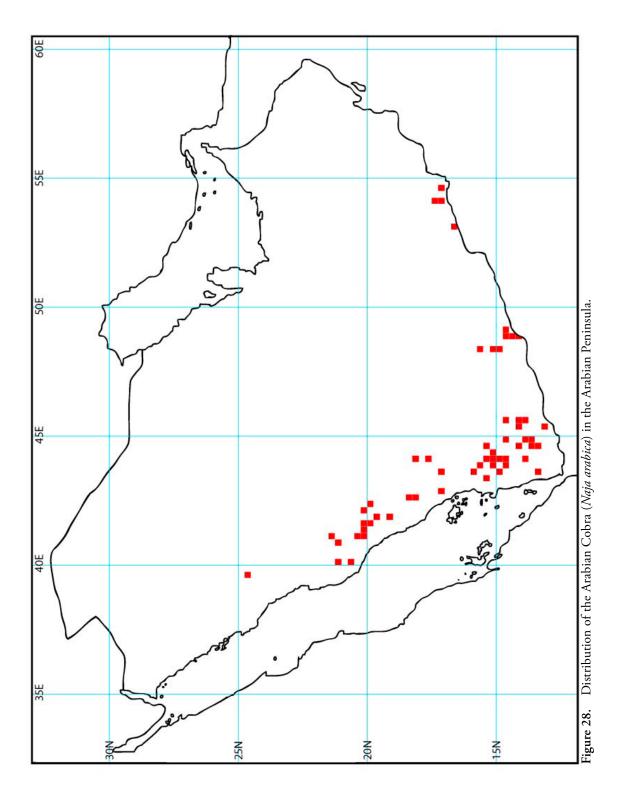


Working Group: Snakes		Date: 3-5 February 2008
1. Taxonomy		
1A. Scientific Name (Genus, species & subspecies): A	laja arabica	
Taxonomy  1A. Scientific Name (Genus, species & subspecies): Naja arabica Authority: Scortecci  1B. Synonyms (with authority & date):  1C. Common Name(s) with language/region: Arabian cobra (English)  Distribution  2A. Historical Distribution (last 100 years): Southwestern Saudi Arabia, to SW Yemen, through Hadramaut to Dhofar, Om 2B. Current Distribution (illustrate on map): See 2A  2C. Habitat of the taxon (ecosystem level): Varied: Red Sea Nubio-Sinian tropical desert and semi-desert. Southwestern Arabian montane woodlands  2D. Habitat specificity (elevation, etc.): Non specific habitat requirements- generally found in the vicinity of permane 2E. Migration: Yes No Unknown  If Yes, describe:  Number of Populations & Subpopulations in which the Taxon is distril Location of each: Approx. Area Oc SW KSA to sw Yemen 12000km.  Hadramaut Dhofar and SE Yemen  Population Trends  4A. Is the Population: C Increasing Decreasing Stable Unknown  Had. If declining, what has been the rate of decline? <a href="#equation-color: 2006">C</a> 20% >20% <a href="#equation-color: 2006">C</a> >20%		<b>Date:</b> 1832
1B. Synonyms (with authority & date):		
1C. Common Name(s) with language/region: Arabian cobra (English)		
2. Distribution		
<b>2A. Historical Distribution</b> (last 100 years): Southwestern Saudi Arabia, to SW Yemen, throu	ugh Hadramaut to Dhofar, Oman	
<b>2B.</b> Current Distribution (illustrate on map): See 2A		
<b>2C. Habitat of the taxon</b> (ecosystem level): Varied: Red Sea Nubio-Sinian tropical desert and Southwestern Arabian montane woodlands	d semi-desert. Southwestern Arabian f	oothills savannah:
2D. Habitat specificity (elevation, etc.):  Non specific habitat requirements- generally for	und in the vicinity of permanent wate	er
2E. Migration: Yes No Unkn	own	
If Yes, describe:		
3. Number of Populations & Subpopulations	n which the Taxon is distributed:	
Location of each:	Approx. Area Occupied	: Approx. No. of Individuals:
SW KSA to sw Yemen	12000km2	
Dhofar and SE Yemen		
4. Population Trends		
4A. Is the Population: OIncreasing ODecre	easing C Stable • Unknown	
4B. If declining, what has been the rate of decl	ine? • <20% >20% >50%	○>80%
Over how many years has the population	decline occured? 10	
4C. If stable or unknown, do you predict a futu	re decline in the population size? (	Yes • No
If Yes, please specify rate and factors e.g. h	nabitat loss, trade, etc.:	
5. Habitat Status		
5A. Is the habitat distribution: Continuou	us  Fragmented  Unknown	
5B. Is there any change in the range of the hal	pitat where the Taxon occurs? ( )	res O No O Unknown
If Yes, is it:    Decreasing in Area	○ Increasing in Area	

5C. If decreasing what has been Over how many years has th					
5D. Do you predict a future decli If Yes, what do you predict t Over how many years do you	hat decline	will be? (	• <20% \( >20\) \( >50\)	>80%	
<b>5E. State the primary cause of th</b> Urban development, quarrying	is change:				
5F. Is there any change in the qu If Yes, is the habitat quality: 5G. State the primary cause of th	O Decli		ere the Taxon occurs? Yes N Improving	√lo ( Unk	known
6. Threats					
	Present	Future		Present	Future
Pollution			Disease		
Urban Development	$\boxtimes$	$\boxtimes$	Hybridization		
Road Kills			Decline in prey species		
Damming			Loss of habitat	$\boxtimes$	$\boxtimes$
War			Genetic problems		
Recreational activities			Grazing		
Hunting (recreation or retail)	$\boxtimes$	$\boxtimes$	Habitat fragmentation		$\boxtimes$
Harvest for medicine			Predation		
Harvest for food/timber			Interspecific competition		
Poisoning			Livestock competition (food, etc.)		
Pesticides			Livestock conflicts (retaliation kills)		
Persecution	$\boxtimes$	$\boxtimes$	Introduced species (non-livestock)		
Trade of animals/parts			Nutritional disorders		
Other (please specify):					
6B. Would these threats result in Comment:	(perceived	l or inferred	) population decline? C Yes C No	o 🖲 Unki	nown
7. Trade					
7A. Is the Taxon in trade? • Ye If Yes, is it: C Local (	Regiona	○ Unkn	own ernational Commercial		
7B. Parts in trade:					
Skin Fur Meat Produc	ts 🔀 l	Hair ₋ive Animal	Horn Bones Taxidermy Organs	☐ Glands	5

8. Data Quality					
8A. Are the estim	nates you have s	supplied based on:			
_	or monitoring	General field studies	_	rmal field studies	Literature
∐ Hearsay	popular belief	Museum studies/records	Ind	irect information f	rom trade, etc.
9. Studies (field) o	onducted over	the last 10 years (indicate the year	r of study r	not the year of public	ation):
Researchers	i	Location	Year	Topic	
Masa et al Sr	nakes in Yemen				
0. Conservation	Status				
10A. IUCN Red Li	st Category:	Global: Not listed	Re	gional: Not listed	
<b>10B. National Re</b> Not listed	d Data Book:				
10C. Workshop A	Assessment of Ro	egional Red List Category: Least	concern		
10D. CITES: Not					
10E. National Wi Not listed	dife Legislation	:			
10F. Other Legis	ation (please spec	ify):			
10G. List existing Protected A		s within the Taxon's range:		Country	Size (km²)
Jebel Sanhar	n			Oman	
10H. Recommen	ded Protected <i>F</i>	Areas for the Taxon:			-
Area				Country	Size (km²)
101 Are there an	v Regional Cons	servation/Protection Action Plans	. O Yes	s O No	Unknown
If Yes, please		servation/Frotection Action Flans	s. () ic.	3 (110	OTIKIOWII
ii res, pieuse	iise di ciiii				
1. Supporting Re	search				
11A. Is research	ecommended?				
If Yes, what t	ype of research	would you recommend?			
Surveys		etics X Taxonomic	∠ Life	History P	ublic Awareness
Trade	☐ Mon	itoring Reintroduction	Hur	man Impact	
Other (pl	ease specify):		_	·	
2. Management					
12A. What mana	gement is recon	nmended for the Taxon?			
Habitat man	agement	☐ Wild population mana	gement	Captive b	reeding
Monitoring		☐ Translocation		Sustainab	le Use
Public Awar	eness	∠ Limiting Factor Manage	gement	⊠ Genome I	Research Banking
Law Enforce	ment	Work in Local Commu	nities	Address P	olicy Makers
Other (please	specify):				

13. Captive Breeding						
13A. Is captive breeding recommended for the taxon	: • Yes	○ No				
13B. If captive breeding is recommeded , is it for:						
☐ Species recovery ☐ Reintroduction ☐ Research ☐ Husbandry						
⊠ Education	me					
,	No O Unk	nown				
If Yes, list the facilities:						
Facility	Country	Males	Females	Unknown	Total	
BCEAW	UAE	5?			5	
13D. Does a coordinated Species Management Plan of If Yes, list the participating institutions:	exist?  Yes	● No	○ Unknow	/n		
If Not, is a Species Management Plan recommend If Yes, list the institutions that should participate:  13E. Level of captive breeding recommended:		<ul><li>No</li></ul>				
Captive breeding program not neccessary	□ Initiate	program	within 3 yea	rc		
	ensify existing pr	. 3	_ ′	se existing p	rogam	
13F. Are the techniques established for captive breed	, ,	- <b>J</b>			9	
Techniques are known for this or similar taxo	_	chniques a	ire known fo	or this or sim	ilar taxon	
Techniques not known for this or simialr taxo	on Unknow	n				
<b>14. Sources/References (complete citation):</b> Egan, D. 2007. Snakes of Arabia. A field guide to the Snak	es of the Arabian	Peninsula	and its Shor	es. Motivate		
Publishing.						
Gasperetti, J. 1988. Snakes of Arabia. Fauna of Saudi Arabi	a 9:169-450					
Schatte, B & Desvolgness, A. 1999. The Herpetofauna of so d'Histoire Naturelle. Geneve.	outhern Yemen a	ind the Soc	qotra archipe	elago. Museu	m	
Schatte, B & Gasparetti, J.A. Contribution to the herpetof	auna of Southwe	estern Arak	oia. Fauna of	Saudi Arabia	a. Vol.14	
Van der Kooij, J. 2001. The Herpetofauna of the Sultinate	of Oman. Part 4:	Terrestrial	Snakes. Pod	arcus.		

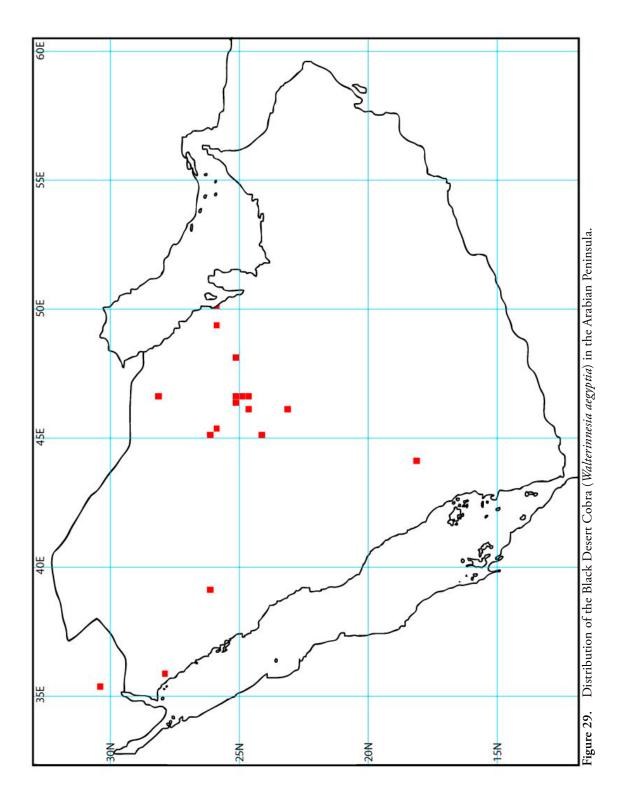


Working Group: Snakes	С	Pate: 3-5 February 2008
1. Taxonomy		
1A. Scientific Name (Genus, species & subspecies): Walterinnesia	ı aegyptia	
Authority: Lataste	1	<b>Date:</b> 1887
1B. Synonyms (with authority & date):		
1C. Common Name(s) with language/region: Desert black snake, black desert cobra (English)		
2. Distribution		
<b>2A. Historical Distribution</b> (last 100 years):  Northeast Africa with a scattered distribution in the Middle Arabia. Possible unconfirmed occurrence in Qatar.	East. Northeast and Central	Saudi Arabia. NW Saudi
<b>2B. Current Distribution</b> (illustrate on map): See 2A		
<b>2C. Habitat of the taxon</b> (ecosystem level):  Varied: Arabian Desert and east Sahero-Arabian xeric wood desert; Southwestern Arabian foothills savannah; Southwest		
2D. Habitat specificity (elevation, etc.): Habitat gravel plains; Uromastryx burrows and associated fa	una	
2E. Migration: Yes • No Unknown		
If Yes, describe:		
3. Number of Populations & Subpopulations in which the Location of each:		Annual Na Alla di dalah
Location of each:	Approx. Area Occupied:	Approx. No. of Individuals:
4. Population Trends		
4A. Is the Population: \(\) Increasing \(\) Decreasing \(\)	Stable • Unknown	
4B. If declining, what has been the rate of decline? ○<20	0% ()>20% ()>50%	
Over how many years has the population decline occ	ured?	
4C. If stable or unknown, do you predict a future decline i	n the population size? (	Yes O No
If Yes, please specify rate and factors e.g. habitat loss,	trade, etc.:	
5. Habitat Status		
5A. Is the habitat distribution: Continuous • Fragr	nented ( Unknown	
5B. Is there any change in the range of the habitat where		es 🔿 No   💿 Unknown
If Yes, is it: O Decreasing in Area Increasi	ng in Area	

