

Elephant Figures 07

15/01/18

Figures and Tables

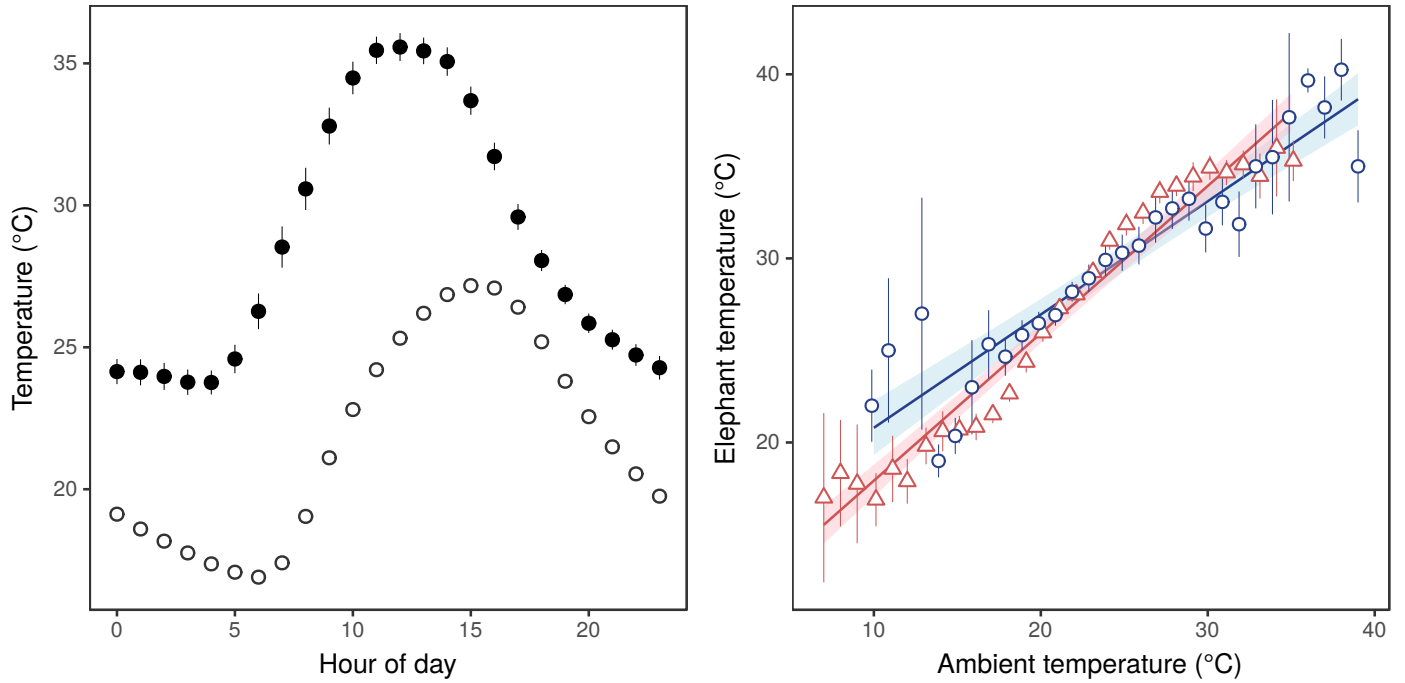


Figure 1: A: Mean thermochron temperature (filled circles) tracks mean ambient temperature (open circles) through the day. Vertical lineranges represent 95% confidence intervals. B: Mean thermochron temperature (points) at measured ambient temperature, and GLM fits (lines) in each season (cool-dry: blue circles & lines, hot-wet: red triangles & lines). Vertical lineranges and shaded areas (coloured by season) indicate 95% confidence intervals at each point.

