

***Umbilicaria phaea* in the Joshua Tree National Park (California, U.S.A.)**

**Map collection**



*Umbilicaria phaea*. Photo by Jana Kocourková.

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**Abstract** – *Umbilicaria phaea* is only known in North and South America. It is common lichen throughout California. It is documented by 10 collections in the Mojave Desert in Joshua Tree. It occurs on vertical flats of rocks on non-calcareous rock; in Joshua Tree on basalt, gneiss and monzogranite. The map of known distribution of *U. phaea* in Joshua Tree is presented. We compiled a detailed list of records based on GPS data.

**Key words** – *Umbilicaria phaea*, lichens, map of distribution, Mojave Desert, California

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### ***Umbilicaria phaea* Tuck.**

DESCRIPTION. – McCune and Geiser 2009.

WORLD DISTRIBUTION. – North and South America.

SUBSTRATE. – Non-calcareous rock; on basalt, gneiss, and monzogranite in Joshua Tree.

NOTES. – *Umbilicaria phaea* is common throughout California. It is documented by 10 collections in the Mojave Desert in Joshua Tree.

DISTRIBUTION. – Little San Bernardino Mountains (Black Rock, Eureka Peak, Pushwalla), Lost Horse Mountains (basalt), lower and upper Covington Flats, Ryan Mountain.

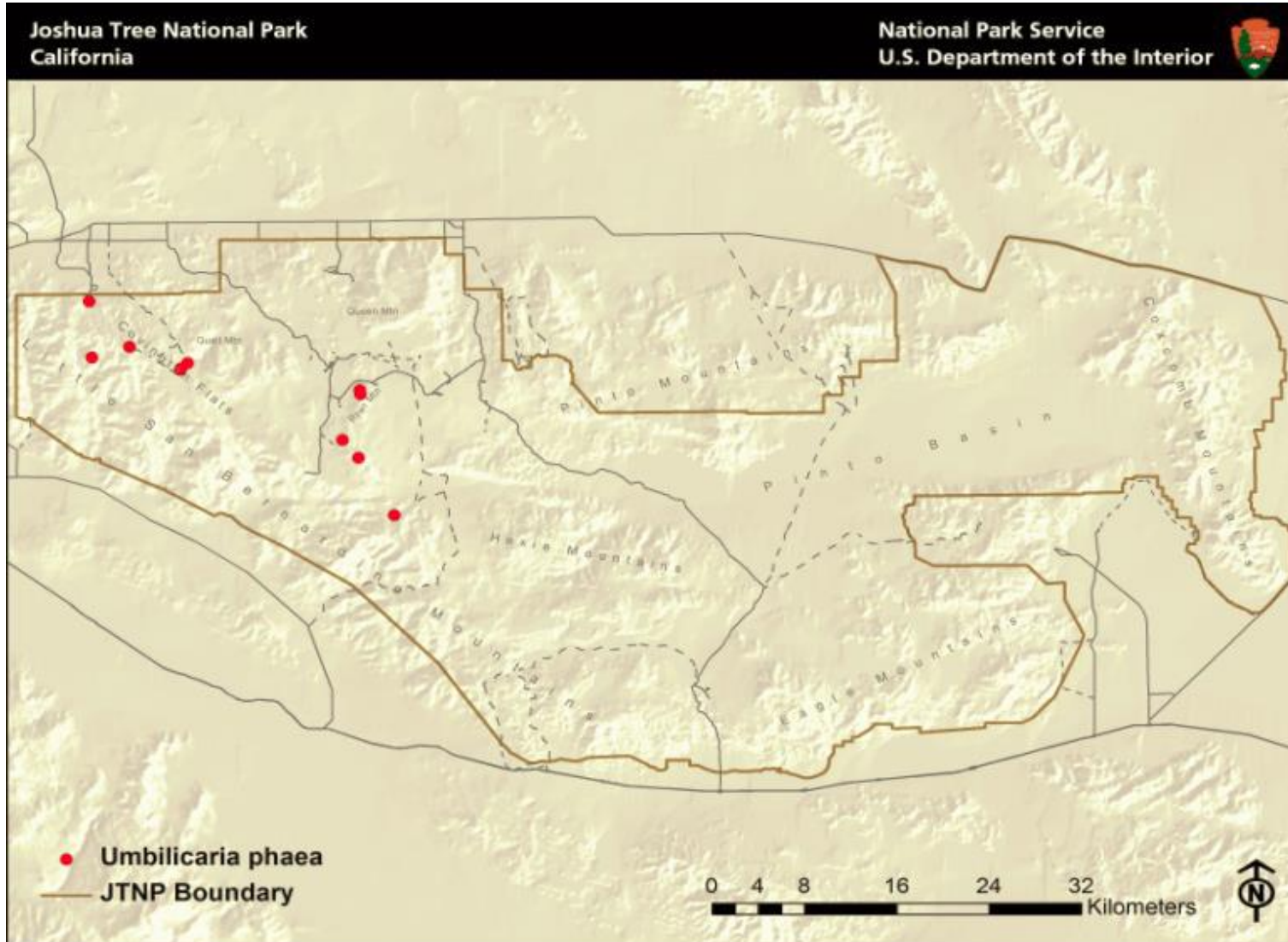
### LITERATURE CITED

McCune, B. and L. Geiser. 2009. Macrolichens of the Pacific Northwest. Second Edition. Oregon State University Press, Corvallis OR. 464 pp.

### ACKNOWLEDGEMENTS

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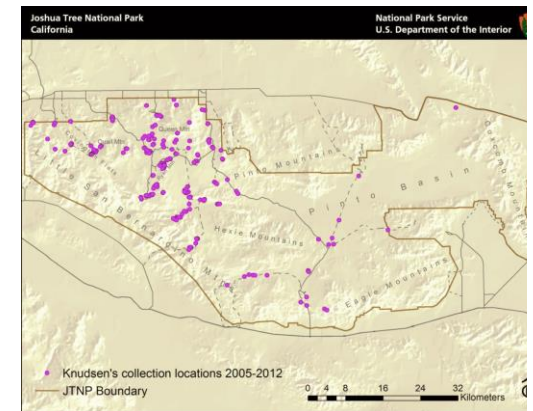
# *Umbilicaria phaea*



Known distribution of *Umbilicaria phaea* in JTNP.



Location of Joshua Tree National Park in Southern California



All 238 of Knudsen's and Kocourková's lichen collection sites throughout Joshua Tree National Park between the years of 2005 and 2012.

Map collection, maps made in software ArcGIS, 10.1; electronic form, file type pdf.