5C. If decreasing what has been t Over how many years has thi			% ( >20% ( >50% ( >80%		
5D. Do you predict a future decling fees, what do you predict the Over how many years do you	nat decline	will be? (	• <20% () >20% () >50% () >	>80%	
<b>5E. State the primary cause of thi</b> Urban development	s change:				
5F. Is there any change in the quality:	ality of the  Decli		ere the Taxon occurs?	lo Ounknown	
<b>5G. State the primary cause of th</b> Urban development and possible	_	effects of ov	er grazing from domestic livestock		
6. Threats					
Pollution Urban Development Road Kills Damming War Recreational activities Hunting (recreation or retail) Harvest for medicine Harvest for food/timber Poisoning Pesticides Persecution Trade of animals/parts Other (please specify):	Present	Future	Disease Hybridization Decline in prey species Loss of habitat Genetic problems Grazing Habitat fragmentation Predation Interspecific competition Livestock competition (food, etc.) Livestock conflicts (retaliation kills) Introduced species (non-livestock) Nutritional disorders	Present Futur	e
Comment:			population decline? Yes No	• Unknown	
7. Trade					
7A. Is the Taxon in trade? • Yes	Regional	○ Unkn	own rnational Commercial		
7B. Parts in trade:  Skin Fur  Meat Product  Comments/Other threats (ple	s 🛭 L	Hair .ive Animal	☐ Horn ☐ Bones ☐ Taxidermy ☐ Organs	☐ Glands	

8. Data Quality				
8A. Are the estimates you have su	oplied based on:			
Census or monitoring	General field studies		mal field studies	
☐ Hearsay/popular belief		☐ Indi	rect information	from trade, etc.
9. Studies (field) conducted over the	ne last 10 years (indicate the yea	ır of study n	ot the year of publi	cation):
Researchers	Location	Year	Topic	
10. Conservation Status		-	_	
10A. IUCN Red List Category: G	obal: Not listed	Rec	gional: Not listed	
10B. National Red Data Book: Not listed		_	•	
10C. Workshop Assessment of Reg	ional Red List Category: Least	concern		
10D. CITES: Not listed				
<b>10E. National Wildife Legislation:</b> Not listed				
10F. Other Legislation (please specify	):			
10G. List existing Protected Areas Protected Area			Country	Size (km²)
Al Jandaliyah, At Taysiyah, Al Kh	nunfah, Harrat Al Harra		KSA	
10H. Recommended Protected Area	eas for the Taxon:		Country	Size (km²)
10I. Are there any Regional Conse	vation/Protection Action Plans	s: O Yes	<ul><li>No</li></ul>	Unknown
If Yes, please list them:				
11. Supporting Research				
11A. Is research recommended?	• Yes No			
If Yes, what type of research w	•			
Surveys Seneti	<u></u>	Life	. –	Public Awareness
☐ Trade ☐ Monito	oring Reintroduction	⊠ Hum	nan Impact	
Other (please specify):				
12. Management				
12A. What management is recomm	mended for the Taxon?			
	☐ Wild population mana	gement	Captive k	oreeding
Monitoring	☐ Translocation		Sustaina	ole Use
Public Awareness	Limiting Factor Manag	gement	Genome	Research Banking
Law Enforcement	Work in Local Commu	nities	Address	Policy Makers
Other (please specify):				

13. Captive Breeding					
13A. Is captive breeding recommended for the ta	axon: OYes	<ul><li>No</li></ul>			
13B. If captive breeding is recommeded, is it for:					
Species recovery Reintroduction	n 🔲 Resea	arch		Husbandry	
Education Preserve live g	enome				
13C. Do Captive stocks already exist? Yes	No	known			
If Yes, list the facilities:					
Facility	Country	Males	Females	Unknown	Total
13D. Does a coordinated Species Management Pl	lan exist? \( \) Yes	● No	O Unknov	·	
If Yes, list the participating institutions:					
If Not, is a Species Management Plan recomn	nended: \(\cap \text{Yes}\)	No			
If Yes, list the institutions that should particip		(3)110			
ii res, iise the iiistitations that should particip	acc.				
13E. Level of captive breeding recommended:					
Captive breeding program not neccessar	y 🗍 Initiate	program v	within 3 yea	rs	
	Intensify existing p			se existing p	rogam
13F. Are the techniques established for captive b	reeding?				
▼ Techniques are known for this or similar:	taxon 🔲 Some te	chniques a	are known fo	or this or sim	ilar taxon
Techniques not known for this or simialr	taxon 🔲 Unknow	/n			
14. Sources/References (complete citation):					
Egan, D. 2007. Snakes of Arabia. A field guide to the S Publishing.	inakes of the Arabian	n Peninsula	and its Shor	es. Motivate	
Gasperetti, J. 1988. Snakes of Arabia. Fauna of Saudi A	rabia 9: 169-450				
Werner, Y.L. 1991. Notable Herpetofaunal Records from	m TransJordan. Zool	logy in the	Middle East.	Vol 5: 37-41	



## <u>Conservation Workshop for the Fauna of Arabia</u> <u>Taxon Data Sheet</u>

Working Group: Snakes	!	Date: 3-5 February 2008
1. Taxonomy		
1A. Scientific Name (Genus, species & subspecies): Bitis arietan.	s arietans	
Authority: Merrem		<b>Date:</b> 1820
1B. Synonyms (with authority & date):		
1C. Common Name(s) with language/region: Puff Adder (English).		
2. Distribution		
<b>2A.</b> Historical Distribution (last 100 years): Known from southwestern Saudi Arabia, Yemen and south	iwestern Oman.	
<b>2B.</b> Current Distribution (illustrate on map): See 2A.		
2C. Habitat of the taxon (ecosystem level):  Varied: Red Sea Nubio-Sinian tropical desert and semi-dese southwestern Arabian montane woodlands.	ert, southwestern Arabian fo	oothill savannah and
2D. Habitat specificity (elevation, etc.):  Non-specific habitat requirements, found from sea level up	o to 2000 m.a.s.l.	
2E. Migration: Yes • No Unknown		
If Yes, describe:		
3. Number of Populations & Subpopulations in which t	he Taxon is distributed:	3
Location of each:	Approx. Area Occupied:	Approx. No. of Individuals:
Southwestern Arabia	23,125 km²	~
Dhofar, Sultanate of Oman	2,500 km²	~
Possible Hadramaut complex, Yemen	~	~
4. Population Trends		
4A. Is the Population: \(\bigc\) Increasing \(\bigc\) Decreasing \(\bigc\)	Stable Ounknown	
4B. If declining, what has been the rate of decline?	20% ()>20% ()>50%	○>80%
Over how many years has the population decline oc	cured?	
4C. If stable or unknown, do you predict a future decline	in the population size? (	Yes • No
If Yes, please specify rate and factors e.g. habitat los	s, trade, etc.:	
5. Habitat Status		
5A. Is the habitat distribution: Continuous • Frag	gmented ( Unknown	
5B. Is there any change in the range of the habitat when	e the Taxon occurs?	es O No O Unknown
If Yes, is it: • Decreasing in Area	sing in Area	

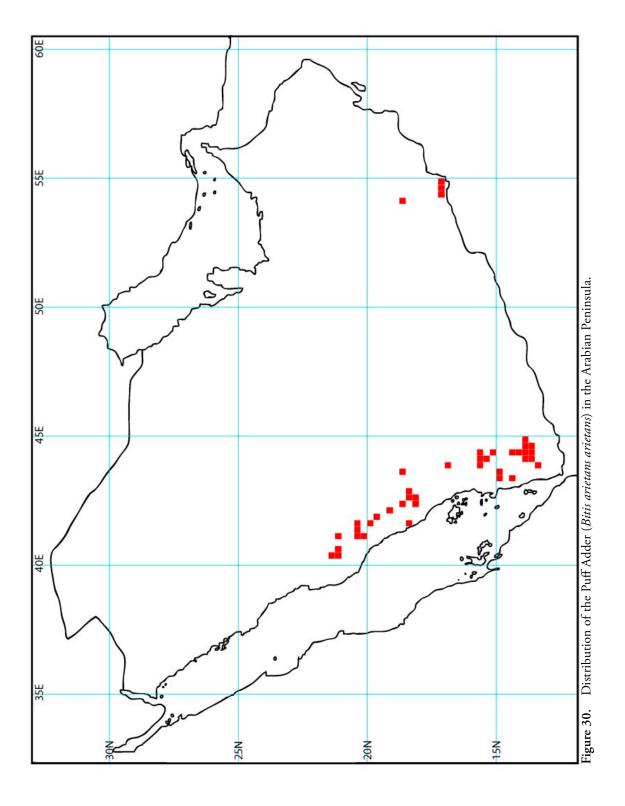
5C. If decreasing what has been Over how many years has tl					
5D. Do you predict a future dec If Yes, what do you predict Over how many years do yo	that decline	will be? (	• <20% \( >20\) \( >50\)	>80%	
<b>5E. State the primary cause of th</b> Urban development on Dhofar c	_				
If Yes, is the habitat quality:	<ul><li>Decli</li></ul>		ere the Taxon occurs?	lo ( Unk	known
<b>5G. State the primary cause of t</b> Urban development on Dhofar c	_				
6. Threats					
	Present	Future		Present	Future
Pollution			Disease		
Urban Development	$\boxtimes$	$\boxtimes$	Hybridization		
Road Kills			Decline in prey species		
Damming			Loss of habitat	$\bowtie$	$\boxtimes$
War			Genetic problems		
Recreational activities			Grazing		
Hunting (recreation or retail)	$\boxtimes$	$\boxtimes$	Habitat fragmentation	$\boxtimes$	$\boxtimes$
Harvest for medicine			Predation		
Harvest for food/timber			Interspecific competition		
Poisoning			Livestock competition (food, etc.)		
Pesticides			Livestock conflicts (retaliation kills)		
Persecution			Introduced species (non-livestock)		
Trade of animals/parts			Nutritional disorders		
Other (please specify): Collection in Saudi Arabia for ver	nom extraction	on a possibl	le threat but not confirmed.		
6B. Would these threats result in Comment:	າ (perceived	or inferred	) population decline? Yes No	)	nown
7. Trade					
7A. Is the Taxon in trade?  • Your If Yes, is it:  • Local	es \( \) No \( \) Regional	○ Unkn	own ernational Commercial		
7B. Parts in trade:					
Skin Fur Meat Produc	cts 🛭 L	lair .ive Animal	Horn Bones Taxidermy Organs	☐ Glands	5
Comments/Other threats (pl	ease specify):				

Data Quality				
8A. Are the estimates you have s	upplied based on:			
Census or monitoring	☐ General field studies	⊠ Info	ormal field studie	s 🔀 Literature
Hearsay/popular belief	Museum studies/records	⊠ Ind	irect information	from trade, etc.
Studies (field) conducted over	the last 10 years (indicate the year	ır of study ı	not the year of publ	ication):
Researchers	Location	Year	Topic	
. Conservation Status				
10A. IUCN Red List Category: (	Global: Not Listed.	Re	gional: Not Liste	d.
<b>10B. National Red Data Book:</b> Not Listed.				
10C. Workshop Assessment of Re	egional Red List Category: Least	: Concern.		
10D. CITES: Not Listed.				
<b>10E. National Wildife Legislation:</b> Not Listed.				
10F. Other Legislation (please speci	ify):			
10G. List existing Protected Area Protected Area	s within the Taxon's range:		Country	Size (km²)
Jabel Samhan		<del> </del>	Oman	3,460
-			Official	
10H. Recommended Protected A Area	reas for the Taxon:		Country	Size (km²)
Alea			Country	Size (KIII )
10I. Are there any Regional Cons If Yes, please list them:	ervation/Protection Action Plans	s: O Ye	s   No	Unknown
. Supporting Research  11A. Is research recommended?				
If Yes, what type of research				
Surveys Gene	<u></u>	Life	History	Public Awareness
☐ Trade ☐ Moni	toring Reintroduction	⊠ Hur	man Impact	
Other (please specify):				
. Management				
12A. What management is recom	mended for the Taxon?			
Habitat management	☐ Wild population manag	gement	Captive b	preeding
Monitoring	☐ Translocation		Sustainal	ole Use
Public Awareness	Limiting Factor Manage	ement		Research Banking
Law Enforcement	Work in Local Commur	nities	Address F	Policy Makers
Other (please specify):				

13. Captive Breeding					
13A. Is captive breeding recommended for the ta	xon: • Yes	○ No			
13B. If captive breeding is recommeded , is it for:					
Species recovery Reintroduction	⊠ Resea	rch	$\boxtimes$	Husbandry	,
⊠ Education	enome				
13C. Do Captive stocks already exist? Yes	○No ○Unk	nown			
If Yes, list the facilities:					
Facility	Country	Males	Females	Unknown	Total
BCEAW	UAE	~	~	~	~
13D. Does a coordinated Species Management Pl If Yes, list the participating institutions:	an exist? Yes	● No	OUnknow	vn	
If Not, is a Species Management Plan recomm If Yes, list the institutions that should particip		No     No			
13E. Level of captive breeding recommended:					
<ul> <li>Captive breeding program not neccessary</li> </ul>	y 🔲 Initiate	program	within 3 yea	rs	
Maintain existing program as it is	Intensify existing pr	ogram	Decrea	se existing p	orogam
13F. Are the techniques established for captive by	reeding?				
Techniques are known for this or similar t	taxon 🔲 Some ted	chniques a	are known fo	or this or sim	ilar taxon
Techniques not known for this or simialr	taxon 🔲 Unknow	n			
14. Sources/References (complete citation):					
Egan, D. 2007. Snakes of Arabia: A field guide to the Sr Dubai.	nakes of the Arabian	Peninsula	and its Shore	es. Motivate l	Publishing
Gasparetti, J. 1988. Snakes of Arabia. <i>Fauna of Saudi Ara</i> Schätte, B. and Desvoignes, A. 1999. The Herpetofaun Naturelle. Geneve.		and Soko	tra Archipela	ago. Museum	n d'Historie
Schätte, B. and Gasparetti, J.A. 1994. Contribution to tl 348-432.	he herpetofauna of S	Southwest	Arabia. <i>Faun</i>	a of Saudi Ard	abia 14:
Scortecci, G. 1932. Rettili dello Yemen. Atti della Socie:	tá Italiana di Scienze	Naturali e	del Museo C	ivico di Stori	a Naturale

William Branch, Damien Egan, Tony Phelps, Declan O'Donovan, Gavin Nel, Saud A. Al Farraj, Pritpal Soorae, Ehad Eid, Haithem Al Aamri, Peter Arras, Neelofa Ali, Masaa Al Jumaily, Khaled Al Rasbi and Patrick Paillat

Van der Kooij, J. 2001. The herpetofauna of the Sultanate of Oman. Part 4: The Terrestrial Snakes. Podarcis 2 (2): 54-64.