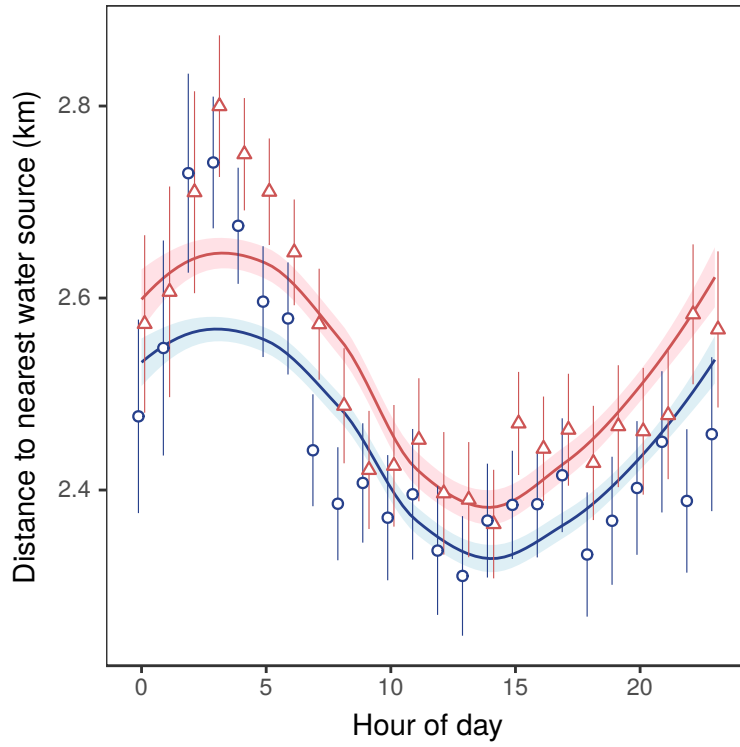


Figure 2: GAMM fit (lines) and mean distance to the nearest water source in each season (point) through the day in each season (cool-dry: blue circles & lines, hot-wet: red triangles & lines). Vertical lineranges and shaded areas (coloured by season) indicate 95% confidence intervals at each point. Only moving elephants included.

