

**Figure 1**: Four hypothetical patch configurations, ranging from 1 ha patches (a) to 1000 ha patches (d). Cumulative area at high severity is 1000 ha in all cases. Panel (e) illustrates the different q-value coefficients from models (lines) fit to each of the four datasets (points). In each case the model is: Proportion high severity ~ e^(q\*distance to edge); lower (more negative) q-values indicate proportionally more high-severity area closer to he edge of a patch.



**Figure 2:** Actual data from 2 fires as an example of differing q-values. Both fires have similar total area burned at high-severity (panel a: Goldledge=966 ha, panel b: Hasloe=1073 ha), although the total fire sizes (Goldledge=1781, Hasloe = 2783) and proportion high-severity (Goldledge=54.3%, Hasloe=38.5%) differed. Hasloe has a lower q-value, despite having a greater total area burned at high-severity (panel c). Fitted line in panel c represents the q-value model (severity ~ e^(q\*distance to edge)) fit to each dataset.