Science in the Wild
A chance to find out what wildlife rangers do

Year 7-9

Learning Outcomes:
At the end of the session:

✔ **All students** will understand the importance of biodiversity and how different methods can be used to measure it

✔ **Most students** will understand how biodiversity can be lost and how it can restored and maintained

✔ **Some students** will be able to apply the techniques used in South Africa to other locations to measure biodiversity

Session Outline:
The session starts with an introduction to UmPhafa, a private nature reserve in South Africa, which is operated by Colchester Zoo’s charity Action for the Wild. The session then looks at how the land was rehabilitated from farm land (by reversing habitat fragmentation), and the effects this has on wildlife. The session also looks at the importance of biodiversity, as well as looking at how the rangers can monitor biodiversity. Techniques used to measure biodiversity are explored, especially methods used to estimate animal populations, such as mark-recaptures. The final part of the session is a circus of activities aimed at providing the information needed for the students to calculate the biodiversity of the reserve; just like the real rangers on UmPhafa!