

Schools and their potential to help in the protection of plant biodiversity!

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The MSBP at Wakehurst Place, is a global conservation initiative responding to the increasing threats facing the world's plant species. The collected and stored seeds in its vaults are intended to remain viable for hundreds of years, retaining a bank of plant genetic diversity for use of future generations. However, it is unknown if some species may deteriorate after a relatively short length of storage with a subsequent loss of the genetic material. It is vital to identify those species with a limited stored seed lifespan so that a programme of more frequent monitoring and replacement can be instigated.

To determine which species seeds are short or long-lived, accelerated ageing tests are carried out.

With guidance from the MSBP and the Learning Programme at RBG Kew, at Wakehurst Place, a trial is underway to train schools to carry out a seed longevity study of the native British flora. School students will be involved in making a genuine contribution to maintaining plant biodiversity.

The proposal will give students:

- 1) An understanding of why it is vital to conserve plants as seeds in seed banks for the future of the planet and its people.
- 2) Experience of investigative procedures and techniques which directly link into the Science Curriculum 2006, 'How science works.'
- 3) An opportunity for schools to be acknowledged as contributors in a real life research investigation, which will make an impact on a global seed conservation project.
- 4) An awareness of the challenges faced when we set out to store viable native seeds and conserve the genetic diversity of the world's flora.

In addition to the conservation of biodiversity study, the students will be exposed to the related issues of plant ecology and evolution arising from the investigation.

This is a novel approach to tackling bio diversification and conservation research and increasing public awareness and concern.

Biography:

Sue Hunt is an R&D Education Officer based at RBG Kew at Wakehurst Place. Sue's role is based upon a collaboration between the RBG Kew and Science and Plants For Schools (SAPS), with a vision to stimulate exciting, secondary, plant science education. She has a background in plant tissue culture research at Unilever research Ltd and teaching secondary students.