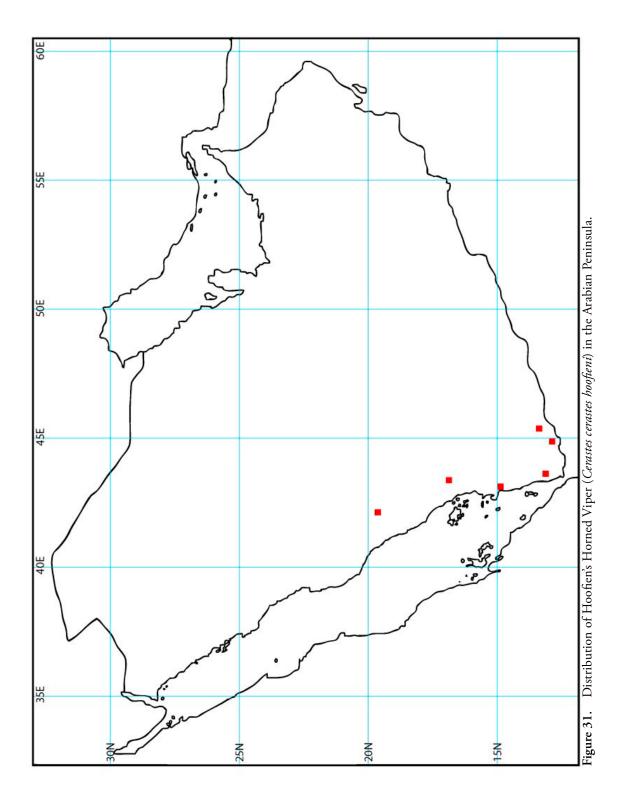
Working Group: Snakes	Date: 3-5 February 2008
1. Taxonomy	
1A. Scientific Name (Genus, species & subspecies): Cerastes cera	istes hoofieni
Authority: Werner & Sivan	<b>Date:</b> 1999
1B. Synonyms (with authority & date):	
1C. Common Name(s) with language/region: Hoofien's Horned Viper	
2. Distribution	
<b>2A.</b> Historical Distribution (last 100 years): Southwestern Arabia between Saudi Arabia and Yemen.	
<b>2B. Current Distribution</b> (illustrate on map): See 2A.	
<b>2C. Habitat of the taxon</b> (ecosystem level): Southwestern Arabian foothill savannah and Arabian Penin	sula coastal fog desert.
<b>2D. Habitat specificity</b> (elevation, etc.): Sandy locations on coastal plains (Tihama).	
2E. Migration: Yes No Unknown	
If Yes, describe:	
ii Tes, describe.	
3. Number of Populations & Subpopulations in which tl	ne Taxon is distributed:
Location of each:	Approx. Area Occupied: Approx. No. of Individuals:
On coast between Saudi Arabia and Yemen.	3750 km <sup>2</sup> ~
4. Population Trends	
4A. Is the Population: \(\) Increasing \(\) Decreasing \(\)	Stable • Unknown
4B. If declining, what has been the rate of decline? $\bigcirc$ <2	0% ( >20% ( >50% ( )>80%
Over how many years has the population decline occ	cured?
4C. If stable or unknown, do you predict a future decline	in the population size? ( Yes ( No
If Yes, please specify rate and factors e.g. habitat loss	, trade, etc.:
5. Habitat Status	
5A. Is the habitat distribution: • Continuous • Frag	mented 🔘 Unknown
5B. Is there any change in the range of the habitat where	the Taxon occurs?  Yes  No Unknown
If Yes, is it: O Decreasing in Area Increas	ing in Area
5C. If decreasing what has been the decline? <20%	
Over how many years has this decline occured?	

5D. Do you predict a future decli If Yes, what do you predict the Over how many years do you	hat decline	will be?		>80%	
5E. State the primary cause of th	is change:				
5F. Is there any change in the qu If Yes, is the habitat quality: 5G. State the primary cause of th	O Decl	ining	ere the Taxon occurs? Yes C	No OUnk	known
6. Threats					
Pollution Urban Development Road Kills Damming War Recreational activities Hunting (recreation or retail) Harvest for medicine Harvest for food/timber Poisoning Pesticides Persecution Trade of animals/parts Other (please specify):	Present	Future	Disease Hybridization Decline in prey species Loss of habitat Genetic problems Grazing Habitat fragmentation Predation Interspecific competition Livestock competition (food, etc.) Livestock conflicts (retaliation kills) Introduced species (non-livestock) Nutritional disorders	Present	Future
6B. Would these threats result in Comment:	(perceivec	d or inferred	l) population decline? Yes   Yes	No 🔵 Unkr	nown
7. Trade  7A. Is the Taxon in trade?  Ye  If Yes, is it:  Local (  7B. Parts in trade:	s <b>©</b> No Regiona	◯ Unkr I ◯ Into	nown ernational ( ) Commercial		
Skin Fur Meat Produc Comments/Other threats (ple	ts	Hair Live Anima	☐ Horn ☐ Bones  I ☐ Taxidermy ☐ Organs	☐ Gland	ls

8. Data Quality				
8A. Are the estimates you have s	upplied based on:			
Census or monitoring	☐ General field studies	☐ Inform	nal field studies	
Hearsay/popular belief		☐ Indire	ect information	from trade, etc.
9. Studies (field) conducted over	the last 10 years (indicate the yea	r of study no	t the year of public	cation):
Researchers	Location	Year	Topic	
10. Conservation Status				
10A. IUCN Red List Category:	Global: Not Listed.	Regi	onal: Not Listed	d.
<b>10B. National Red Data Book:</b> Not Listed.				
10C. Workshop Assessment of Re	egional Red List Category: Near	Threatened		
10D. CITES: Not Listed.				
<b>10E. National Wildife Legislation:</b> Not Listed.				
10F. Other Legislation (please spec	ify):			
10C List ovieting Dratastad Area	s within the Tayon's range.			
10G. List existing Protected Area Protected Area	s within the Taxon's range:		Country	Size (km²)
			<u> </u>	
1011 December de d'Oueste etc. d'A	was familia Tarray			_
10H. Recommended Protected A  Area	reas for the Taxon:		Country	Size (km²)
				5,20 (1.117)
10I. Are there any Regional Cons If Yes, please list them:	ervation/Protection Action Plans	S: O Yes	No     No	O Unknown
11. Supporting Research				
11A. Is research recommended?	• Yes No			
If Yes, what type of research	would you recommend?			
☐ Surveys ☐ Gene	tics X Taxonomic	Life H	istory	Public Awareness
_	toring Reintroduction	⊠ Huma	an Impact	
Other (please specify):				
12. Management				
12A. What management is recom	nmended for the Taxon?			
	☐ Wild population manag	gement	Captive b	reeding
Monitoring	☐ Translocation		Sustainab	le Use
Public Awareness	Limiting Factor Manage			Research Banking
Law Enforcement	Work in Local Commur	nities	Address P	olicy Makers
Other (please specify):				

13. Captive Breeding					
13A. Is captive breeding recommended for the tax	on: OYes	No			
13B. If captive breeding is recommeded, is it for:					
Species recovery Reintroduction	Resea	rch		Husbandry	
☐ Education ☐ Preserve live ger	nome				
13C. Do Captive stocks already exist? Yes	● No  Unk	known			
If Yes, list the facilities:					
Facility	Country	Males	Females	Unknown	Total
12D Decrease with the different in Management Dis					
13D. Does a coordinated Species Management Pla If Yes, list the participating institutions:	in exist? ( ) Yes	No	Unknow	/n	
ii res, list the participating institutions.					
If Not, is a Species Management Plan recomme	ended: O Yes	<ul><li>No</li></ul>			
If Yes, list the institutions that should participa	te:				
13E. Level of captive breeding recommended:					
	☐ Initiate	program	within 3 yea	rs	
Maintain existing program as it is	ntensify existing p	rogram	☐ Decrea	se existing p	rogam
13F. Are the techniques established for captive bre	eeding?				
☐ Techniques are known for this or similar tage.	axon 🔲 Some te	chniques a	are known fo	or this or sim	ilar taxon
Techniques not known for this or simialr to	axon 🔲 Unknow	'n			
14.6					
14. Sources/References (complete citation):					
Egan, D. 2007. Snakes of Arabia: A field guide to the Sna Dubai.	akes of the Arabian	Peninsula	and its Shore	es. Motivate P	Publishing
Gasparetti, J. 1988. Snakes of Arabia. Fauna of Saudi Ara			6	1 . 1	
Werner, Y., Sivan, N., Kusher, V. & Motro, U. 1999. A statisthe description of two endemic subspecies. In U. Joger					

(Darmstad) 8: 83-97.



Working Group: Snakes	Date	e: 3-5 February 2008
1. Taxonomy		
1A. Scientific Name (Genus, species & subspecies): Cerastes gasp	erettii	
Authority: Leviton & Anderson	Dat	re: 1984
1B. Synonyms (with authority & date):		
1C. Common Name(s) with language/region: Arabian Horned Viper (English)		
2. Distribution		
<b>2A. Historical Distribution</b> (last 100 years): Throughout the Arabian Peninsula where there is suitable ha	abitat.	
<b>2B. Current Distribution</b> (illustrate on map): See 2A.		
<b>2C. Habitat of the taxon</b> (ecosystem level): Varied: Arabian desert and east Sahero-Arabian xeric woodla desert. Southwestern Arabian foothill savannah and Gulf of		
2D. Habitat specificity (elevation, etc.): Generally loose sand conditions.		
2E. Migration: Yes • No Unknown		
If Yes, describe:		
${\bf 3.NumberofPopulations\&Subpopulationsinwhichth}$	e Taxon is distributed:	1
Location of each:	Approx. Area Occupied: A	pprox. No. of Individuals:
Throughout the Arabian Peninsula in suitable habitat.	50800 km²	~
4. Population Trends		
4A. Is the Population: \(\) Increasing \(\) Decreasing \(\)	table	
4B. If declining, what has been the rate of decline? <20	0%	>80%
Over how many years has the population decline occu	ured?	
4C. If stable or unknown, do you predict a future decline in	n the population size? 🔘 Ye	es   No
If Yes, please specify rate and factors e.g. habitat loss,	trade, etc.:	
5. Habitat Status		
5A. Is the habitat distribution:   Continuous  Fragn	nented ( Unknown	
5B. Is there any change in the range of the habitat where the street of the street of the habitat where the street of the street	the Taxon occurs?	○ No ○ Unknown
5C. If decreasing what has been the decline?		>80%
Over how many years has this decline occured? 10		

5D. Do you predict a future decl If Yes, what do you predict t Over how many years do yo	hat decline	will be?		>80%	
<b>5E. State the primary cause of th</b> Urban development.	iis change:				
, -	•			No OUnk	known
If Yes, is the habitat quality:		ining	Improving		
<b>5G. State the primary cause of th</b> Overgrazing, offroad driving, urba	_	nent and s	prawl.		
6. Threats					
	Present	Future		Present	Future
Pollution			Disease		
Urban Development	$\boxtimes$		Hybridization		
Road Kills			Decline in prey species		
Damming			Loss of habitat		$\boxtimes$
War			Genetic problems		
Recreational activities			Grazing		
Hunting (recreation or retail)  Harvest for medicine			Habitat fragmentation Predation		
Harvest for fledicine  Harvest for food/timber			Interspecific competition		
Poisoning			Livestock competition (food, etc.)		
Pesticides			Livestock conflicts (retaliation kills)		
Persecution			Introduced species (non-livestock)		
Trade of animals/parts			Nutritional disorders		
Other (please specify):			Nutritional disorders		
6B. Would these threats result in Comment:	ı (perceivec	l or inferre	ed) population decline? Yes • N	No 🔿 Unki	nown
7. Trade					
7A. Is the Taxon in trade? • Ye If Yes, is it: Cocal	es ( No Regiona	O Unk I ⊚ In	known nternational Commercial		
7B. Parts in trade:					
Skin Fur		Hair	☐ Horn ☐ Bones	☐ Gland	ls
☐ Meat ☐ Produc	ts 🖂	Live Anim	al Taxidermy Organs		
Comments/Other threats (ple	ease specify):				