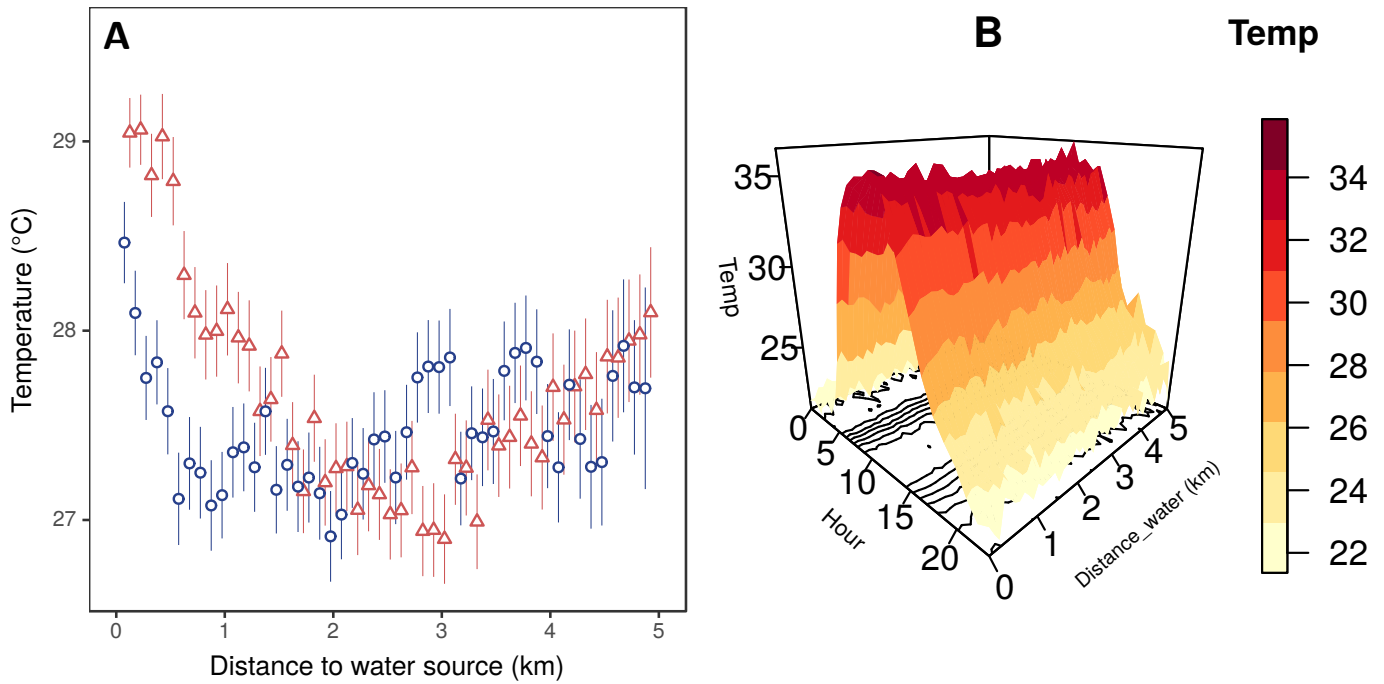


Figure 3: A: Mean elephant temperature (points) at 100m distance intervals from the nearest water source in each season (cool-dry: blue circles, hot-wet: red triangles). Vertical lineranges (coloured by season) represent 95% confidence intervals. B: Mean elephant temperatures (3D surface) at 100m distance intervals from the nearest water source (y-axis), at each hour of day (x-axis). Contour lines shown on base indicate rate of change (narrow contours indicate rapid changes). Only moving elephants included.

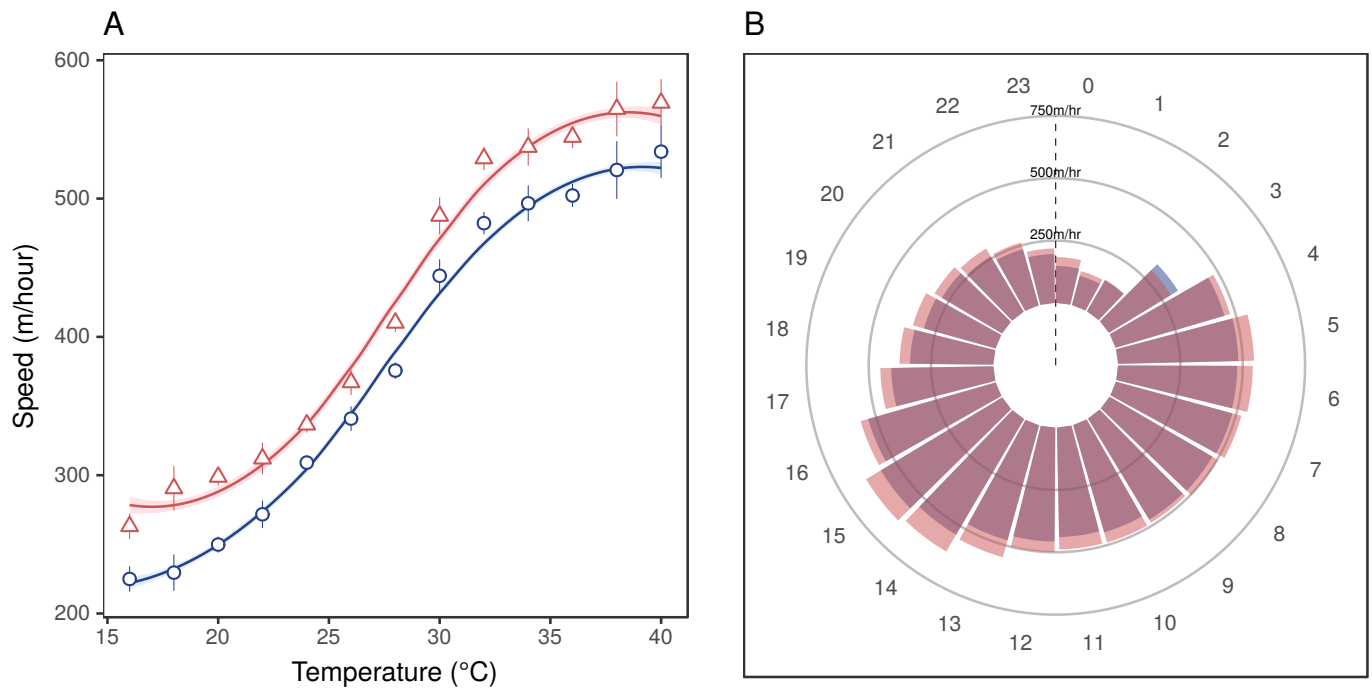


Figure 4: A. Mean steplength (points) at 2°C temperature intervals in each season (cool-dry: blue circles, hot-wet: red triangles). GAMM fit (lines), data error intervals (linerranges), and fit error intervals (shaded areas) are shown coloured by season. B. Mean steplength at each half hour interval (bars) in each season (cool-dry: blue, hot-wet: red, overlap: grey). Surrounding text indicates hour of day. All elephants included.

