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Scope(s): Global Language: English



Phlyctis petraea, Eggshell Rock Blaze

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Taxonomy

Kingdom	Phylum	Class	Order	Family
Fungi	Ascomycota	Lecanoromycetes	Ostropales	Phlyctidaceae

Scientific Name: Phlyctis petraea R.C. Harris, Muscavitch, Ladd & Lendemer

Common Name(s):

• English: Eggshell Rock Blaze

Taxonomic Source(s):

Index Fungorum Partnership. 2020. Index Fungorum. Available at: http://www.indexfungorum.org.

Taxonomic Notes:

As is discussed in detail by Muscavitch *et al.* (2017), *Phlyctis petraea* has been collected for nearly a century, and recognized as distinct for more than fifty years. However it was only formally described in 2017.

Assessment Information

Red List Category & Criteria: Least Concern ver 3.1

Year Published: 2022

Date Assessed: April 18, 2022

Justification:

Phlyctis petraea is a rock-dwelling species that is abundant throughout eastern North America. Its occurs in a diversity of habitats and its population size is currently inferred to be stable. Given the large number sites where it is extant, large geographic range, large population size, and absence of documented or suspected declines, the species does not meet the thresholds for any threat criteria. Thus, it is considered Least Concern.

Geographic Range

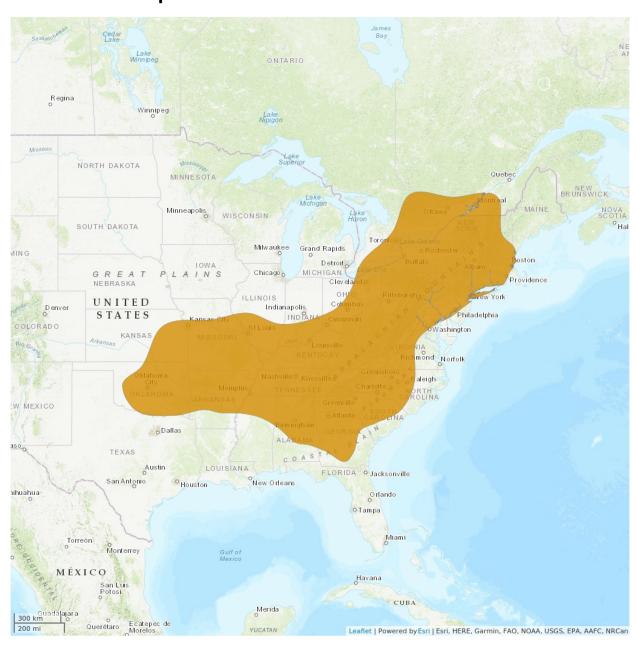
Range Description:

Phlyctis petraea is endemic to North America where it is widespread in the eastern United States and parts of adjacent Canada (Muscavitch *et al.* 2017).

Country Occurrence:

Native, Extant (resident): Canada; United States

Distribution Map





EXTANT (RESIDENT)

Compiled by: IUCN 2022







The boundaries and names shown and the designations used on this map do not imply any official endorsement, acceptance or opinion by IUCN.

Population

Complete, detailed population data are unavailable for this taxon. However, it is suspected to be stable

as it is common and widespread in many different habitats (Muscavitch et al. 2017).

Current Population Trend: Stable

Habitat and Ecology (see Appendix for additional information)

Although Phlyctis petraea has a wide geographic distribution in temperate eastern North America, it grows almost exclusively on sheltered and protected rock overhangs (Muscavitch et al. 2017). Nearly all known occurrences are from non-calcareous rocks, especially sandstones, however it has occasionally been found on calcareous rocks such as limestone. A small number of records are from the bases of

hardwood trees.

Systems: Terrestrial

Use and Trade

Phlyctis petraea has been used to study the impacts of climbing on crustose rock-dwelling lichens (Clark

and Hessl 2015) and to study remote detection of lichen communities (Wasklewicz et al. 2007).

Threats (see Appendix for additional information)

The primarily threat to *Phlyctis petraea* is urbanization as it does not typically occur in urban areas.

Otherwise it occurs at sites that span a wide range of habitat qualities.

Conservation Actions (see Appendix for additional information)

Many sites where Phlyctis petraea occurs are located on public lands and in protected areas where it is incidentally protected. This species would benefit from broader awareness and training as to the impacts of urbanization generally on lichens. Moreover, this species would benefit from demographic

studies and long-term monitoring of both habitat and population trends.

Credits

Assessor(s):

Lendemer, J.

Reviewer(s):

Allen, J.

Bibliography

Clark, P. and Hessl, A. 2015. The effects of rock climbing on cliff-face vegetation. *Applied Vegetation Science* 18: 705-715.

IUCN. 2022. The IUCN Red List of Threatened Species. Version 2022-1. Available at: www.iucnredlist.org. (Accessed: 21 July 2022).

Muscavitch, Z.M., Lendemer, J.C. and Harris, R.C. 2017. A review of the lichen genus *Phlyctis* in North America (Phlyctidaceae) including the description of a new widespread saxicolous species from eastern North America. *The Bryologist* 120(4): 388-417.

Wasklewicz, T., Staley, D., Mihir, M. and Seruntine, L. 2007. Virtual recording of lichen species: integrating terrestrial laser scanning and GIS techniques. *Physical Geography* 28: 183-192.

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External Resources

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

Appendix

Habitats

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

Habitat	Season	Suitability	Major Importance?
1. Forest -> 1.4. Forest - Temperate	Resident	Suitable	Yes

Plant Growth Forms

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

Plant Growth Form	
LC. Lichen	
M. Fungus	

Use and Trade

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

End Use	Local	National	International
14. Research	No	Yes	No

Threats

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

Threat	Timing	Scope	Severity	Impact Score
Residential & commercial development -> 1.1. Housing & urban areas	Ongoing	Unknown	Unknown	Unknown
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion		
		1. Ecosystem stresses -> 1.2. Ecosystem degradation		
		1. Ecosystem stresses -> 1.3. Indirect ecosystem effects		
		2. Species Stresses -> 2.1. Species mortality		
		2. Species Stresses -> 2.2. Species disturbance		
		2. Species Stresses -> 2.3. Indirect species effects		

Conservation Actions in Place

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

Conservation Action in Place	
In-place land/water protection	
Occurs in at least one protected area: Yes	

Conservation Actions Needed

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

Conservation Action Needed

- 4. Education & awareness -> 4.1. Formal education
- 4. Education & awareness -> 4.2. Training
- 4. Education & awareness -> 4.3. Awareness & communications

Research Needed

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

Research Needed

- 1. Research -> 1.2. Population size, distribution & trends
- 3. Monitoring -> 3.1. Population trends
- 3. Monitoring -> 3.4. Habitat trends

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