Supplemental Methods:

Shannon-Weiner's (H'), Simpson's (D) and Simpson's reciprocal (D') indices of diversity, Simpson's (E) and Pielou's indices of evenness (J') calculations were adapted from Magurran (2013) and are listed below for reference:

$$H' = -\sum_{i=1}^{S} p_i \ln p_i \qquad \text{Shannon-Weiner's index of diversity } (H') \qquad (1)$$

$$D = 1 - \sum_{i=1}^{S} {p_i}^2 \qquad \text{Simpson's index of diversity } (D) \qquad (2)$$

$$D' = 1/\sum_{i=1}^{S} {p_i}^2 \qquad \text{Simpson's reciprocal index of diversity } (D') \qquad (3)$$

$$E = D'/S \qquad \text{Simpson's index of evenness } (E) \qquad (4)$$

$$J' = \frac{H'}{\ln S} \qquad \text{Pielou's index of evenness } (J') \qquad (5)$$

Where S is total number of probes and p_i is proportion of total abundance in sample belonging to the i^{th} probe.

References:

Magurran AE (2013). *Measuring biological diversity*. John Wiley & Sons.