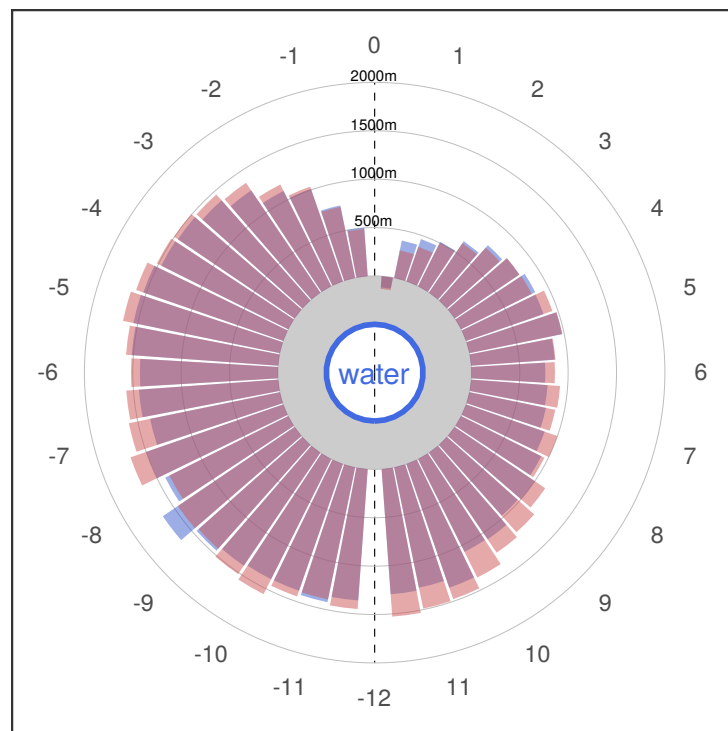


Figure 5: Mean distance to the point of arrival (bars) in the limnal zone (shaded grey, <500m from water) at each half hour interval over a 24 period (numbers on outside). Zero represents the arrival event, negative values represent hours prior to arrival. Bars are coloured by season (cool-dry: blue, hot-wet: red, overlap: grey).