8. Data Quality				
8A. Are the estimates you have s	upplied based on:			
Census or monitoring	General field studies		mal field studies	∠ Literature
	Museum studies/records		ect information f	rom trade, etc.
9. Studies (field) conducted over	the last 10 years (indicate the yea	r of study no	of the year of publica	tion):
Researchers	Location	Year		
nesearchers	Location	Teal	Topic	
10. Conservation Status				
10A. IUCN Red List Category: (	Global: Not Listed.	Reg	ional: Not Listed.	
10B. National Red Data Book: Not Listed.		5		
10C. Workshop Assessment of Re	egional Red List Category: Least	Concern.		
10D. CITES: Not Listed.				
<b>10E. National Wildife Legislation:</b> Not Listed.				
10F. Other Legislation (please speci	fy):			
10G. List existing Protected Areas Protected Area	s within the Taxon's range:		Country	Size (km²)
 10H. Recommended Protected A	reas for the Taxon:			
Area			Country	Size (km²)
101 Ave there are Decised Cons	owation/Ductostion Astion Dlang	- Vos	• No	
101. Are there any Regional Consol If Yes, please list them:	ervation/Protection Action Plans	s; () les	( NO	Olikilowii
·				
11. Supporting Research				
11A. Is research recommended?	○ Yes ○ No			
If Yes, what type of research				
☐ Surveys ☐ Gene	·	☐ Life H	History   P	ublic Awareness
	toring Reintroduction	_	an Impact	a.o
Other (please specify):	g			
12. Management				
12A. What management is recom	mended for the Taxon?			
Habitat management	Wild population manage	gement		edina
☐ Monitoring	☐ Translocation	J-111-111	Sustainable	_
Public Awareness	Limiting Factor Manage	ement		esearch Banking
☐ Law Enforcement	☐ Work in Local Commur		Address Po	_
Other (please specify):				,

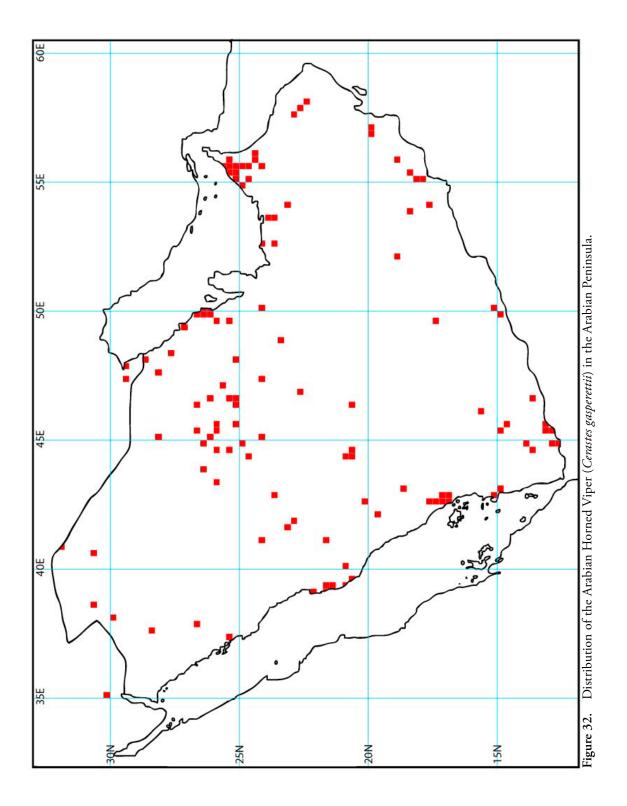
13. Captive Breeding					
13A. Is captive breeding recommended for the	taxon: • Yes	○ No			
13B. If captive breeding is recommeded, is it fo	r:				
☐ Species recovery ☐ Reintroduction ☐ Research ☐ Husbandry					
⊠ Education	genome				
13C. Do Captive stocks already exist? • Yes	○ No ○ Unk	known			
If Yes, list the facilities:					
Facility	Country	Males	Females	Unknown	Total
BCEAW	UAE	~	~	~	~
13D. Does a coordinated Species Management If Yes, list the participating institutions:	Plan exist? Yes	● No	○ Unknov	vn	
If Not, is a Species Management Plan recom		● No			
13E. Level of captive breeding recommended:					
Captive breeding program not neccess	ary 🔲 Initiate	program	within 3 yea	rs	
Maintain existing program as it is	Intensify existing pr	rogram	Decrea	se existing p	orogam
13F. Are the techniques established for captive	•				
☐ Techniques are known for this or simila	<del></del>	chniques a	are known fo	or this or sim	ilar taxon
Techniques not known for this or simia	Ir taxon 🔲 Unknow	'n			
14. Sources/References (complete citation):					
Egan, D. 2007. Snakes of Arabia: A field guide to the Dubai.	Snakes of the Arabian	Peninsula	and its Shore	es. Motivate f	Publishing,
Gasparetti, J. 1988. Snakes of Arabia. <i>Fauna of Saudi</i> . Schätte, B. and Desvoignes, A. 1999. The Herpetofau Naturelle. Geneve.		n and Soko	tra Archipela	ago. Museum	n d'Historie
Schätte, B. and Gasparetti, J.A. 1994. Contribution to 348-432.	the herpetofauna of S	Southwest	Arabia. <i>Faun</i>	a of Saudi Ard	abia 14:
Scortecci, G. 1932. Rettili dello Yemen. Atti della Soc	ietá Italiana di Scienze	Naturali e	del Museo C	ivico di Stori	a Naturale,

Sc Milano 71: 39-49.

Van der Kooji, J. 2001. The herpetofauna of the Sultanate of Oman. Part 4: Terrestrial Snakes. Podarcus 2 (2): 54-64. Werner, Y.L. 1991. Notable herpetofaunal records from Transjordan. Zoology in the Middle East 5: 37-41.

Werner, Y., Sivan, N., Kusher, V. & Motro, U. 1999. A statistical approach to variations in Cerastes (Ophidia: Viperidae) with the description of two endemic subspecies. In U. Joger. (ed.): Phylogeny and Systematics of the Viperidae. Kaupia (Darmstad) 8: 83-97.

#### 15. Compilers



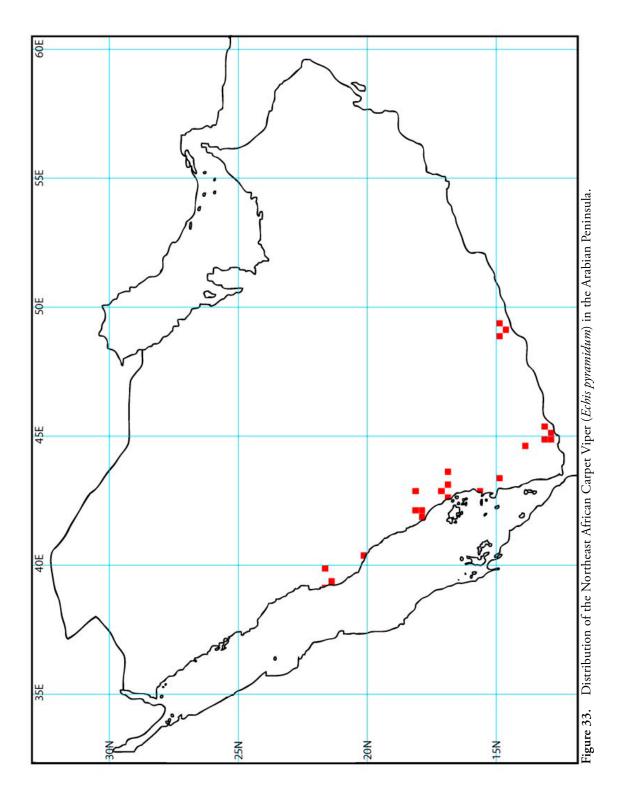
### <u>Conservation Workshop for the Fauna of Arabia</u> <u>Taxon Data Sheet</u>

Working Group: Snakes	Date: 3-5 February 2008
1. Taxonomy	
1A. Scientific Name (Genus, species & subspecies): Echis pyran	nidum
Authority: (Geofry, St Hillaire)	<b>Date:</b> 1827
1B. Synonyms (with authority & date):	
1C. Common Name(s) with language/region: Northeast African Carpet Viper	
2. Distribution	
<b>2A. Historical Distribution</b> (last 100 years): From NE Africa to Sinai. In Arabia, eastern Saudi Arabia to S	South Yemen
<b>2B. Current Distribution</b> (illustrate on map): See 2A	
<b>2C. Habitat of the taxon</b> (ecosystem level): Varied: Southwestern Arabian foothills savannah: may exte	end further east into Hadramaut
2D. Habitat specificity (elevation, etc.): Non-specific habitat requirements	
2E. Migration: Yes • No Unknown	
If Yes, describe:	
3. Number of Populations & Subpopulations in which	the Taxon is distributed:
Location of each:	Approx. Area Occupied: Approx. No. of Individuals:
Eastern watershed of Saudi Arabia and Yemen to South Yemen and possibly Hadrmaut	9200 km2
4. Population Trends	
4A. Is the Population: \(\) Increasing \(\) Decreasing \(\)	Stable • Unknown
4B. If declining, what has been the rate of decline?	
Over how many years has the population decline or	
4C. If stable or unknown, do you predict a future decline	
If Yes, please specify rate and factors e.g. habitat los	
5. Habitat Status	
5A. Is the habitat distribution: Continuous Frag	gmented • Unknown
5B. Is there any change in the range of the habitat when	
5C. If decreasing what has been the decline? <209	%
Over how many years has this decline occured?	

5D. Do you predict a future decl If Yes, what do you predict t Over how many years do yo	hat decline	will be?		>80%	
<b>5E. State the primary cause of th</b> General urbanization	nis change:				
5F. Is there any change in the quality:  1f Yes, is the habitat quality:  5G. State the primary cause of the	O Decl		here the Taxon occurs? Yes 1	No <b>⊚</b> Unl	known
6. Threats					
Pollution Urban Development Road Kills Damming War Recreational activities Hunting (recreation or retail) Harvest for medicine Harvest for food/timber Poisoning Pesticides Persecution Trade of animals/parts Other (please specify):	Present	Future	Disease Hybridization Decline in prey species Loss of habitat Genetic problems Grazing Habitat fragmentation Predation Interspecific competition Livestock competition (food, etc.) Livestock conflicts (retaliation kills) Introduced species (non-livestock) Nutritional disorders	Present	Future
6B. Would these threats result in Comment:	n (perceivec	l or inferre	d) population decline?	o 🔿 Unk	nown
	es ( No ( Regiona		nown ternational Commercial		
7B. Parts in trade:  Skin Fur  Meat Product  Comments/Other threats (pl	cts 🖂	Hair Live Anim	Horn Bones  al Taxidermy Organs	☐ Gland	sk

8A. Are the estimates you have so	upplied based on:			
Census or monitoring	General field studies		nal field studies	Literature
Hearsay/popular belief	Museum studies/records		ect information f	rom trade, etc.
. Studies (field) conducted over	the last 10 years (indicate the yea	r of study not	t the year of publica	ition):
Researchers	Location	Year	Topic	
0. Conservation Status				
10A. IUCN Red List Category: (	Global: Not listed	Regi	onal: Not listed	
10B. National Red Data Book: Not listed				
10C. Workshop Assessment of Re	egional Red List Category: Least	concern		
10D. CITES: Not listed				
<b>10E. National Wildife Legislation:</b> Not listed				
10F. Other Legislation (please speci	fy):			
10G. List existing Protected Areas	s within the Taxon's range:		Country	Size (km²)
10H. Recommended Protected A	reas for the Taxon:			
10H. Recommended Protected A Area	reas for the Taxon:		Country	Size (km²)
	reas for the Taxon:		Country	Size (km²)
Area			·	
Area  101. Are there any Regional Conse			·	Size (km²)
Area			·	
Area  101. Are there any Regional Conse			·	
Area  10l. Are there any Regional Conse If Yes, please list them:			·	
Area  101. Are there any Regional Conse  If Yes, please list them:			·	
Area  101. Are there any Regional Consell f Yes, please list them:  1. Supporting Research  11A. Is research recommended?	ervation/Protection Action Plans  • Yes		·	
Area  101. Are there any Regional Conse If Yes, please list them:  1. Supporting Research	ervation/Protection Action Plans  • Yes		No     No	
Area  101. Are there any Regional Consell f Yes, please list them:  1. Supporting Research  11A. Is research recommended?  If Yes, what type of research with the conseller for the conseller fo	ervation/Protection Action Plans  • Yes	: Yes	No     No	Unknown
Area  101. Are there any Regional Consell f Yes, please list them:  1. Supporting Research  11A. Is research recommended?  If Yes, what type of research with the support of the support o	ervation/Protection Action Plans  ● Yes ○ No would you recommend? tics ☑ Taxonomic	: Yes	No     Istory    □ P	Unknown
Area  101. Are there any Regional Consell Yes, please list them:  1. Supporting Research  11A. Is research recommended?  If Yes, what type of research Surveys Gene  Trade Monit Other (please specify):	ervation/Protection Action Plans  ● Yes ○ No would you recommend? tics ☑ Taxonomic	: Yes	No     Istory    □ P	Unknown
Area  101. Are there any Regional Consell f Yes, please list them:  1. Supporting Research  11A. Is research recommended?  If Yes, what type of research will be surveys will Genee will make the conselling of th	ervation/Protection Action Plans	: Yes	No     Istory    □ P	Unknown
Area  101. Are there any Regional Consell f Yes, please list them:  1. Supporting Research  11A. Is research recommended?  If Yes, what type of research will be surveys will Gene will make a monitoring of the following of the f	ervation/Protection Action Plans  Yes	:  Yes	No  istory □ P  an Impact	Unknown  Unknown
Area  10I. Are there any Regional Conself Yes, please list them:  1. Supporting Research  11A. Is research recommended?  If Yes, what type of research with the search of	ervation/Protection Action Plans  Yes	:  Yes	No  istory P  an Impact  Captive bre	Unknown  Unknown  ublic Awareness
Area  101. Are there any Regional Consell Yes, please list them:  1. Supporting Research  11A. Is research recommended?  If Yes, what type of research will genee Monit Other (please specify):  2. Management  12A. What management is recom Monitoring	ervation/Protection Action Plans  ● Yes	: Yes	No  istory Pan Impact  Captive bre	Unknown  Unknown  ublic Awareness  eding Use
Area  101. Are there any Regional Consell f Yes, please list them:  1. Supporting Research  11A. Is research recommended?  If Yes, what type of research with the search of the search o	ervation/Protection Action Plans  Yes	Life H Huma	No  istory Pan Impact  Captive bre	Unknown  Unknown  ublic Awareness  eding Use search Banking

