



CORRECTION

Open Access



# Correction to: Fuels, vegetation, and prescribed fire dynamics influence ash production and characteristics in a diverse landscape under active pine barrens restoration

K. M. Quigley<sup>1\*</sup>, R. E. Wildt<sup>2</sup>, B. R. Sturtevant<sup>3</sup>, R. K. Kolka<sup>4</sup>, M. B. Dickinson<sup>5</sup>, C. C. Kern<sup>3</sup>, D. M. Donner<sup>3</sup> and J. R. Miesel<sup>1</sup>

## Correction to: *Fire Ecol*

<https://doi.org/10.1186/s42408-018-0015-7>

Following publication of the original article (Quigley et al. 2019), the authors reported that an incorrect version of Additional 1 has been published. The corrected version of Additional file 1 is attached to this Correction.

Additional file 1 was revised to include the following information which was omitted from the original publication:

- 1) A list of References for the section ‘S1 – Calibrated fuel consumption from maximum paint tag temperature’
- 2) Standard errors associated with original supplementary tables
- 3) An additional supplementary table for LE element concentrations by paint tag groups
- 4) Additional supplementary tables reporting Total C, PyC, and % of C as PyC in ash samples

Additionally, the authors reported that the standard errors associated with Table 2 in the main text were omitted from the original publication, as well as the letters to

indicate significant contrasts. In this Correction the incorrect and corrected version of Table 2 are shown.

Originally Table 2 was published as:

**Table 2** Mean total extractable element concentrations for Moquah Barrens, Wisconsin, USA, ash samples collected in May 2016. Samples are distinguished by vegetation cover type, and table excludes ash samples collected from plots with experimental fuel load manipulations (addition or removal). N = nitrogen, Fe = iron, Cu = copper, Mn = manganese, Mg = magnesium, Ca = calcium, K = potassium, P = phosphorus

Vegetation cover type	Total extractable element concentration (g kg <sup>-1</sup> )							
	N	P	K	Ca	Mg	Mn	Cu	Fe
Standing brush	16.12	2.08	4.55	23.17	4.82	2.80	0.03	5.89
Grassland	15.86	1.39	2.71	18.79	4.45	2.13	0.02	6.29
Deciduous forest	13.00	1.87	3.58	27.26	4.68	4.46	0.03	8.62
Cut brush	13.52	1.89	3.66	22.78	5.33	4.45	0.03	8.86
Conifer woodland	10.44	1.18	2.35	10.30	3.38	1.44	0.02	7.71

\* Correspondence: [quigle44@msu.edu](mailto:quigle44@msu.edu)

The original article can be found online at <https://doi.org/10.1186/s42408-018-0015-7>

<sup>1</sup>Department of Plant, Soil, and Microbial Sciences, Michigan State University, 1066 Bogue Street, East Lansing, MI 48824-1222, USA

Full list of author information is available at the end of the article

The correct version of Table 2:

**Table 2** Total extractable element concentrations by vegetation cover type. Values are expressed as mean concentration ( $\text{g kg}^{-1}$ )  $\pm$  standard error. Significant differences according to pairwise contrasts (Tukey's tests;  $p < 0.05$ ) are indicated by different letters in the same row

Element (total extractable)	Vegetation cover				
	Standing brush	Grassland	Deciduous	Cut brush	Conifer
N	16.12 (2.63)a	15.86 (1.14)a	13.00 (1.29)a	13.52 (1.42)a	10.44 (1.47)a
P	2.08 (0.27)a	1.39 (0.24)a	1.87 (0.24)a	1.89 (0.20)a	1.17 (0.17)a
K	4.55 (0.66)a	2.71 (0.37)a	3.58 (0.73)a	3.66 (0.40)a	2.35 (0.28)a
Ca	23.17 (2.16)ab	18.79 (2.95)ab	27.26 (5.70)a	22.78 (2.73)ab	10.30 (2.73)b
Mg	4.82 (0.23)ab	4.45 (0.39)ab	4.68 (0.59)ab	5.33 (0.24)a	3.38 (0.30)b
Mn	2.80 (0.35)abc	2.13 (0.66)ac	4.46 (0.66)b	4.45 (0.50)b	1.44 (0.15)abc
Cu	0.03 (2.7e <sup>-3</sup> )a	0.025 (3.1e <sup>-3</sup> )a	0.034 (4.8e <sup>-3</sup> )a	0.031 (2.0e <sup>-3</sup> )a	0.019 (3.8e <sup>-3</sup> )a
Fe	5.89 (2.1e <sup>-3</sup> )a	6.29 (1.2e <sup>-3</sup> )a	8.62 (2.8e <sup>-3</sup> )a	8.86 (4.9e <sup>-3</sup> )a	7.71 (0.024)a

**Additional file**

**Additional file 1: S1.** Calibrated fuel consumption from maximum paint tag temperature. **Table S2.** Total extractable element concentrations by paint tag temperature groups. Values are expressed as mean concentration ( $\text{g kg}^{-1}$ )  $\pm$  standard error. Significant differences according to pairwise contrasts (Tukey's tests;  $p < 0.05$ ) are indicated by different letters in the same row. Table excludes plots which were subject to fuel manipulations. **Table S3.** Leachable element (LE) concentrations by paint tag temperature groups. Values are expressed as mean concentration ( $\text{g kg}^{-1}$ )  $\pm$  standard error. Significant differences according to pairwise contrasts (Tukey's tests;  $p < 0.05$ ) are indicated by different letters in the same row. Table excludes plots which were subject to fuel manipulations. **Table S4.** Total C ( $\text{g kg}^{-1}$ ), PyC ( $\text{g kg}^{-1}$ ), and proportion of PyC (as % of total ash C) in ash samples, by vegetation cover type. Significant differences according to pairwise contrasts (Tukey's tests;  $p < 0.05$ ) are indicated by different letters in the same row. Table excludes plots which were subject to fuel manipulations. **Table S5.** Total C ( $\text{g kg}^{-1}$ ), PyC ( $\text{g kg}^{-1}$ ), and proportion of PyC (as % of total ash C) in ash samples, by paint tag temperature groups. Significant differences according to pairwise contrasts (Tukey's tests;  $p < 0.05$ ) are indicated by different letters in the same row. Table excludes plots which were subject to fuel manipulations. (DOCX 32 kb)

**Author details**

<sup>1</sup>Department of Plant, Soil, and Microbial Sciences, Michigan State University, 1066 Bogue Street, East Lansing, MI 48824-1222, USA. <sup>2</sup>Department of Fisheries and Wildlife, Michigan State University, 480 Wilson Road, East Lansing, MI 48824-1222, USA. <sup>3</sup>USDA Forest Service, Northern Research Station, 5985 Hwy K, Rhinelander, WI 54501, USA. <sup>4</sup>USDA Forest Service, Northern Research Station, 1831 Hwy 169 E, Grand Rapids, MN 55744, USA. <sup>5</sup>USDA Forest Service, Northern Research Station, 359 Main Road, Delaware, OH 43015, USA.

**Reference**

Quigley, et al. 2019. Fuels, vegetation, and prescribed fire dynamics influence ash production and characteristics in a diverse landscape under active pine barrens restoration. *Fire Ecology* 15: 5 <https://doi.org/10.1186/s42408-018-0015-7>.