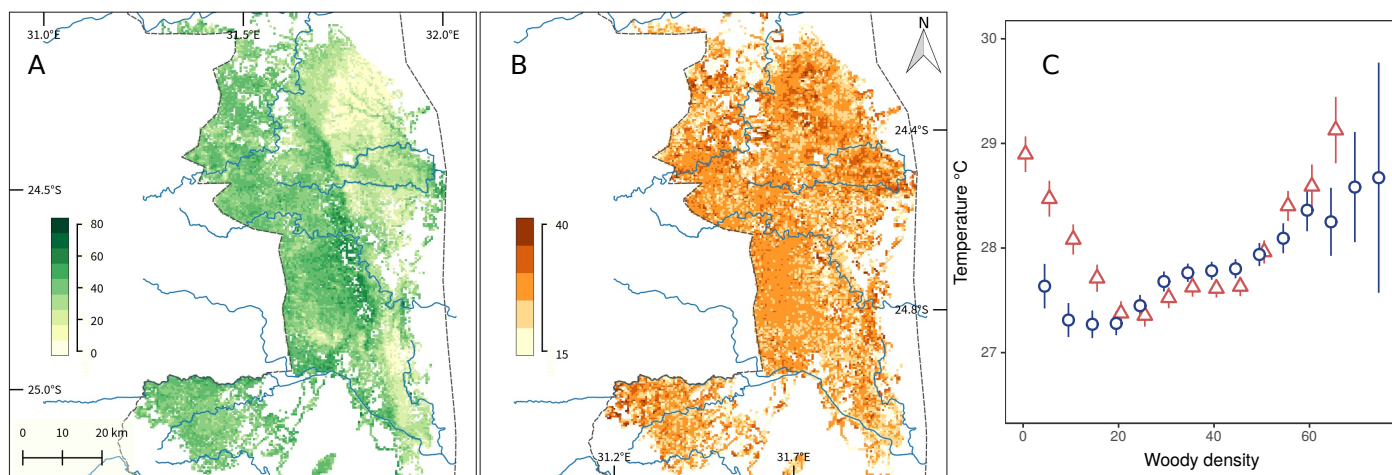


Figure 6: A. Woody density, and B. Elephant temperature at relocation sites. Values shown are 500m² pooled means. C. Mean elephant temperatures at woody densities in increments of 5, separated by season (cool dry: blue circles, hot wet: red triangles), showing 95% confidence intervals (linaranges coloured by season.). Rivers (light blue lines) and Kruger boundary (dashed black line) are shown.

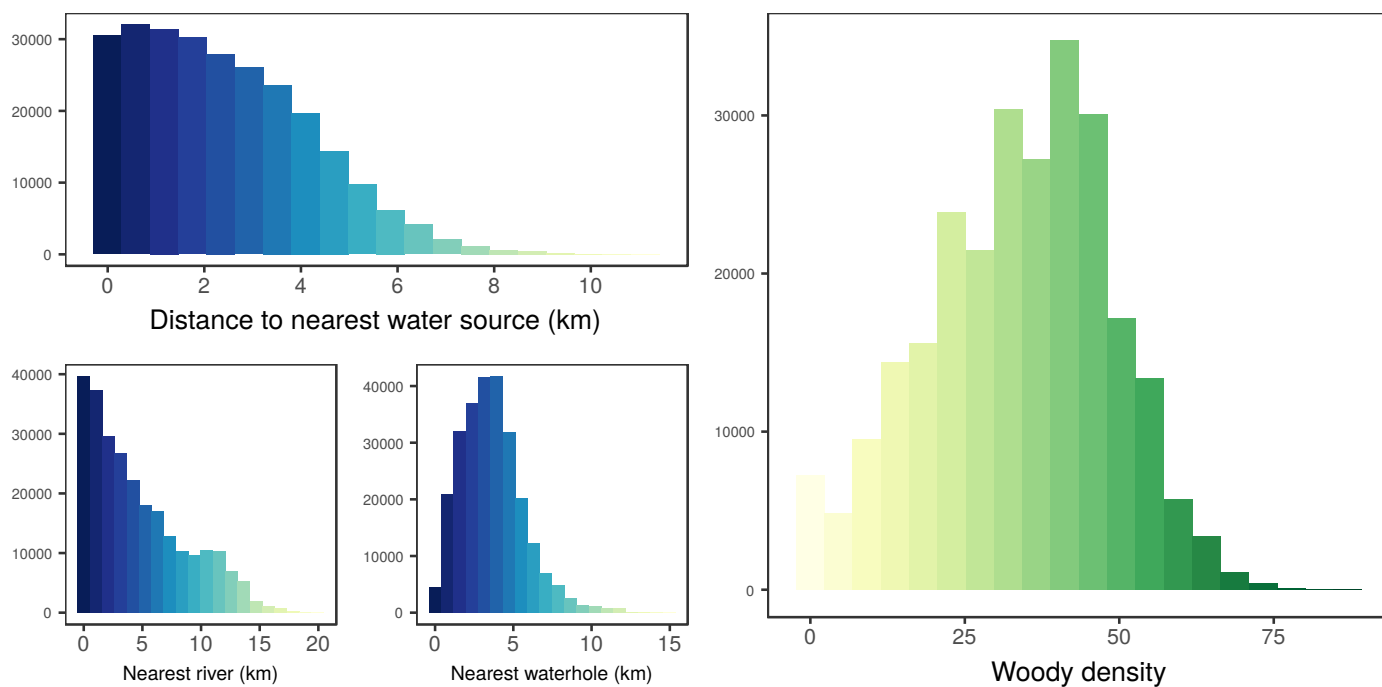


Figure 7: Supplementary material: A. Frequency distributions of distance to the nearest water source (waterhole or river, see separate histograms below), and B. Frequency distribution of the woody density encountered by elephants.

