



Corrigendum

Corrigendum to “Late-Holocene response of limber pine (*Pinus flexilis*) forests to fire disturbance in the Pine Forest Range, Nevada, USA” [Quaternary Research 78 (2012) 465–473]

Robert K. Shriver^{a,1}, Thomas A. Minckley^{a,b,*}

^a Dept. of Botany, University of Wyoming, Laramie, WY 82071, USA

^b Roy J. Shlemon Center for Quaternary Studies, University of Wyoming, Laramie, WY 82071, USA

The purpose of Shriver and Minckley (2012) “Late-Holocene response of limber pine (*Pinus flexilis*) forests to fire disturbance in the Pine Forest Range, Nevada, USA” was to assess historic responses to disturbance (fire) using pollen percentage data derived from a sediment core using superimposed epoch analysis. This work was conducted in a small glacial tarn, Blue Lake, located in an isolated mountain range of northwestern Nevada, the Pine Forest Range. The benefit of this site was the unique setting of an isolated forest that added to our knowledge of disturbance in five-needle pine ecosystems in general and limber pine in particular. The results showed that pollen abundances did change directly after inferred fire-episodes in a predictable fashion based on assumptions of differential mortality in the arboreal, shrub, and herbaceous components of the pollen assemblages.

Unfortunately, the phytogeography attribution of the conifer forest surrounding the study site was erroneous. The second author (Minckley) identified the forest as *Pinus flexilis* (limber pine) based on his initial and four subsequent visits to the coring site and mountain range. Limber pine, although the common subalpine species of many Great Basin mountains is a rare component in the Pine Forest Range. The species is known from three disjunct locations in the Range, one of which is the tree on the shore of Blue Lake observed in 1986 (Charlet, 1996, and D. Charlet, pers. comm., 2012). However, the extensive conifer forest upslope of the lake is composed of *Pinus albicaulis* (whitebark pine) (C. Millar, pers. comm., 2012). The two species are phenotypically similar and securely differentiated in the field only by cone morphology (Hickman, 1993). The error in forest attribution was brought to our attention by the US Forest Service conifer biologist, Constance Millar, in October 2012.

The occurrence of such a large population of whitebark pine in this portion of northwestern Nevada is notable in itself. The Pine Forest Range is not particularly high in comparison to surrounding ranges that do not have similar forest types. The presence of a few but exceedingly rare limber pines suggests that there might have been historic processes that have favored one species versus the other over time – maybe even fire. The differences in the ecology of the two species are significant enough to suspect that they would have different climatic and disturbance responses. The results of Shriver and Minckley showing continuous pine cover over the past 4.0 cal ka might mask changes in relative species contribution to cover by limber pine versus whitebark pine (i.e., limber pine might not always have been rare, and whitebark pine might have come to dominance only recently). However, as both species are palynologically similar and their needle morphologies virtually indistinguishable these differences could not be explored.

Acknowledgments

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References

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* Corresponding author at: Dept. of Geography, University of Wyoming, Laramie, WY 82071, USA. Fax: +1 307 766 2851.

E-mail address: minckley@uwyo.edu (T.A. Minckley).

¹ Current address: University Program in Ecology, Duke University, Durham, NC, 27708, USA.