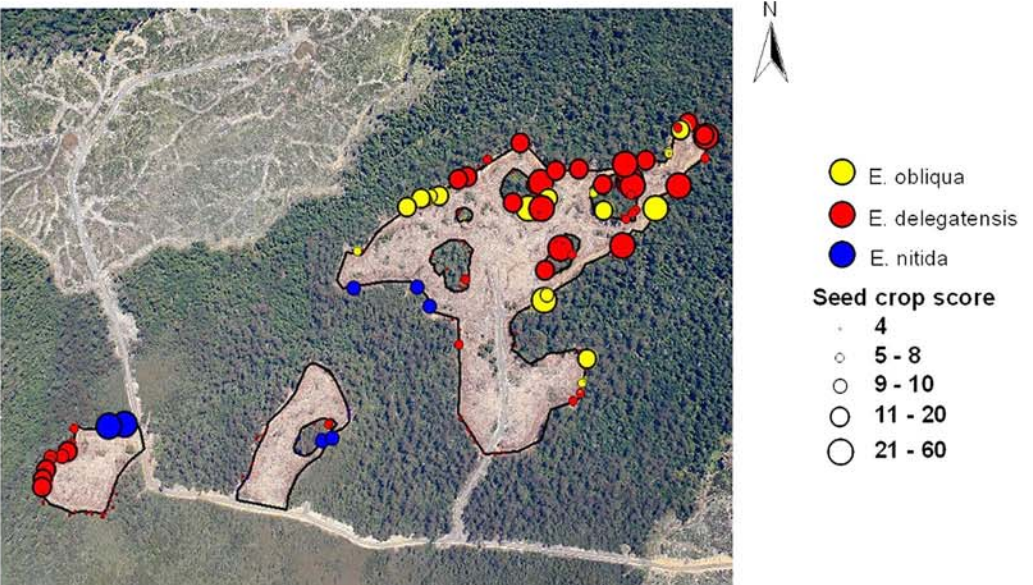


Research Notes

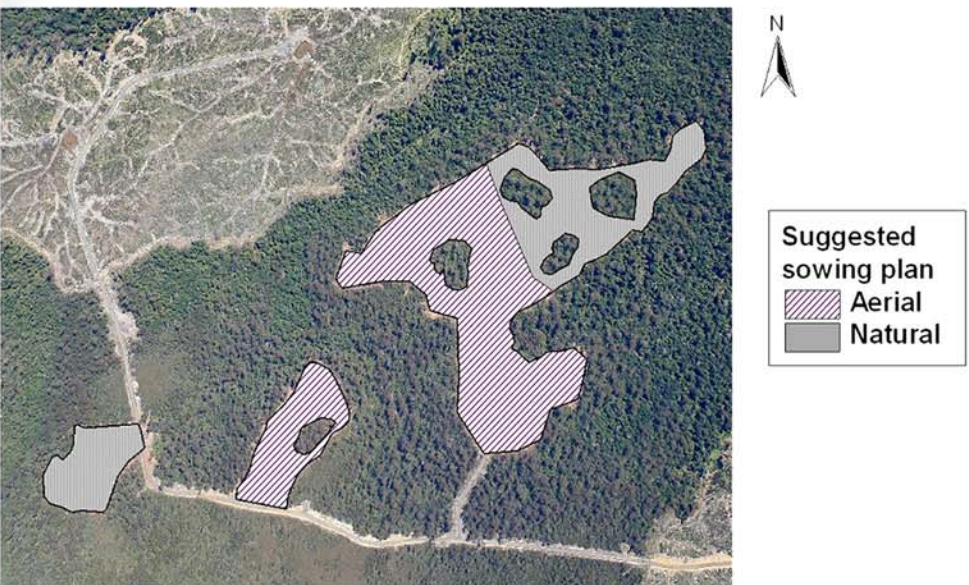
Can we rely on natural seeding in ARN coupes?



SX004B - Seed tree locations



SX004B - Sowing plan

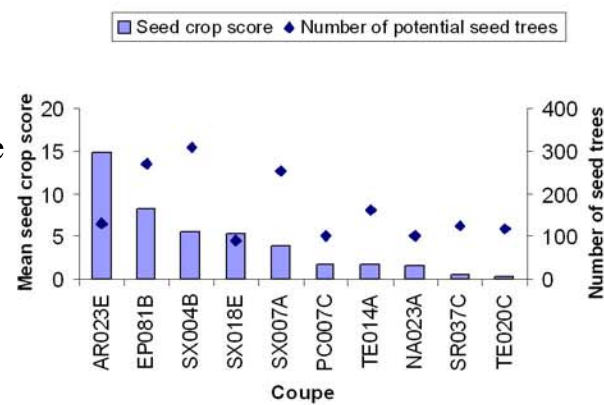


Ten aggregated retention (ARN) coupes scheduled for burning in 2007 were assessed to determine whether on site eucalypt seed crops were sufficient to allow for natural regeneration. A seed crop score was assigned to each potential seed tree in the retained aggregates and along coupe edges, based on crown size and seed capsule density (as described in Technical Bulletin No. 6). The results showed that although potential seed trees were present in all coupes, average seed crop scores were generally low.

Seed tree locations were mapped for the three coupes with the highest average seed crop scores (AR023E, EP081B and SX004B), and the maps examined to determine if there were sections of the coupes which were adequately supplied with seed. A sowing plan showing which areas needed sowing and which could be left to regenerate naturally was provided to District staff. All other ARN coupes were completely oversown.

Regeneration surveys will be carried out in January 2008. Stocking level and seedling density will be compared in naturally regenerated and sown areas.

The variable nature of high-quality seed crops in both time and space, and expected changes to ARN coupe design (wider fairways and fewer, larger aggregates) mean that future ARN coupes may need to rely entirely on aerial sowing to achieve rapid and successful regeneration.



However, in coupes where >80% of the felled area will be within one tree height of standing trees or where good seed crops are identified during harvesting, efforts should be made to retain seed trees along coupe and aggregate edges.