13. Captive Breeding					
13A. Is captive breeding recommended for the taxon	: O Yes	No			
13B. If captive breeding is recommeded, is it for:					
Species recovery Reintroduction	Resea	arch		Husbandry	1
Education Preserve live genor	me				
13C. Do Captive stocks already exist? Yes	No OUn	known			
If Yes, list the facilities:					
Facility	Country	Males	Females	Unknown	Total
13D. Does a coordinated Species Management Plan e	ovist? O Vos		O Unknov		
If Yes, list the participating institutions:	exist: () res	( <b>•</b> ) INO	Onknow	/11	
If Not, is a Species Management Plan recommend	ded: OYes	<ul><li>No</li></ul>			
If Yes, list the institutions that should participate:					
13E. Level of captive breeding recommended:					
Captive breeding program not neccessary	_	_	within 3 yea		
	ensify existing p	rogram	Decrea	se existing p	orogam
13F. Are the techniques established for captive breed	ling?				
Techniques are known for this or similar taxo		echniques	are known fo	or this or sim	nilar taxon
Techniques not known for this or simialr taxo	on 🗌 Unknov	vn			
14. Sources/References (complete citation):					
Egan, D. 2007. Snakes of Arabia. A field guide to the Snak Publishing.	es of the Arabia	n Peninsula	a and its Sho	res. Motivate	
Gasperetti, J. 1988. Snakes of Arabia. Fauna of Saudi Arabi	ia 9:169-450				
Schatte, B & Desvolgnes, A. 1999. The herpetofauna fo so d'Histoire Naturelle, Geneve.	uthern Yemen a	and the Soc	qotra archipe	lago. Museur	m
Schatte, B & Gasparetti, J.A. Contribution to the herpetofal	una of Southwe	stern Arabi	a. Fauna of S	audi Africa. V	/ol.14
Scortecci, G. 1932. Rettill dello Yemen. Atti della. Societa l Milano 71:39-49.	taliana di Scienz	ze Naturali e	e del Musea (	Civico Storia	Naturale di
Van der Kooij, J. 2001. The Herpetofauna of the Sultinate	e of Oman. Part	4: Terrestri	al Snakes. Po	darcus	
Werner, Y.L. 1991. Notable Herpetofauanal Records from	n TransJordan. Z	Zoology in	the Middle E	ast. Vo.5:37-	-41

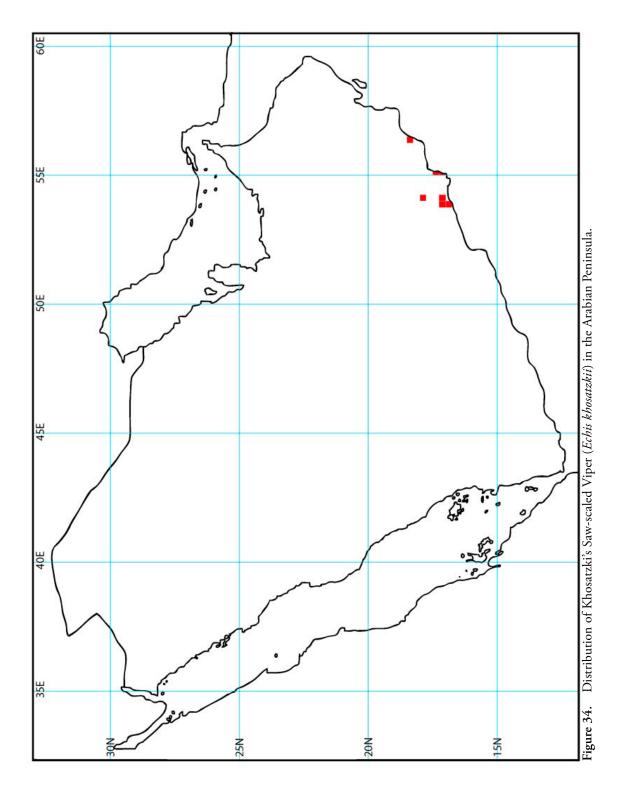


Working Group: Snakes	Date: 3-5 February 2008
1. Taxonomy	
1A. Scientific Name (Genus, species & subspecies):	Echis khosatzkii
Authority: Cherlin	<b>Date</b> : 1990
1B. Synonyms (with authority & date):	
1C. Common Name(s) with language/regior Khosatzki's saw scale viper	:
2. Distribution	
<b>2A. Historical Distribution</b> (last 100 years): Dhofar, Oman and possible adjacent SW Yem	en
<b>2B.</b> Current Distribution (illustrate on map): See 2A.	
<b>2C. Habitat of the taxon</b> (ecosystem level): Varied: Red Sea Nubio-Sinian tropical desert a Peninsula coastal fog desert	nd semi-desert: South western Arabian foothills savannah: Arabian
2D. Habitat specificity (elevation, etc.): Apparently non-specific habitat requirements	
2E. Migration:	known
If Yes, describe:	
3. Number of Populations & Subpopulation	s in which the Taxon is distributed:
Location of each:	Approx. Area Occupied: Approx. No. of Individuals:
Dhofar	525 km2
4. Population Trends	
4A. Is the Population: \( \cap \) Increasing \( \cap \) De	creasing Stable • Unknown
•	ecline? <20% <>20% <>50% <>80%
Over how many years has the population	
	ture decline in the population size? Yes • No
If Yes, please specify rate and factors e.g.	
ii res, picase specify rate and factors e.g	. Habitat 1033, trade, etc
5. Habitat Status	
5A. Is the habitat distribution:   © Continu	ous ( ) Fragmented ( ) Unknown
5B. Is there any change in the range of the h If Yes, is it: • Decreasing in Area	
5C. If decreasing what has been the decline	
Over how many years has this decline of	

5D. Do you predict a future declir If Yes, what do you predict th Over how many years do you	at decline	will be?		>80%	
<b>5E. State the primary cause of this</b> Development of coastal plains in E	_				
<ul><li>5F. Is there any change in the qualify:</li><li>5G. State the primary cause of thi</li><li>Urban development</li></ul>	<ul><li>Decli</li></ul>	ining	nere the Taxon occurs?	No ( Unk	known
6. Threats					
Pollution Urban Development Road Kills Damming War Recreational activities Hunting (recreation or retail) Harvest for medicine Harvest for food/timber Poisoning Pesticides Persecution Trade of animals/parts Other (please specify):			Disease Hybridization Decline in prey species Loss of habitat Genetic problems Grazing Habitat fragmentation Predation Interspecific competition Livestock competition (food, etc.) Livestock conflicts (retaliation kills) Introduced species (non-livestock) Nutritional disorders		
6B. Would these threats result in Comment: Status pending further distribu			d) population decline?	o	nown
7. Trade  7A. Is the Taxon in trade?  Yes	s ( No	○ Unkr	nown		
	Regiona	l OInto	ernational Commercial		
7B. Parts in trade:  Skin Fur  Meat Product  Comments/Other threats (plea	ss	Hair Live Anima	☐ Horn ☐ Bones	☐ Gland	łs

8. Data Quality				
8A. Are the estimates you have sup	oplied based on:			
Census or monitoring	General field studies	_	ormal field studies	Literature
	Museum studies/records	Ind	lirect information f	rom trade, etc.
9. Studies (field) conducted over the	ne last 10 years (indicate the year	r of study	not the year of publica	ation):
Researchers	Location	Year	Topic	
Wuster, W; Pook, C. (Pers.com)	Dhofar	2007	Arabian viperida	e
10. Conservation Status				
<ul><li>10A. IUCN Red List Category: GI</li><li>10B. National Red Data Book: Not listed</li></ul>	obal: Not listed	Re	egional: Not listed	
10C. Workshop Assessment of Reg	ional Red List Category: Near	Threaten	ed	
10E. National Wildife Legislation: Not listed				
10F. Other Legislation (please specify	):			
10G. List existing Protected Areas v Protected Area	within the Taxon's range:		Country	Size (km²)
Possibly Jebel Samhan			Oman	
10H. Recommended Protected Are	eas for the Taxon:		•	
Area			Country	Size (km²)
10I. Are there any Regional Conser If Yes, please list them:	vation/Protection Action Plans	s: O Ye	es <b>©</b> No	O Unknown
11. Supporting Research				
11A. Is research recommended?	Yes No			
If Yes, what type of research w  Surveys Geneti Trade Monito Other (please specify):	cs X Taxonomic	_	History	ublic Awareness
12. Management				
12A. What management is recomm	nended for the Taxon?			
	☐ Wild population mana	igement	Captive b	reeding
Monitoring	☐ Translocation		Sustainab	
Public Awareness	Limiting Factor Manag		_	Research Banking
Law Enforcement	☐ Work in Local Commu	nities	Address P	olicy Makers
Other (please specify):				

13. Captive Breeding					
13A. Is captive breeding recommended for the ta	axon: • Yes	○ No			
13B. If captive breeding is recommeded, is it for:					
Species recovery Reintroduction	n 🔀 Rese	arch	$\boxtimes$	Husbandry	
⊠ Education	jenome				
13C. Do Captive stocks already exist? Yes	● No ○ Ur	ıknown			
If Yes, list the facilities:					
Facility	Country	Males	Females	Unknown	Total
 13D. Does a coordinated Species Management P	Plan exist? \( \sum \text{Yes}	● No		 vn	
If Yes, list the participating institutions:					
If Not, is a Species Management Plan recomment of Yes, list the institutions that should participate of the Plan Recommendation o		<ul><li>No</li></ul>			
13E. Level of captive breeding recommended:					
Captive breeding program not neccessar	_		within 3 yea		. KO G O MO
<ul><li>Maintain existing program as it is</li><li>13F. Are the techniques established for captive b</li></ul>	Intensify existing pareeding?	orograffi	Decrea	se existing p	nogani
Techniques are known for this or similar	_	echniques a	are known fo	or this or sim	ilar taxon
Techniques not known for this or simialr	_	-			
14. Sources/References (complete citation):					
Egan, D. 2007. Snakes of Arabia. A field guide to the Sn	nakes of the Arabian F	Peninsula an	d its Shores. N	Notivate Pub	lishing.
Gasperetti, J. 1988. Snakes of Arabia. Fauna of Saudi A	rabia 9: 169-450				
Schatte, B & Desvolgnes, A. 1999. <i>The Herpetofauna of</i> Naturelle, Geneve.	f southern Yemen and	d the Soqotro	a archipelagc	o. Museum d'	Histoire
Schatte, B & Gasperetti, J.A. Contribution to the herpeto	ofauna of Southwest	ern Arabia. F	auna of Sauc	di Arabia Vol.	14.
Scartecci, G. 1932. Rettili dello Yemen. <i>Atti della. Socie Milario</i> 71: 39-49.	eta Italiana di Scienze	? Naturalle de	el Museo Civid	co Storia Natu	ırale di
Van der Kooij, J. 2001. The Herpetofauna of the Sultino	ate of Oman. Part 4:	Terrestrial S	nakes: Poda	rcus.	
Werner, Y.L. 1991. Notable Herpetofauna Records fr	rom TransJordan. <i>Zc</i>	oology in the	: Middle East.	Vol.5: 37-42	



Working Group: Snakes		Date: 3-5 February 2008
1. Taxonomy		
1A. Scientific Name (Genus, species & subspecies): Echis co	oloratus coloratus	
Authority: Gunther		<b>Date:</b> 1878
1B. Synonyms (with authority & date):		
1C. Common Name(s) with language/region: Burton's carpet viper, Painted carpet viper (English)		
2. Distribution		
<b>2A. Historical Distribution</b> (last 100 years): NE Africa to Sinai. Western Saudi Arabia to Southern Y	emen. One population in North	ern Dhofar, Oman.
<b>2B.</b> Current Distribution (illustrate on map): See 2A.		
<b>2C. Habitat of the taxon</b> (ecosystem level): Varied: Arabian Desert and east Sahero-Arabian xeric desert: South western Arabian foothills savannah	woodlands. Red Sea Nubio-Sinia	n tropical desert and semi-
2D. Habitat specificity (elevation, etc.): Non-specific habitat requirements. Generally associat	ed with rocky situations.	
2E. Migration: Yes • No Unknown		
If Yes, describe:		
·		
3. Number of Populations & Subpopulations in wh	ich the Taxon is distributed:	
Location of each:	Approx. Area Occupied:	Approx. No. of Individuals:
Western Saudi Arabia to Southern Yemen	24 375 km2	
Dhofar	25 km2	-
4. Population Trends		-
	Ctable Clinksons	
4A. Is the Population: Olncreasing Decreasing		C > 900/
4B. If declining, what has been the rate of decline?		( ) > 00 %
Over how many years has the population declin		O No
4C. If stable or unknown, do you predict a future de		Yes No
If Yes, please specify rate and factors e.g. habita (Dhofar population)	t loss, trade, etc.:	
5. Habitat Status		
5A. Is the habitat distribution:   Continuous	Fragmented ( Unknown	
5B. Is there any change in the range of the habitat v		es \( \) No \( \) Unknown
	creasing in Area	

