1.6 Example: Garroch Head macrofauna

Pearson & Blackstock (1984) describe the sampling of a transect of 12 sites across the sewage-sludge disposal ground at Garroch Head in the Firth of Clyde, SW Scotland ({G}, Fig. 1.5). The samples considered here were taken during 1983 and consisted of abundance and biomass values of 84 macrobenthic species, together with associated contaminant data on the extent of organic enrichment and the concentrations of heavy metals in the sediments. Fig. 1.6 shows the resulting species abundance distributions for the twelve sites, i.e. at site 1, twelve species were represented by a single individual, two species by 2–3 individuals, three species by 4–7 individuals, etc. (Gray & Pearson (1982)). For the middle sites close to the dump centre, the hypothesised loss of less-abundant species, and gain of a few species in the higher geometric classes, can clearly be seen.

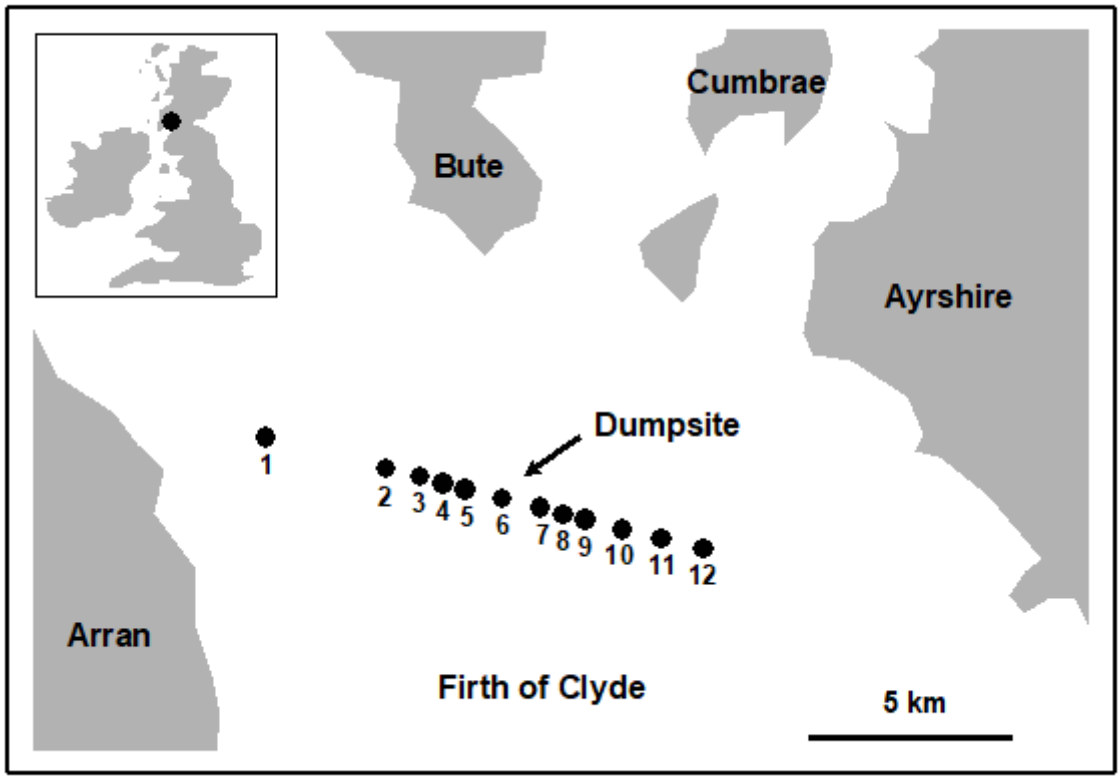


Fig. 1.5. Garroch Head, Scotland {G}. Location of sewage sludge dump ground and position of sampling sites (1–12); the dump centre is at site 6.

