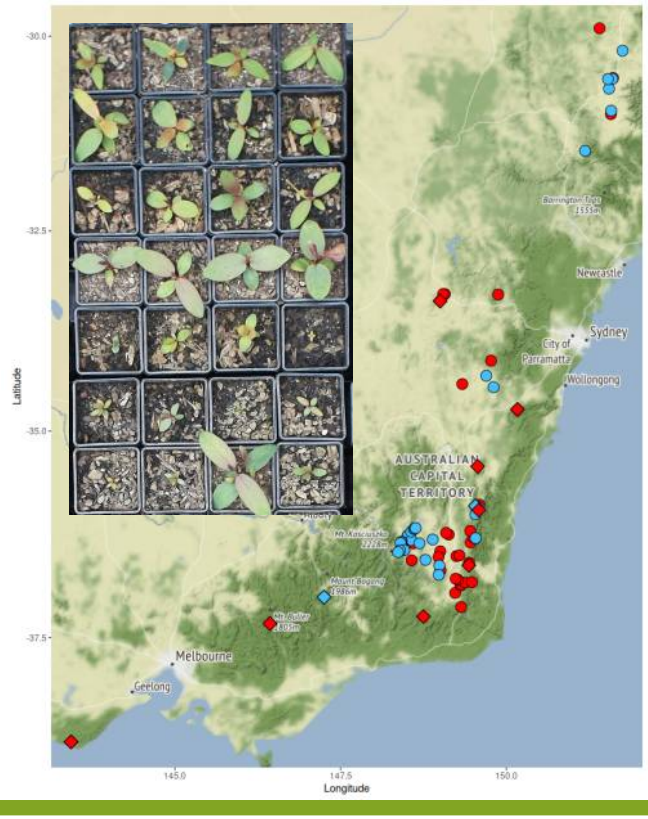
Gegedzerick Open Day

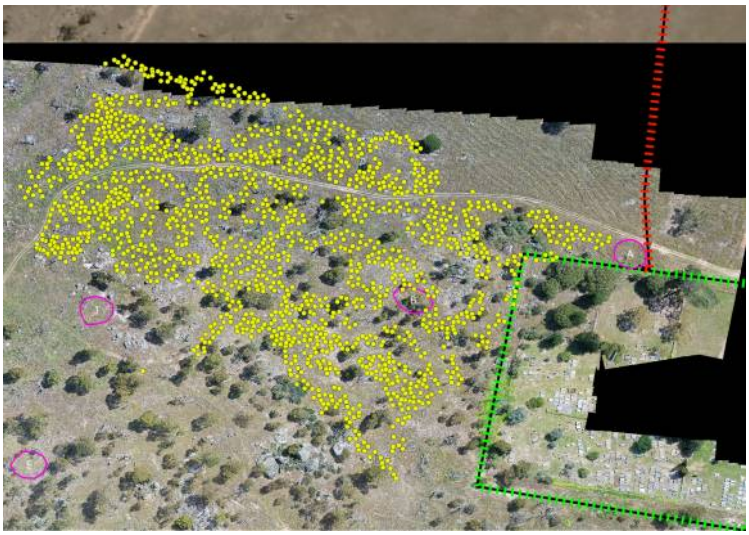
LANDCARE LEADS THE WAY
Sat, 25 March 2023

Station 4 - ANU Climate seedlings

A major concern for the future is whether the trees that are growing locally now will be suitable for the warmer climate ahead. In order to test whether Eucalyptus are specifically adapted to warmer/drier vs. colder/wetter environments, we collected seed from two species - Ribbon Gums (red dots) and Snow Gums (blue dots) - from across the full length of NSW (left figure). Using funding from the Landcare Led Bushfire Recovery Program, seeds from 100 different tree families (half-sibs) were then grown in climate chambers at the ANU under two different climate conditions mimicking the current and future Monaro climates. Growth rates were measured by automatic imaging of the seedlings every 15 minutes (inset in left figure). Root growth was also measured in "rhizoplates" (right-hand figure).



At the end of the climate chamber experiment, the seedlings were planted out at Gegedzerick TSR by volunteers in May 2022. After six months, with the help of Landcare Intrepid volunteers from ANU, a record-breaking survival rate of 93% was found. Analyses are ongoing as to whether locally sourced seedstock survives and grows better in this environment than seedstock from warmer climates.



Upper Snowy Landcare Network

This project has been assisted by the NSW Government through its Environmental Trust.

NSW GOVERNMENT