

New records of a lost species and a geographic range expansion for sengis in the Horn of Africa

Steven Heritage^{1,2}, Houssein Rayaleh³, Djama G. Awaleh⁴, Galen B. Rathbun⁵

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- 1 Division of Fossil Primates, Duke Lemur Center, Duke University, Durham, NC, USA
- 2 Interdepartmental Doctoral Program in Anthropological Sciences, Stony Brook University, Stony Brook, NY, USA
- 3 Association Djibouti Nature, Djibouti City, Republic of Djibouti
- 4 Department of Environment and Sustainable Development, Ministry of Urban Affairs, Environment and Tourism, Djibouti City, Republic of Djibouti
- 5 Institute of Biodiversity Science and Sustainability, California Academy of Sciences, San Francisco, CA, USA

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Abstract

The Somali Sengi or Somali Elephant-shrew ('Elephantulus' revoilii, Macroscelidea, Mammalia) has been considered a "lost species" and is primarily known from about 39 museum specimens, with no new vouchered occurrence records since the early 1970s. The scientific literature contains no data concerning living Somali Sengi individuals and the species' current Data Deficient conservation status is attributable to an absence of modern information. Almost everything that has been published about the species is derived from anatomical examinations of historic specimens, gleaned from museum collection notes, or inferred from the known habits and ecology of other sengi taxa. Here we report new evidence that the Somali Sengi is currently extant. These data include voucher specimens, georeferenced occurrence localities, body measurements, habitat parameters, and DNA sequences. While the species is historically documented as endemic to Somalia, these new records are from the neighboring Republic of Djibouti and thus expand the Somali Sengi's known range in the Horn of Africa. Furthermore, Djiboutian locality data near international borders suggests that the Somali Sengi is also a current inhabitant of both Somalia and

Ethiopia. Criteria that inform conservation status assessments (e.g., suitable habitat contiguity and occurrence in wildlife protected areas) can be positively characterized in Djibouti and therefore bode well for the survival of the Somali Sengi species. New data also inform previously undocumented substrate and sheltering affiliations. DNA analyses indicate that the Somali Sengi is a descendant of the Macroscelidini lineage and therefore reveal that the species' referral to the genus *Elephantulus* is incompatible with sengi phylogeny. This taxonomic issue is resolved by recognizing a new genus replacement and recombinant binomial that redesignates the Somali Sengi as *Galegeeska revoilii* (gen. nov., nov. comb). An analysis of ancestral biogeography suggests that the Somali Sengi has inhabited the Horn of Africa for more than 5.4 million years—and the recognition of the species' phylogenetic ancestry appends the already remarkable biogeographic story of the Macroscelidini tribe.

Press Coverage

Elephant shrew rediscovered in Africa after 50 years https://www.bbc.co.uk/news/science-environment-53820395

Ritrovato il toporagno elefante. Si pensava estinto da 50 anni https://www.gqitalia.it/news/article/ritrovato-toporagno-elefante-gibuti

Tiny elephant shrew species documented in Horn of Africa for first time in nearly 50 years https://edition.cnn.com/2020/08/18/world/somali-sengi-documented-africa-scli-intl-scn/index. https://edition.cnn.com/2020/08/18/world/somali-sengi-documented-africa-scli-intl-scn/index.

The Case of the Missing Sengi https://synapsida.blogspot.com/2020/08/the-case-of-missing-sengi.html?m=1

Tiny Elephant Shrew Resurfaces After More Than 50 Years On Lost Species List https://www.npr.org/2020/08/24/905350284/researcher-identifies-tiny-mammal-last-documented-in-1968?t=1634056217765

Missing for over 50 years: Long-lost elephant shrew resurfaces in Africa https://eu.usatoday.com/story/news/nation/2020/08/25/elephant-shrew-found-africa-after-lost-over-50-years/5631450002/

An elephant-nosed creature 'lost to science' was living just next door https://www.nature.com/articles/d41586-020-02468-1

Sida seynisyahannada ay magaca Somali Sengi ugu bixiyeen Walo-Sandheer https://www.bbc.com/somali/war-53850946

Elephant shrew 'lost' to science for 52 years is 'rediscovered' in Africa https://news.mongabay.com/2020/08/elephant-shrew-lost-to-science-for-52-years-is-rediscovered-in-africa/

FOUND: Romantically Monogamous, Mouse-sized Elephant-Shrew Rediscovered Dashing Around the Wilds of Djibouti

https://www.rewild.org/press/found-romantically-monogamous-mouse-sized-elephant-shrew-rediscovered-dashing-around-the-wilds-of-djibouti-2

Tiny elephant shrew species, missing for 50 years, rediscovered https://www.theguardian.com/environment/2020/aug/18/tiny-elephant-shrew-species-missing-for-50-years-rediscovered

Long 'lost' elephant shrew found in Horn of Africa https://www.ctvnews.ca/sci-tech/long-lost-elephant-shrew-found-in-horn-of-africa-1.5068543

Subject Areas

Biogeography, Conservation Biology, Evolutionary Studies, Taxonomy, Zoology

Keywords

Somali Sengi, Sengis, Elephant-shrews, Macroscelidea, Djibouti, Somalia, Conservation, Phylogenetic Systematics, Taxonomy, Biogeography

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