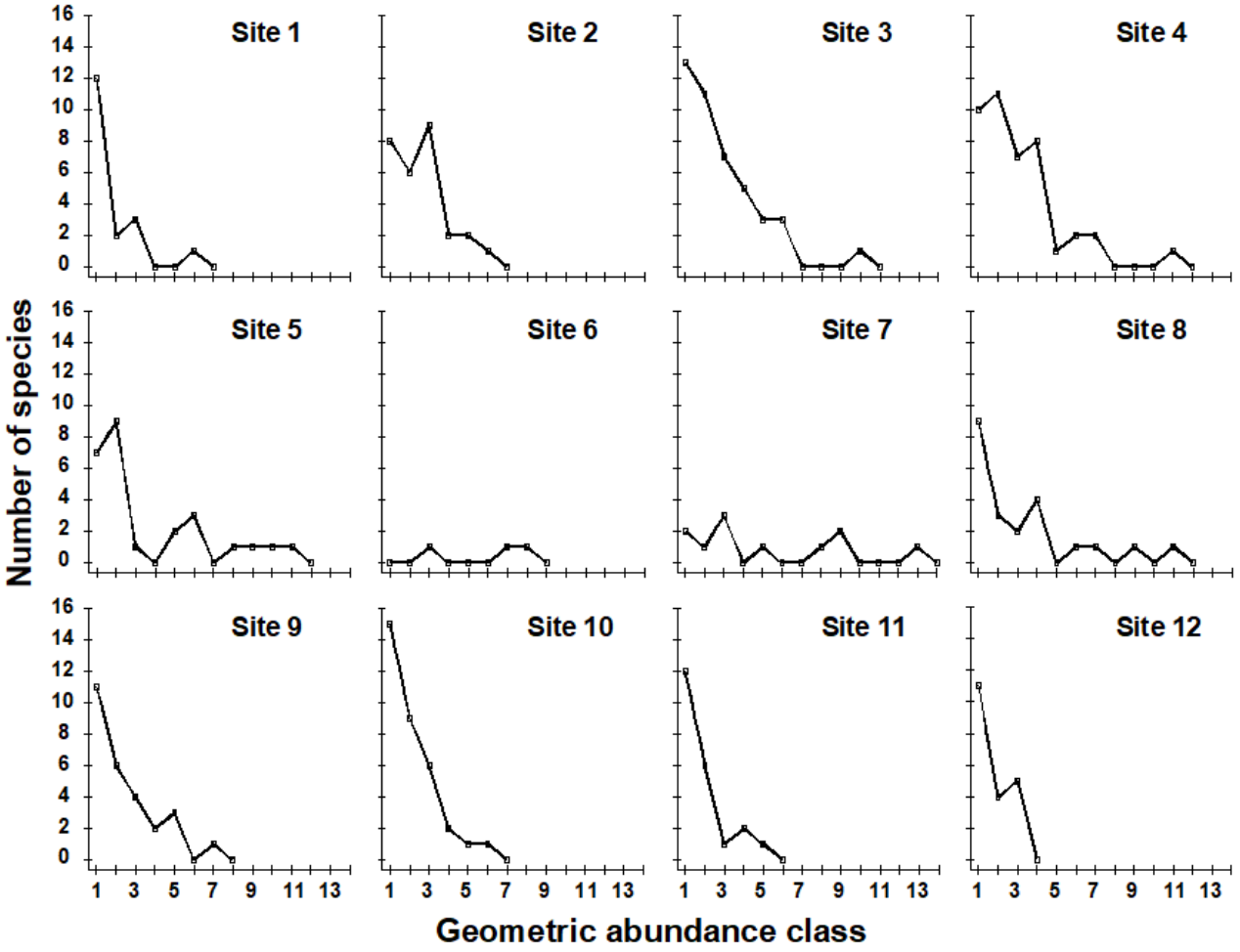


Fig. 1.6. Garroch Head macrofauna {G}, Plots of number of species against number of individuals per species in $\times$2 geometric classes, for the 12 sampling sites of Fig. 1.5.

Revision #12
Created 10 February 2022 08:31:48 by Arden
Updated 16 October 2024 06:10:45 by Marti