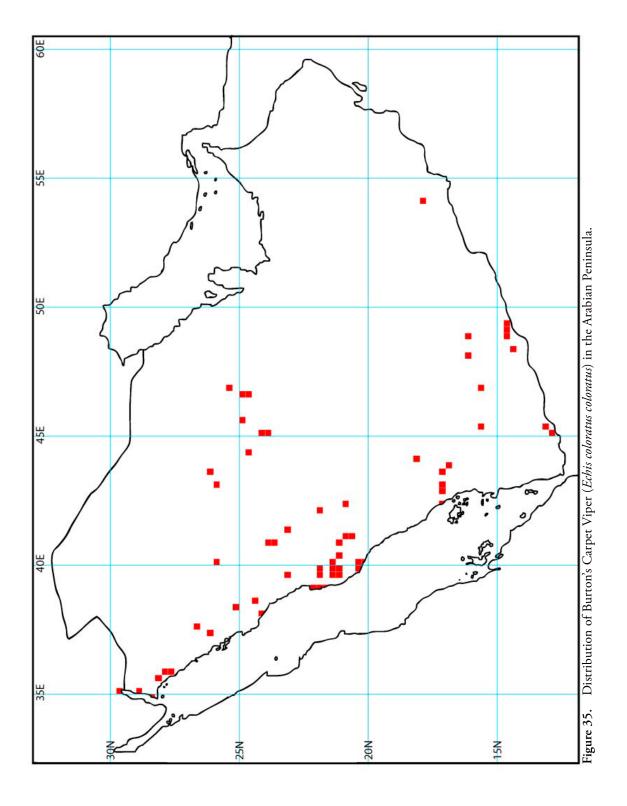
5C. If decreasing what has been Over how many years has th			% () >20% () >50% () >80%	ı	
5D. Do you predict a future decli If Yes, what do you predict t Over how many years do yo	hat decline	will be? (	• <20% >20% >50%	>80%	
<b>5E. State the primary cause of th</b> Urban development	is change:				
5F. Is there any change in the qu If Yes, is the habitat quality:	•		ere the Taxon occurs?	No ( Unk	known
<b>5G. State the primary cause of th</b> Urban development	iis change:				
6. Threats					
	Present	Future		Present	Future
Pollution			Disease		
Urban Development	$\boxtimes$	$\boxtimes$	Hybridization		
Road Kills			Decline in prey species		
Damming			Loss of habitat	$\boxtimes$	$\boxtimes$
War			Genetic problems		
Recreational activities			Grazing		
Hunting (recreation or retail)			Habitat fragmentation		$\boxtimes$
Harvest for medicine			Predation		
Harvest for food/timber			Interspecific competition		
Poisoning			Livestock competition (food, etc.)		
Pesticides			Livestock conflicts (retaliation kills)		
Persecution			Introduced species (non-livestock)		
Trade of animals/parts Other (please specify):			Nutritional disorders		
Comment:			) population decline?	o 💿 Unkı	nown
7. Trade					
7A. Is the Taxon in trade? • Ye	es O No	O Unkn	own		
If Yes, is it: C Local (	Regional	l • Inte	ernational Commercial		
7B. Parts in trade:					
Skin Fur	_ F	Hair	☐ Horn ☐ Bones	Glands	;
☐ Meat ☐ Produc	ts 🛭 L	ive Animal	☐ Taxidermy ☐ Organs		
Comments/Other threats (ple	ease specify):				

8. Data Quality				
8A. Are the estimates you have s	upplied based on:			
Census or monitoring	⊠ General field studies	⊠ Info	ormal field studies	Literature
Hearsay/popular belief	Museum studies/records	⊠ Ind	lirect information	from trade, etc.
9. Studies (field) conducted over	the last 10 vears (indicate the vea	r of study	not the vear of publi	cation):
Researchers	Location	Year	Topic	
Wuster, W; Pook, C.	Dhofar	2007	Viperidae- Arab	ia (Pers.com)
10. Conservation Status		-	_	
10A. IUCN Red List Category: (	Global: Not listed	Re	gional: Not listed	
10B. National Red Data Book: Not listed			<b>5</b>	
10C. Workshop Assessment of Re	egional Red List Category: Least	concern		
10D. CITES: Not listed				
<b>10E. National Wildife Legislation:</b> Not listed				
<b>10F. Other Legislation</b> (please speci Not listed	fy):			
10G. List existing Protected Area	s within the Taxon's range:			
Protected Area	, within the raxons range.		Country	Size (km²)
		_		_
10H. Recommended Protected A	reas for the Taxon:		Carratura	c: (1 2)
Area			Country	Size (km²)
10I. Are there any Regional Cons	ervation/Protection Action Plans	s: O Ye	s   No	Unknown
If Yes, please list them:				
11. Supporting Research				
11A. Is research recommended?	Yes No			
If Yes, what type of research	would you recommend?			
☐ Surveys ☐ Gene	_	Life	History	Public Awareness
Trade Moni	toring Reintroduction	⊠ Huı	man Impact	
Other (please specify):				
12. Management				
12A. What management is recon	nmended for the Taxon?			
☐ Habitat management	☐ Wild population mana	igement		oreeding
Monitoring	☐ Translocation	.gement	☐ Sustainal	_
Public Awareness	Limiting Factor Manag	gement		Research Banking
Law Enforcement	Work in Local Commu		_	Policy Makers
Other (please specify):				

13. Captive Breeding						
13A. Is captive breeding reco	mmended for the taxo	n: Yes	○No			
13B. If captive breeding is red	commeded , is it for:					
Species recovery	Reintroduction	⊠ Resea	arch	$\boxtimes$	Husbandry	
⊠ Education	Preserve live gend	ome				
13C. Do Captive stocks alread	dy exist? Yes	● No	known			
If Yes, list the facilities:						
Facility		Country	Males	Females	Unknown	Total
13D. Does a coordinated Spe		evist? O Ves		Unknov		
If Yes, list the participatin	_	CAIST: () TES	( NO	OTIKITOV	VII	
,	<b>5</b>					
If Not, is a Species Manag	gement Plan recommer	nded: O Yes	<ul><li>No</li></ul>			
If Yes, list the institutions	that should participate	2:				
13E. Level of captive breeding	g recommended:					
Captive breeding pro	ogram not neccessary		e program	within 3 yea	rs	
Maintain existing pro	ogram as it is 🔲 Int	ensify existing p	rogram	Decrea	se existing p	rogam
13F. Are the techniques esta	blished for captive bree	eding?				
	wn for this or similar tax	on Some te	echniques a	are known fo	or this or sim	ilar taxon
Techniques not know	wn for this or simialr tax	kon 🗌 Unknow	vn			
14. Sources/References (comp	lete citation):					
Babocsay, G. 2001. Sexual differ		ation of some mo	orphologica	al characters	in Echis color	atus
(Viperidae, Ophidia. Pp. 39-42. Ir						
Irakleio.						
Babocsay, G. 2003. Geographic	variation in Echis colorat	us (Viperidae, Op	hidia) in the	e Levant with	n the descrip	tion of a
new subspecies. Zoology of the I	Middle East, 29: 13-32.					
Babocsay, G. 2004. A new specie	es of saw-scaled viper of	the Echis colorat	us complex	(Ophidia: Vi	peridae) fron	n Oman,
Eastern Arabia. Systematics and	Biodiversity 1 (4): 503-51	4				

William Branch, Damien Egan, Tony Phelps, Declan O'Donovan, Gavin Nel, Saud A. Al Farraj, Pritpal Soorae, Ehad Eid, Haithem Al Aamri, Peter Arras, Neelofa Ali, Masaa Al Jumaily, Khaled Al Rasbi and Patrick Paillat

Gasperetti, J. 1988. Snakes of Arabia. Fauna of Saudi Arabia 9: 169-450.

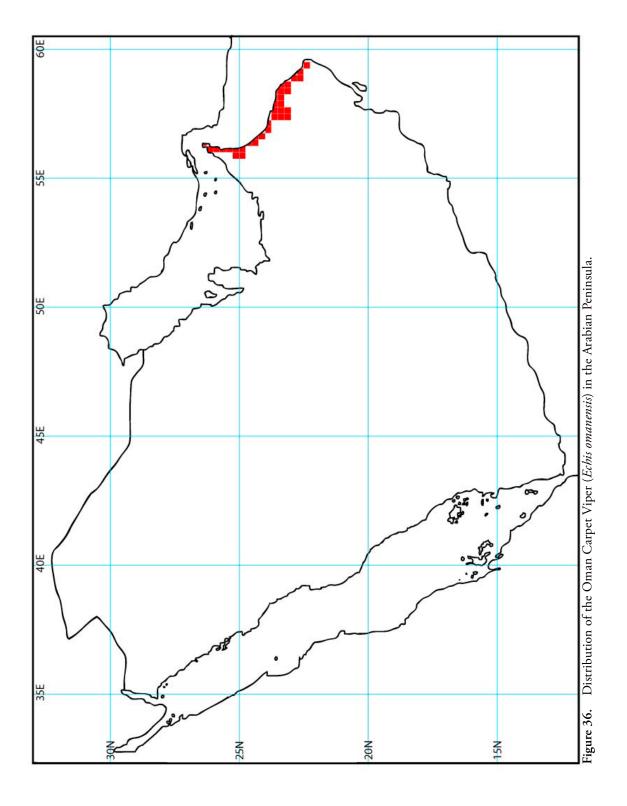


Working Group: Snakes	Date: 3-5 February 2008
1. Taxonomy	
1A. Scientific Name (Genus, species & subspecies): Echis	omanensis
Authority: Babocsay	<b>Date:</b> 2004
1B. Synonyms (with authority & date):	
1C. Common Name(s) with language/region: Oman carpet viper, Oman saw scaled viper (English)	
2. Distribution	
<b>2A. Historical Distribution</b> (last 100 years): Hajar moutains, UAE and Oman	
<b>2B.</b> Current Distribution (illustrate on map): See 2A	
2C. Habitat of the taxon (ecosystem level): Gulf of Oman desert and semi-desert	
2D. Habitat specificity (elevation, etc.): All altitudes within range- Rocky wadis and slopes	
2E. Migration:	
If Yes, describe:	
3. Number of Populations & Subpopulations in w	nich the Taxon is distributed:
Location of each:	Approx. Area Occupied: Approx. No. of Individuals:
Musandam to Ras Al Djins	875km2
4. Population Trends	
4A. Is the Population: \( \) Increasing \( \) Decreasin	g C Stable • Unknown
4B. If declining, what has been the rate of decline?	<pre>&lt;20%</pre>
Over how many years has the population decl	ne occured?
4C. If stable or unknown, do you predict a future d	ecline in the population size?   Yes   No
If Yes, please specify rate and factors e.g. habit	at loss, trade, etc.:
5. Habitat Status	
5A. Is the habitat distribution:   • Continuous	Fragmented C Unknown
5B. Is there any change in the range of the habitat If Yes, is it: • Decreasing in Area	where the Taxon occurs?
5C. If decreasing what has been the decline?  Over how many years has this decline occured	

5D. Do you predict a future decling for the state of the	at decline	will be?		>80%	
<b>5E. State the primary cause of thi</b> Quarrying, recreational activity	s change:				
5F. Is there any change in the qua	ality of the	habitat wl	here the Taxon occurs? • Yes	No ( Unk	nown
If Yes, is the habitat quality:	<ul><li>Decl</li></ul>	ining	○ Improving		
<b>5G. State the primary cause of thi</b> Quarrying, recreational activity	s change:				
6. Threats					
	Present	Future		Present	Future
Pollution			Disease		
Urban Development	$\boxtimes$	$\boxtimes$	Hybridization		
Road Kills			Decline in prey species		
Damming			Loss of habitat	$\boxtimes$	$\boxtimes$
War			Genetic problems		
Recreational activities	$\boxtimes$	$\boxtimes$	Grazing		
Hunting (recreation or retail)			Habitat fragmentation	$\boxtimes$	$\boxtimes$
Harvest for medicine			Predation		
Harvest for food/timber			Interspecific competition		
Poisoning			Livestock competition (food, etc.)		
Pesticides			Livestock conflicts (retaliation kills)		
Persecution	$\boxtimes$	$\boxtimes$	Introduced species (non-livestock)		
Trade of animals/parts Other (please specify):			Nutritional disorders		
6B. Would these threats result in Comment:	(perceivec	l or inferre	d) population decline?	lo 📵 Unkr	nown
7. Trade					
7A. Is the Taxon in trade? Yes	No Regiona	◯ Unk I ◯ Int	nown ternational Commercial		
7B. Parts in trade:  Skin Fur  Meat Product  Comments/Other threats (plea	s	Hair Live Anima	☐ Horn ☐ Bones al ☐ Taxidermy ☐ Organs	☐ Gland	ls

8. Data Quality				
8A. Are the estimates you have su	upplied based on:			
Census or monitoring	General field studies		rmal field studies	∠ Literature
	Museum studies/records		irect information f	rom trade, etc.
9. Studies (field) conducted over t	the last 10 years (indicate the yea	r of study i	not the year of publica	ation):
Researchers	Location	Year	Topic	
10. Conservation Status	<del></del>			
10A. IUCN Red List Category: 0	Global: Not listed	Re	gional: Not listed	
10B. National Red Data Book: Not listed			J	
10C. Workshop Assessment of Re	gional Red List Category: Least	concern		
10D. CITES: Not listed				
<b>10E. National Wildife Legislation:</b> Not listed				
10F. Other Legislation (please specif	ý):			
10G. List existing Protected Areas Protected Area	within the Taxon's range:		Country	Size (km²)
Wadi Helo, Sharjah			UAE	
10H. Recommended Protected A	reas for the Taxon:			
Area			Country	Size (km²)
10I. Are there any Regional Conse	ervation/Protection Action Plans	s: O Ye	s   No	Unknown
If Yes, please list them:				
11. Supporting Research				
11A. Is research recommended?				
If Yes, what type of research v				
☐ Surveys ☐ Gener	<u> </u>		History P	ublic Awareness
☐ Trade ☐ Monit	coring Reintroduction	_	man Impact	
Other (please specify):	- <u>-</u>		·	
12. Management				
12A. What management is recom	mended for the Taxon?			
	☐ Wild population mana	gement		eeding
	☐ Translocation		Sustainab	_
Public Awareness	☐ Limiting Factor Manag	gement	Genome F	Research Banking
Law Enforcement	☐ Work in Local Commu		_	olicy Makers
Other (please specify):	_			•

