

**Table 2** Variables examined as potential controls of charcoal abundance

Variable name	Description (units or classes)	Source
Burn status	Lake located in burned or unburned watershed (burned, unburned)	Geographic Information System (GIS) fire severity coverage, <sup>a</sup> field observations
Severity	Percentage of tree mortality surrounding each lake (0%, 5–50%, 51–95%, >95% crown scorch, >95% crown consumption)	GIS fire severity coverage <sup>a</sup>
Relative position	Position of lake in unburned watersheds relative to the fire (upwind, downwind)	Average wind direction calculated from Remote Automated Weather (RAW) Station data <sup>b</sup>
Area	Surface area of lake (ha)	Calculated from GIS lake coverages of the Willamette <sup>c</sup> and Deschutes <sup>d</sup> national forests
Depth	Maximum water depth (m)	Measured in the field with a seiche disk
Slope	Maximum slope adjacent to lakeshore (flat, moderate, steep)	Determined from field observations and a Digital Elevation Model (DEM) <sup>e</sup>
Margin	Extent (width) of post-fire riparian vegetation (0 m, 0–3 m, >3 m)	Field observations
Distance	Distance of lake from the centre of the fire (m)	Calculated from GIS lake coverages of the Willamette <sup>c</sup> and Deschutes <sup>d</sup> national forests

<sup>a</sup>GIS fire severity coverage provided in 1997 by J. Kertis, Siuslaw National Forest.

<sup>b</sup>The RAW stations are: Black Rock (T24s-R07e-S29) in the Deschutes National Forest, and Pebbles (T24s-R07e-S29) and Fields (T22s-R04e-S11) in the Willamette National Forest. The Black Rock and Pebbles RAW stations are located approximately 32 km southeast and 24 km south-southeast, respectively, of the Charlton Burn. The Fields RAW station is located approximately 24 km southwest of the burned area.

<sup>c</sup>Willamette National Forest GIS lake coverage provided in 1998 by the Willamette National Forest to the University of Oregon: obtained in 1999 from C. Leue, Social Sciences Instructional Lab (SSIL), University of Oregon.

<sup>d</sup>Deschutes National Forest GIS lake coverage provided in 1999 by D. Rawson, Deschutes National Forest.

<sup>e</sup>10 m resolution DEM provided in 1998 by the Willamette National Forest to the University of Oregon: obtained in 1999 from C. Leue, Social Sciences Instructional Lab (SSIL), University of Oregon.

Gardner, J.J. and Whitlock, C. (2001). Charcoal accumulation following a recent fire in the Cascade Range, northwestern USA, and its relevance for fire-history studies. *Holocene* 11(5): 541-549.