Seed Conservation

Supporting the survival of plant diversity in Western Australia

Conserving life on earth

Plants are the basis of life on earth. They trap the sun's energy, generate oxygen and provide nourishment and habitat for almost all life forms. The tremendous diversity of life on earth is largely dependent on the diversity of plant species that sustains it. Any loss of species diversity has irreversible negatives impacts on ecosystem processes.

Nature's genetic storehouse

Seeds are nature's genetic storehouse and seed collections provide a ready source of plant material. Seeds can be used to help restore degraded lands, reintroduce species into the wild and restock depleted populations, therefore helping to conserve natural habitats and ecosystems. Seeds are used for scientific research into biology, conservation genetics and disease susceptibility, information that assists on ground conservation and management.

Helping on ground conservation

Collecting seed for conservation represents a complementary approach to on ground actions and has some useful advantages. Seed conservation is an efficient and cost effective method of conserving the variation within and between individual species. Seeds occupy little space and require little attention over long periods of time. Seeds are portable and can be stored at a number of sites reducing their vulnerability to loss. Seeds can produce whole plants with minimal technology.

Good conservation strategies

As global threats to biodiversity escalate the most judicious conservation strategies will be ones that combine available resources to provide the highest possible degree of protection. Banked seeds are available irrespective of season and can be used immediately to support species survival in the wild. Data collection associated with the species or population from which the seed is taken is a potentially vital contribution to knowledge about these plants and should always be obtained at the time of seed collection.

Quality collections

Good quality seed collections with a broad genetic base are required to reinforce and benefit species survival. Storage conditions that minimise deterioration of seeds will maximise the quality and quantity of seeds available for future use.

Species at risk

Species targeted for conservation are those most at risk in the wild. Species with low plant numbers, few populations or limited geographic range and those highly threatened by human and other influences (for example disease, salinity, weed invasion and grazing) may all warrant priority for seed conservation. Other priorities include those experiencing rapid decline in conservation status or health, and those thought to be genetically or taxonomically different from more common species. Where habitats are in immediate danger of destruction, and where on ground actions cannot guarantee species survival, the collection and maintenance of plant material from the wild becomes necessary, acting as insurance.

Seed conservation directly and indirectly assists species survival in the wild. It is an integral part of the Western Australian Department of Environment and Conservation's Flora Conservation and Herbarium Program, supported by national and international conservation strategies.

Enquiries

If you wish to know more about seed conservation please contact
The Seedbank Manager
Threatened Flora Seed Centre
Department of Environment and Conservation
Locked Bag 104
Bentley Delivery Centre
Western Australia 6983

www.naturebase.wa.gov.au

Department of Environment and Conservation

Natural Heritage Trust
Helping Communities Helping Australia

MILLENNIUM SEED BANK PROJECT Kew

SCRIPT
South Coast Regional Initiative Planning Team