13. Captive Breeding						
13A. Is captive breeding recommended for the ta	axon:	○ No				
13B. If captive breeding is recommeded, is it for	:					
☐ Species recovery ☐ Reintroduction ☐ Research ☐ Husbandry						
⊠ Education						
13C. Do Captive stocks already exist? • Yes	○ No ○ Unk	nown				
If Yes, list the facilities:						
Facility	Country	Males	Females	Unknown	Total	
BCEAW	UAE	?	?	?	?	
13D. Does a coordinated Species Management F	Plan exist?  Yes	No		vn		
If Yes, list the participating institutions:  If Not, is a Species Management Plan recoming the species of the institutions that should participations that should participations in the institutions that should participations in the institutions that should participations in the institutions in the institution in the inst		<ul><li>No</li></ul>				
13E. Level of captive breeding recommended:  Captive breeding program not neccessa	ry 🔲 Initiate	program v	within 3 yea	rs		
Maintain existing program as it is	Intensify existing pr	rogram	Decrea	se existing p	rogam	
13F. Are the techniques established for captive b	oreeding?					
☐ Techniques are known for this or similar	taxon Some te	chniques a	ire known fo	or this or sim	ilar taxon	
Techniques not known for this or simial	r taxon 🔲 Unknow	n				
14. Sources/References (complete citation):						

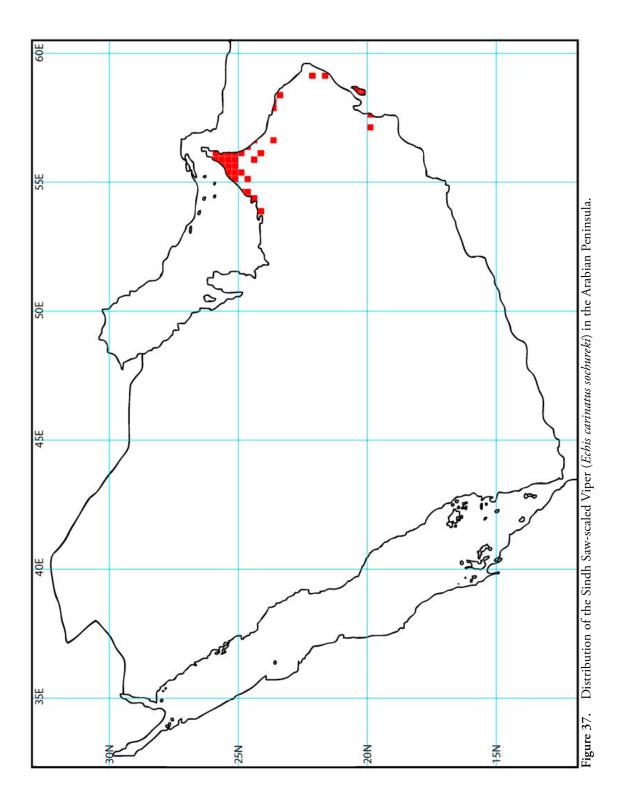


Working Group: Snakes	Date: 3-5 February 2008
1. Taxonomy	
1A. Scientific Name (Genus, species & subspecies): Echis ca	rinatus sochureki
Authority: Stemmler	<b>Date:</b> 1969
1B. Synonyms (with authority & date):	
1C. Common Name(s) with language/region: Sindh Saw Scaled Viper (English).	
2. Distribution	
<b>2A.</b> Historical Distribution (last 100 years): Eastern Arabian sand deserts.	
<b>2B. Current Distribution</b> (illustrate on map): See 2A.	
<b>2C.</b> Habitat of the taxon (ecosystem level): Gulf of Oman desert and semi-desert.	
2D. Habitat specificity (elevation, etc.): Generally below 300 m.a.s.l.	
2E. Migration: Yes No Unknown	
If Yes, describe:	
.,	
3. Number of Populations & Subpopulations in whi	ch the Taxon is distributed:
Location of each:	Approx. Area Occupied: Approx. No. of Individuals:
Southeastern Saudi Arabia, UAE & Oman.	19,500 km <sup>2</sup> ~
4. Population Trends	
4A. Is the Population: Olncreasing Decreasing	
4B. If declining, what has been the rate of decline? (	<20% < >20% < >50% < >80%
Over how many years has the population declin	e occured?
4C. If stable or unknown, do you predict a future dec	cline in the population size? Yes • No
If Yes, please specify rate and factors e.g. habitat	: loss, trade, etc.:
5. Habitat Status	
5A. Is the habitat distribution:   • Continuous	Fragmontod C Unknown
5B. Is there any change in the range of the habitat w	
	creasing in Area
	<del>-</del>

5C. If decreasing what has been Over how many years has to					
5D. Do you predict a future dec If Yes, what do you predict Over how many years do y	that decline	will be?		>80%	
<b>5E. State the primary cause of t</b> Urban development.	his change:				
5F. Is there any change in the c	juality of the	habitat wh	ere the Taxon occurs?  • Yes	lo ( Unk	known
If Yes, is the habitat quality	: • Decli	ning (	☐ Improving		
<b>5G. State the primary cause of</b> Urban development.	this change:				
6. Threats					
	Present	Future		Present	Future
Pollution			Disease		
Urban Development	$\boxtimes$	$\boxtimes$	Hybridization		
Road Kills			Decline in prey species		
Damming			Loss of habitat		
War			Genetic problems		
Recreational activities	$\boxtimes$	$\boxtimes$	Grazing	$\boxtimes$	$\boxtimes$
Hunting (recreation or retail)			Habitat fragmentation	$\boxtimes$	$\boxtimes$
Harvest for medicine			Predation		
Harvest for food/timber			Interspecific competition		
Poisoning			Livestock competition (food, etc.)		
Pesticides			Livestock conflicts (retaliation kills)		
Persecution			Introduced species (non-livestock)		
Trade of animals/parts			Nutritional disorders		
Other (please specify): Recreational Activities: Off road	driving.				
6B. Would these threats result Comment:	n (perceived	or inferred	l) population decline?	) () Unkr	nown
7. Trade					
7A. Is the Taxon in trade?	∕es ∩ No	O Unkn	nown		
If Yes, is it:	Regional	l	ernational Commercial		
7B. Parts in trade:					
Skin Fur	I	Hair	☐ Horn ☐ Bones	☐ Gland	ls
☐ Meat ☐ Produ	ıcts 🔀 l	Live Anima	l 🔲 Taxidermy 🔲 Organs		
Comments/Other threats (p	olease specify):				

8. Data Quality			
8A. Are the estimates you have s	upplied based on:		
Census or monitoring	☐ General field studies		dies 🔀 Literature
☐ Hearsay/popular belief			ion from trade, etc.
9. Studies (field) conducted over	the last 10 years (indicate the year	ur of study not the year of n	ublication)*
Researchers	Location	Year Topic	usincation).
Researchers	Location	Teal Topic	
10. Conservation Status	-	-	
10A. IUCN Red List Category: (	Global: Not Listed.	Regional: Not Lis	sted.
10B. National Red Data Book: Not Listed.		Š	
10C. Workshop Assessment of Re	egional Red List Category: Least	Concern.	
10D. CITES: Not Listed.			
<b>10E. National Wildife Legislation:</b> Not Listed.			
10F. Other Legislation (please speci	fy):		
10G. List existing Protected Areas Protected Area	s within the Taxon's range:	Country	Size (km²)
10H. Recommended Protected A	reas for the Taxon:	Country	Size (km²)
Alea		Country	Size (KIII )
10I. Are there any Regional Conso	ervation/Protection Action Plans	S: O Yes • No	O Unknown
11. Supporting Research			
11A. Is research recommended?	• Yes No		
If Yes, what type of research	would you recommend?		
☐ Surveys ☐ Gene	tics X Taxonomic	Life History	Public Awareness
☐ Trade ☐ Moni	toring Reintroduction	Human Impact	
Other (please specify):			
12. Management			
12A. What management is recom	mended for the Taxon?		
Habitat management	Wild population manage	gement 🕅 Captiv	e breeding
Monitoring	☐ Translocation		nable Use
Public Awareness	☐ Limiting Factor Manag	_	ne Research Banking
☐ Law Enforcement	☐ Work in Local Commur	_	ss Policy Makers
Other (please specify):	_		,

13. Captive Breeding						
13A. Is captive breeding recom	mended for the taxo	on:	○ No			
13B. If captive breeding is recor	nmeded , is it for:					
Species recovery [	Reintroduction		rch	$\boxtimes$	Husbandry	
⊠ Education     [	Preserve live gen	ome				
13C. Do Captive stocks already	exist? • Yes	○No ○Unk	nown			
If Yes, list the facilities:						
Facility		Country	Males	Females	Unknown	Total
BCEAW		UAE	~	~	~	~
13D. Does a coordinated Specie If Yes, list the participating i	_	exist? ( Yes	● No	OUnknow	vn	
If Not, is a Species Manager If Yes, list the institutions th			● No			
13E. Level of captive breeding r	ecommended:					
Captive breeding progr	am not neccessary	☐ Initiate	program	within 3 yea	rs	
Maintain existing progr	am as it is 🔲 In	tensify existing pr	ogram	Decrea	se existing p	rogam
13F. Are the techniques establis	hed for captive bree	eding?				
	for this or similar tax	on Some te	chniques a	are known fo	or this or sim	ilar taxon
Techniques not known	for this or simialr ta	xon 🗌 Unknow	n			
14. Sources/References (complete	citation):					
Egan, D. 2007. Snakes of Arabia: A fi Dubai.	eld guide to the Sna	kes of the Arabian	Peninsula	and its Shore	es. Motivate F	ublishing,
Gasparetti, J. 1988. Snakes of Arabia			16.1			
Schätte, B. and Desvoignes, A. 1999 Naturelle. Geneve.	7. The Herpetorauna (	of southern Yemer	n and Soko	tra Archipeia	igo. Museum	a'Historie
Schätte, B. and Gasparetti, J.A. 1994 348-432.	. Contribution to the	herpetofauna of S	outhwest	Arabia. <i>Faun</i>	a of Saudi Ard	abia 14:
Scortecci, G. 1932. Rettili dello Yem Milano 71: 39-49.	en. Atti della Societá	Italiana di Scienze	Naturali e	del Museo C	ivico di Storia	a Naturale,

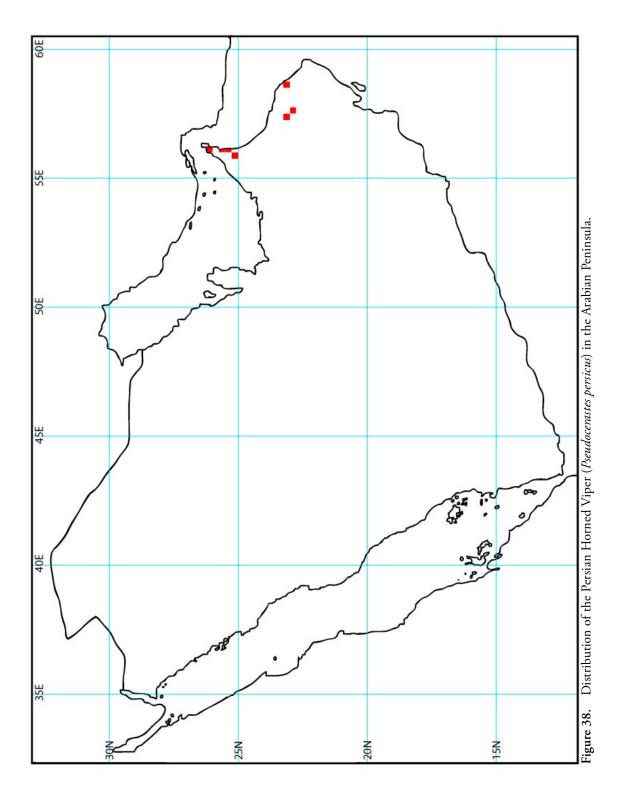


Working Group: Snakes		Date: 3-5 February 2008				
1. Taxonomy						
1A. Scientific Name (Genus, species & subspecies): Pseudocero	astes persicus					
Authority: Dumeri, Bibron & Dumeril		<b>Date:</b> 1854				
1B. Synonyms (with authority & date):						
1C. Common Name(s) with language/region: Persian horned viper, false-horned viper						
2. Distribution						
<b>2A. Historical Distribution</b> (last 100 years): Iran, Pakistan and Afghanistan. Known from Al Hajar Mou	ıntains of the UAE and Omaı	า				
<b>2B. Current Distribution</b> (illustrate on map): See 2A						
2C. Habitat of the taxon (ecosystem level): Al Hajar montane woodlands						
2D. Habitat specificity (elevation, etc.): above 600m a.s.l						
2E. Migration: Yes No Unknown						
If Yes, describe:						
ii res, describe.						
3. Number of Populations & Subpopulations in which	the Taxon is distributed:					
Location of each:	Approx. Area Occupied	: Approx. No. of Individuals:				
Al Hajar mountain complex	175km2					
4. Population Trends						
4A. Is the Population: \(\) Increasing \(\) Decreasing (	Stable • Unknown					
4B. If declining, what has been the rate of decline?	<20%					
Over how many years has the population decline of	occured?					
4C. If stable or unknown, do you predict a future declin	e in the population size?					
If Yes, please specify rate and factors e.g. habitat lo	ss, trade, etc.:					
F. Habitat Carana						
5. Habitat Status						
5A. Is the habitat distribution: Continuous © Fra						
5B. Is there any change in the range of the habitat whe If Yes, is it: • Decreasing in Area	ere the Taxon occurs?	es ( No ( Unknown				
5C. If decreasing what has been the decline?	%	○ >80%				
Over how many years has this decline occured? 10						

