

Presentation title: The application of high throughput DNA barcoding for landscape ecology and management

Abstract:

One of the chief justifications for the development of DNA barcoding for species identification rested in the potential the rapid identification of cryptic species or of representatives from taxonomically problematic groups without the need for detailed anatomical characterisation or reference to a small number of specialists for the group. This need is most keenly felt in poorly studied regions of high biodiversity or in cases where morphological identification is rendered impossible because of incomplete or degraded specimens, or for mixed samples containing multiple species. In this paper, I will provide a series of case studies to illustrate the value of Next Generation Sequencing in enhancing the potential of DNA barcoding for the purposes of species discovery, the risk assessment of GM crops, diet reconstruction and the study of ancient DNA.