environmental variables, such as habitat, season, year, land management regime, elevation, or diversity of other taxa. We can estimate community species richness given certain assumptions about community boundaries. Cognizance of the relationships between sampling regime, data structure, and analysis options will not only improve the quality of individual projects involving ant communities but also make more likely synthetic analyses that examine results from many separate studies. The global importance of ants in terrestrial ecosystems and their potential value in environmental monitoring justify an emphasis on quantitative sampling and cross-study comparability.