5D. Do you predict a future decl If Yes, what do you predict t Over how many years do yo	hat decline	will be?		<u>&gt;80%</u>	
<b>5E. State the primary cause of th</b> Quarrying and Urban expansion	is change:				
5F. Is there any change in the quality:  5G. State the primary cause of the Quarrying	<ul><li>Decl</li></ul>		here the Taxon occurs?	∩ No ∩ Unk	known
6. Threats					
Pollution Urban Development Road Kills Damming War Recreational activities Hunting (recreation or retail) Harvest for medicine Harvest for food/timber Poisoning Pesticides Persecution Trade of animals/parts Other (please specify):	Present	Future	Disease Hybridization Decline in prey species Loss of habitat Genetic problems Grazing Habitat fragmentation Predation Interspecific competition Livestock competition (food, etc.) Livestock conflicts (retaliation kills) Introduced species (non-livestock) Nutritional disorders		Future
6B. Would these threats result in Comment:	(perceivec	l or inferre	d) population decline? C Yes C	No 📵 Unkr	nown
7. Trade					
7A. Is the Taxon in trade?	Regiona	○ Unk I • In Hair Live Anima	ternational Commercial  Horn Bones	☐ Gland	ls
"					

8. Data Quality			
8A. Are the estimates you hav	e supplied based on:		
Census or monitoring	General field studies	☐ Informal field	studies Literature
Hearsay/popular belie	ef Museum studies/records	☐ Indirect info	rmation from trade, etc.
9. Studies (field) conducted ov	ver the last 10 years (indicate the year	r of study not the yea	r of publication):
Researchers	Location	Year Topic	
10. Conservation Status			
10A. IUCN Red List Category:	Global: Not listed	Regional: N	ot listed
<b>10B. National Red Data Book:</b> Not listed			
10C. Workshop Assessment o	f Regional Red List Category: Not l	isted	
10D. CITES: Not listed			
<b>10E. National Wildife Legislati</b> Not listed	on:		
10F. Other Legislation (please s	pecify):		
10G. List existing Protected A  Protected Area	reas within the Taxon's range:	Country	/ Size (km²)
10H. Recommended Protecte	d Areas for the Taxon:		
Area	a ricas for the raxon.	Country	/ Size (km²)
			·
101. Are there any Regional Co If Yes, please list them:	onservation/Protection Action Plans	S: Yes	No C Unknown
11. Supporting Research			
11A. Is research recommende	d?		
If Yes, what type of resear	ch would you recommend?		
Surveys Ge	enetics Taxonomic	Life History	Public Awareness
☐ Trade ☐ M	onitoring Reintroduction	Human Impa	ct
Other (please specify):			
12. Management			
12A. What management is rec	commended for the Taxon?		
☐ Habitat management	☐ Wild population manage	gement 🔲 Ca	aptive breeding
☐ Monitoring	☐ Translocation	Su	ustainable Use
Public Awareness	Limiting Factor Manag	ement 🔲 Ge	enome Research Banking
Law Enforcement	Work in Local Commur	nities	ddress Policy Makers
Other (please specify):			

13. Captive Breeding					
13A. Is captive breeding recommended for the tax	xon: OYes	○ No			
13B. If captive breeding is recommeded , is it for:					
Species recovery Reintroduction	Resea	Husbandry			
☐ Education ☐ Preserve live ge	enome				
13C. Do Captive stocks already exist? Yes	○ No ○ Unk	nown			
If Yes, list the facilities:					
Facility	Country	Males	Females	Unknown	Total
13D. Does a coordinated Species Management Pl	an exist?		Unknow	·	
If Yes, list the participating institutions:					
If Not, is a Species Management Plan recomm If Yes, list the institutions that should particip		○ No			
13E. Level of captive breeding recommended:  Captive breeding program not neccessary		program	within 3 yea	rs	
Maintain existing program as it is	Intensify existing p	rogram	☐ Decrea	se existing p	rogam
13F. Are the techniques established for captive br	reeding?				
Techniques are known for this or similar t	axon 🔲 Some te	chniques a	are known fo	or this or sim	ilar taxon
Techniques not known for this or simialr	taxon 🔲 Unknow	n			
14. Sources/References (complete citation):					
Van der Kooij, J. 2001. The Herpetofauna of the Sultin	ate of Oman. Part 4:	Terrestrial S	Snakes. Poda	rcus.	
Egan, D. 2007. Snakes of Arabia. A field guide to the Sr	nakes of the Arabian	Peninsula	and its Shore	es. Motivate F	Publishing
Gasperetti, J. 1988. Snakes of Arabia. Fauna of Saudi Ar	rabia 9: 169-450				

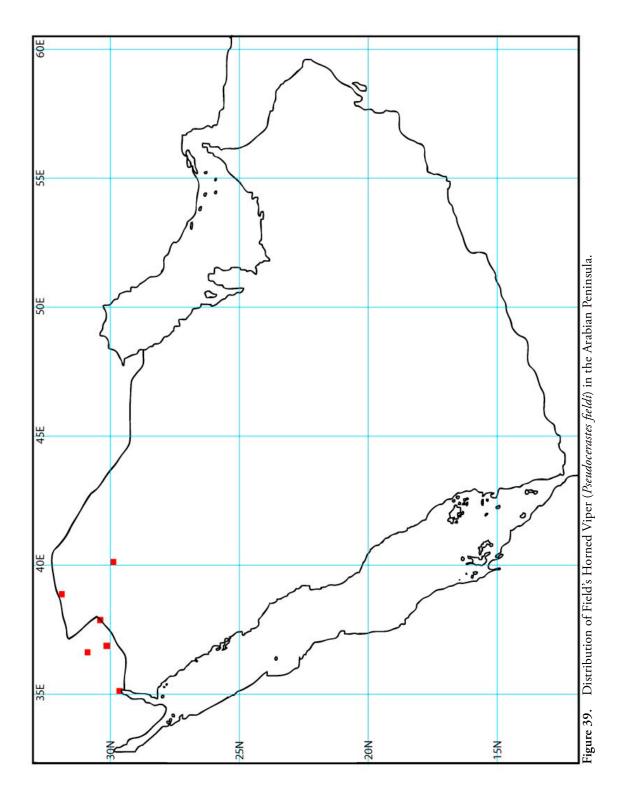


Working Group: Snakes	Date: 3-5 February 2008
1. Taxonomy	
1A. Scientific Name (Genus, species & subspecies): Pseudo	ocerastes fieldi
Authority: Schmidt	<b>Date:</b> 1930
1B. Synonyms (with authority & date):	
1C. Common Name(s) with language/region: Field's horned viper, False horned viper	
2. Distribution	
<b>2A. Historical Distribution</b> (last 100 years): Northern Iran, Sinai and extreme northern tip of Sauce	di Arabia
<b>2B. Current Distribution</b> (illustrate on map): See 2A	
<b>2C. Habitat of the taxon</b> (ecosystem level): Arabian Desert and east Sahero-Arabian xeric woodle	ands
2D. Habitat specificity (elevation, etc.): Hard substrates, lava fields and basalt desert	
2E. Migration: ( Yes ( No ( Unknown	
If Yes, describe:	
3. Number of Populations & Subpopulations in wh	nich the Taxon is distributed:
Location of each:	Approx. Area Occupied: Approx. No. of Individuals:
Northern Saudi Arabia	2100km2
4. Population Trends	
4A. Is the Population: Olncreasing Decreasing	g 🔿 Stable 🌘 Unknown
4B. If declining, what has been the rate of decline?	<20% <>20% <>50% <>80%
Over how many years has the population decli	ne occured?
4C. If stable or unknown, do you predict a future de	ecline in the population size? Yes • No
If Yes, please specify rate and factors e.g. habita	at loss, trade, etc.:
5. Habitat Status	
5A. Is the habitat distribution:   Continuous	Fragmented ( Unknown
5B. Is there any change in the range of the habitat v	
	creasing in Area
5C. If decreasing what has been the decline?	
Over how many years has this decline occured	

5D. Do you predict a future dec If Yes, what do you predict Over how many years do yo	that decline	will be?		>80%	
5E. State the primary cause of t	-				
5F. Is there any change in the q If Yes, is the habitat quality 5G. State the primary cause of t	: O Decli		nere the Taxon occurs? Yes • Improving	No ( Unk	known
6. Threats					
	Present	Future		Present	Future
Pollution			Disease		
Urban Development		$\boxtimes$	Hybridization		
Road Kills			Decline in prey species		
Damming			Loss of habitat		$\boxtimes$
War			Genetic problems		
Recreational activities			Grazing		
Hunting (recreation or retail)		$\boxtimes$	Habitat fragmentation		$\boxtimes$
Harvest for medicine			Predation		
Harvest for food/timber			Interspecific competition		
Poisoning			Livestock competition (food, etc.)		
Pesticides			Livestock conflicts (retaliation kills)		
Persecution		$\bowtie$	Introduced species (non-livestock)		
Trade of animals/parts			Nutritional disorders		
Other (please specify):					
Comment:	n (perceived	l or inferred	d) population decline?	lo 🖲 Unkr	nown
7. Trade					
7A. Is the Taxon in trade?   If Yes, is it:   Local	es No Regional	○ Unkr	nown ernational Commercial		
7B. Parts in trade:					
Skin Fur		Hair	☐ Horn ☐ Bones	☐ Gland	ls
☐ Meat ☐ Produ	cts 🖂 I	Live Anima	l 🗌 Taxidermy 🔲 Organs		
Comments/Other threats (p	lease specify):				
8. Data Quality					
8A. Are the estimates you have	supplied bas	sed on:			
Census or monitoring		ral field stu	idies		ature
	_		s/records 🔀 Indirect information fi		

Researchers	Location	Year	Topic	
10. Conservation Status				
10A. IUCN Red List Category:	Global: Not listed	Re	gional: Not listed	
10B. National Red Data Book: Not listed				
10C. Workshop Assessment of I	Regional Red List Category:	Least concern		
10D. CITES: Not listed				
10E. National Wildife Legislatio Not listed	า:			
10F. Other Legislation (please spe	cify):			
10G. List existing Protected Are	as within the Taxon's range:			
Protected Area			Country	Size (km²)
10H. Recommended Protected	Areas for the Tayon			
Area	Areas for the Taxon:		Country	Size (km²)
			·	
If Yes, please list them:  11. Supporting Research				
11A. Is research recommended	? • Yes			
If Yes, what type of research	n would you recommend?			
	etics X Taxonomic	∠ Life	History P	ublic Awareness
☐ Trade ☐ Mo	nitoring Reintroduc	tion 🔀 Hur	man Impact	
Other (please specify):				
12. Management				
12A. What management is reco	mmended for the Taxon?			
Habitat management	☐ Wild population m	nanagement	Captive bre	eedina
Monitoring	☐ Translocation	g	Sustainable	_
☐ Public Awareness	☐ Limiting Factor Ma	anagement		esearch Banking
Law Enforcement	☐ Work in Local Com		_	olicy Makers
Other (please specify):				
13. Captive Breeding				
13A. Is captive breeding recom	mended for the taxon: $\bigcirc$ Y	es 📵 No	ı	

13B. If captive breeding is recommeded , is it for:						
Species recovery Reintroduction	Research		☐ Husbandry			
☐ Education ☐ Preserve live ger	nome					
13C. Do Captive stocks already exist? Yes	○ No ○ Unk	nown				
If Yes, list the facilities:						
Facility	Country	Males	Females	Unknown	Total	
13D. Does a coordinated Species Management Pla	n exist?  Yes	No	Unknov	/n		
If Yes, list the participating institutions:						
If Not, is a Species Management Plan recomme	ended: O Yes	No				
If Yes, list the institutions that should participa	te:					
13E. Level of captive breeding recommended:						
Captive breeding program not neccessary	Initiate	program v	within 3 yea	rs		
☐ Maintain existing program as it is ☐ Intensify existing program ☐ Decrease existing progam						
13F. Are the techniques established for captive breeding?						
Techniques are known for this or similar ta	ixon Some te	chniques a	re known fo	or this or sim	ilar taxon	
Techniques not known for this or simialr to	axon 🗌 Unknow	n				
14. Sources/References (complete citation):						
Egan, D. 2007. Snakes of Arabia. A field guide to the Sna	akes of the Arabian	Peninsula	and its Shore	es. Motivate F	Publishing.	
Gasperetti, J. 1988. Snakes of Arabia. Fauna of Saudi Ara	abia 9: 169-450					
Werner, Y.L. 1991. Notable Herpetofaunal Records from	n TransJordan. Zoolo	ogy in the I	Middle East.	Vol 5: 37-41		



### **APPENDIX 2**

### Collection of Tissue for DNA Studies

- 1. Kill specimen by either freezing or injection with euthanase (or equivalent) DO NOT USE FORMALIN
- 2. Cut small piece of liver tissue (2-3 mm square) and place in labelled vial (which contains conc. salt/DSMO solution).
- 3. Seal and shake well.
- 4. Write name of species on vial (with permanent ink) and/or on paper (in pencil) and place in vial with specimen.
- 5. Store vial in cool place (do not freeze).
- 6. Preserve voucher specimen in formalin.
- 7. Tie label with full collecting details and vial number to specimen.
- 8. Store in dark, dry place or forward voucher specimen and vial to appropriate museum or researcher.

### **APPENDIX 3**

### Participants List

#### Jordan

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