Simon Heyes <S.Heyes@latrobe.edu.au>

Thu, Sep 12, 2024, 8:57 AM

to Aggie, me, Bill

Arky, Bill and Aggie,

I don't know the emails for those that came yesterday so could one of you to forward these papers on to them?

The crux of my findings are as follows:

Recruitment bottlenecks are not as widespread as we thought but we see a small population effect (Allee effect) on recruitment that is probably independent of inbreeding (ie likely due to seed predation, reduced propagule pool and/or herbivory). Augmenting populations to increase stand sizes (above a critical threshold of around 100) could help.

Seed predation (probably from YTBC) is a major cause of seed removal from the recruitment pool with over 50% of seed crop affected and up to nearly 100% in some cases. Early removal of fruit by YTBC also affects seed mass, seed release of affected cones and reduces overall germination. Isolation of stands is implicated (based on other studies of YTBC foraging behaviour) and we might want to look at linking up the more isolated fragments and increasing population size to spread the load of foraging by YTBC.