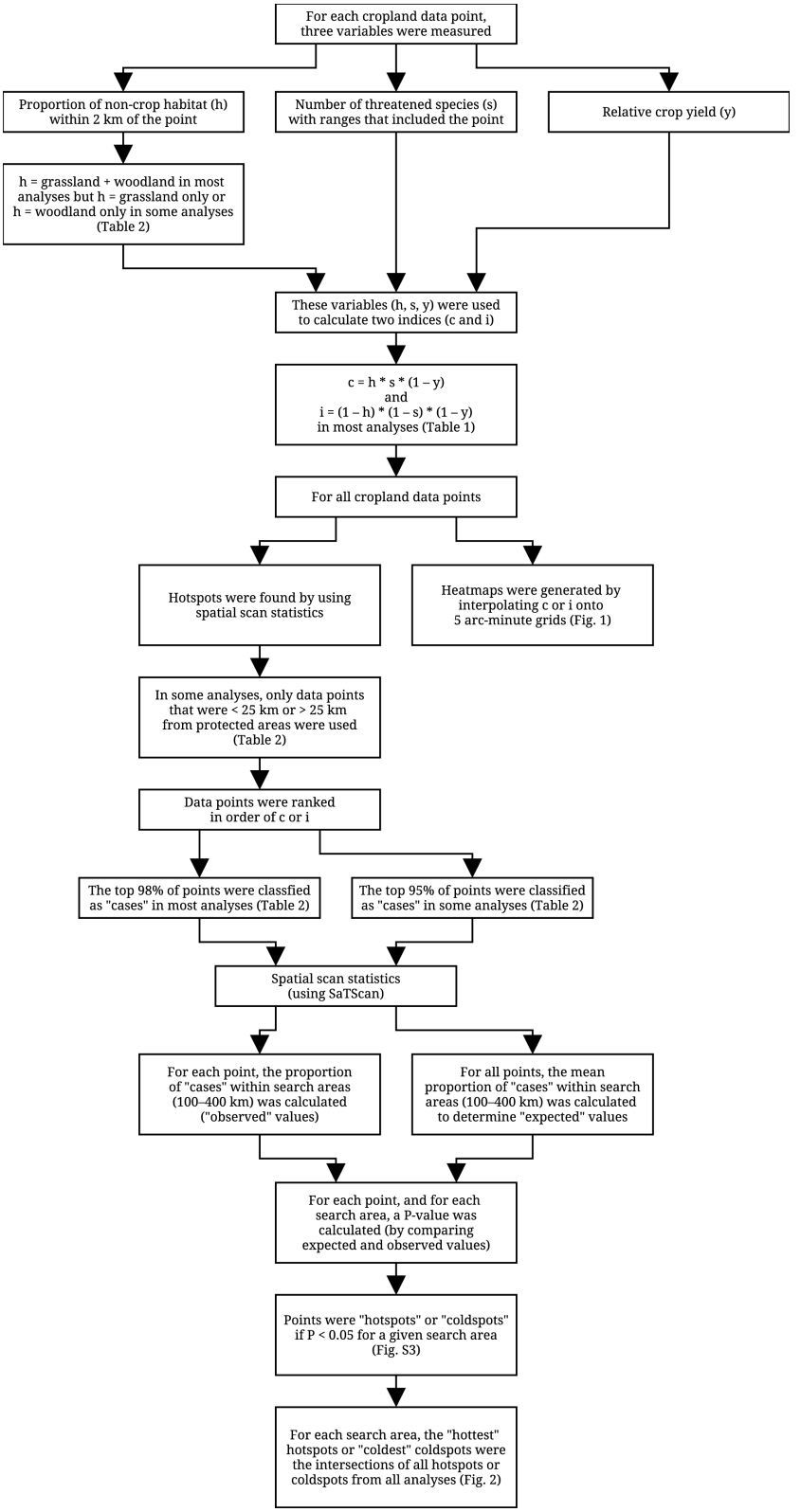
For each cropland data point, three variables were measured
Proportion of non-crop habitat (h) within 2 km of the point
Number of threatened species (s) with ranges that included the point
Relative crop yield (y)
h = grassland + woodland in most analyses but h = grassland only or h = woodland only in some analyses (Table 2)
These variables (h, s, y) were used to calculate two indices (c and i)
c = h * s * (1 – y) and i = (1 – h) * (1 – s) * (1 – y) in most analyses (Table 1)
For all cropland data points
Hotspots were found by using spatial scan statistics
Heatmaps were generated by interpolating c or i onto 5 arc-minute grids (Fig. 1)
In some analyses, only data points that were < 25 km or > 25 km from protected areas were used (Table 2)
Data points were ranked in order of c or i
The top 98% of points were classfied as "cases" in most analyses (Table 2)
The top 95% of points were classified as "cases" in some analyses (Table 2)
Spatial scan statistics (using SaTScan)
For each point, the proportion of "cases" within search areas (100–400 km) was calculated ("observed" values)
For all points, the mean proportion of "cases" within search areas (100–400 km) was calculated to determine "expected" values
For each point, and for each search area, a P-value was calculated (by comparing expected and observed values)
Points were "hotspots" or "coldspots" if P < 0.05 for a given search area (Fig. S3)
For each search area, the "hottest" hotspots or "coldest" coldspots were the intersections of all hotspots or coldspots from all analyses (Fig. 2)