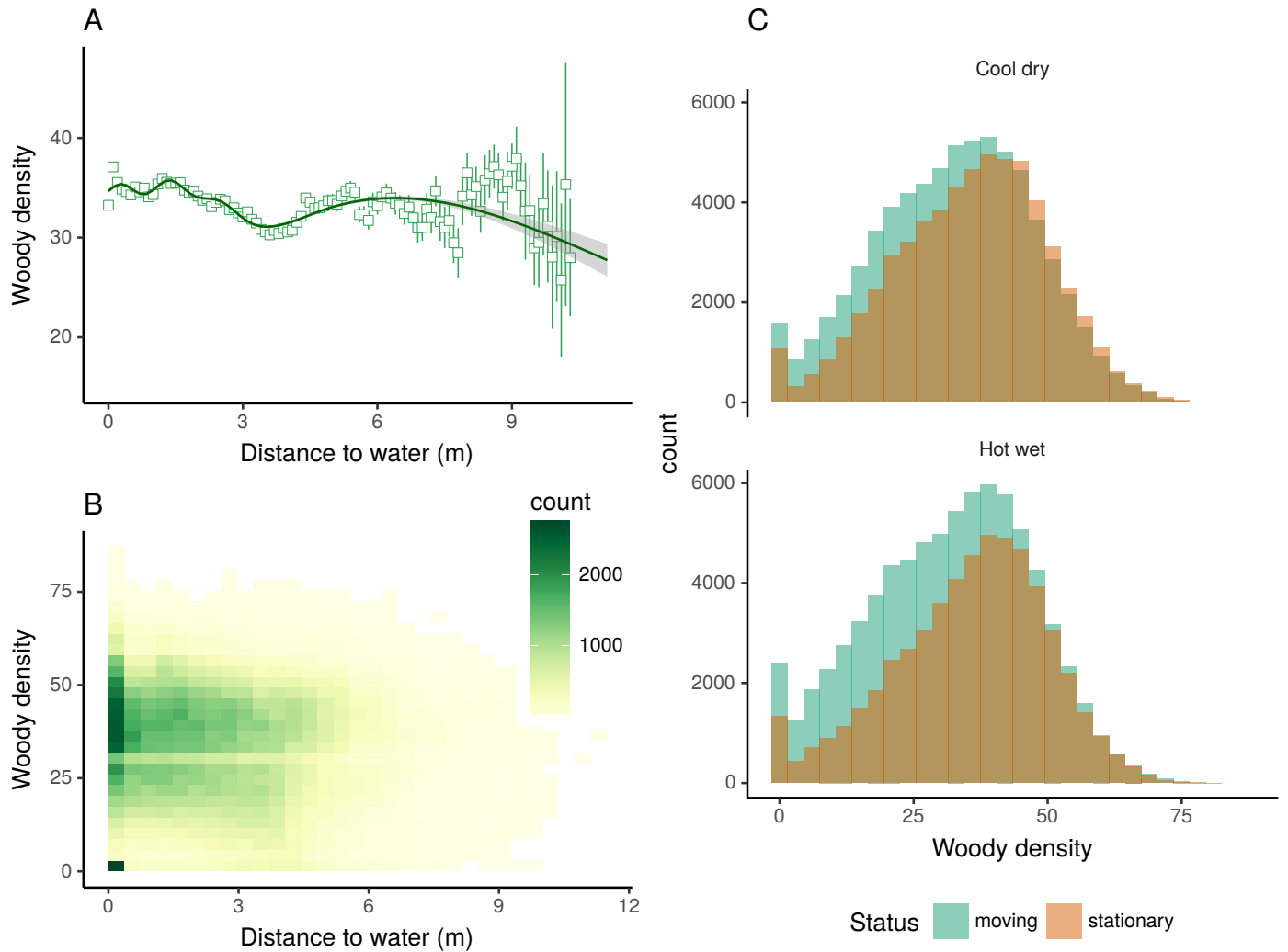


Figure 8: Supplementary material: A. Mean woody density (points), and GAM smoothed fit (line) at 100m distance intervals to the nearest water-source. Lineranges and shaded area represent 95% confidence intervals. B. Count bins of woody density and distance to water. Darker bins indicate more data points for a given combination.