

Honours Project: opportunity for a student

Mistletoe and fire

Background

Mistletoe is a keystone resource worldwide for a remarkable range of wildlife, and the Top End is no exception. Mistletoebirds depend on the fruits, and honeyeaters feed at the flowers. A wide variety of insects are found on mistletoes, and the caterpillars of a number of butterflies feed exclusively only on it. One of these butterflies is Dodd's Azure, a subspecies endemic to the Top End which is classified as Endangered.

In some regions, mistletoes are abundant and, being parasitic plants, are regarded as a pest. The many Top End species are widespread but mostly uncommon. Mistletoes are sensitive to fire, often far more so than their host plants. There is concern that prevailing fire regimes may be affecting mistletoe populations and the fauna associated with them detrimentally.



Christmas Mistletoe (Amyema sanguinea) growing on Darwin Stringybark (Eucalyptus tetrodonta).

Project aims

1. to compare the species composition, abundance and height on hosts of mistletoes between sites that are long unburnt and adjacent frequently-burnt sites;
2. to gather baseline biological data on host-plant mistletoe associations; and
3. evaluate the extent to which mistletoe clumps are aggregated within a site as a starting point for understanding the ability of mistletoe to recolonise areas after fire.

Resources

Funding is available to support transport and other field requirements.



Staff involved:

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Collaborator:

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Are intense wildfires threatening populations of mistletoes and the fauna that depends on them?