

## Burning threatens the food supply of the South-eastern Red-tailed Black-Cockatoo

The South-eastern Red-tailed Black-Cockatoo (SERTBC) is listed as 'Endangered' under the *Environment Protection and Biodiversity Conservation Act* 1999. The Cockatoo has a limited range, occurring only in the South East of South Australia and south-western Victoria.

Its critically small population — around 1500 individuals — is believed to be declining as a result of the ongoing loss and deterioration of the Cockatoo's key habitats. Unlike other subspecies of the Red-tailed Black-Cockatoo, the SERTBC is an ecological specialist that feeds on the seeds of only three species of trees — Desert and Brown Stringybarks and Buloke.

## Food shortages are the greatest threat to the cockatoo.





Over half of the SERTBC's feeding habitat has been cleared since European settlement, with remaining habitats subject to further loss and decline due to clearance of food and nest trees, inappropriate planned burning regimes, catastrophic wildfire, inappropriate agricultural practices, invasive woody weeds and the impacts of pathogens and pests of food trees.

Since 1997, the National Recovery Team for the South-eastern Red-tailed Black-Cockatoo has been working collaboratively with state and federal governments, partner organisations, community groups, schools and farmers to manage and restore critical habitat, reduce key threats and halt the rate of decline.

Each year, the on-ground actions of over 200 volunteers assist the Recovery Team in monitoring the population, providing information on sightings and nest sites, and managing and improving habitat conditions. In 2014, around 300 primary school students from six schools were actively involved in helping to grow and plant stringybarks as part of the successful 'Kids helping Cockies Project'.

However, the efforts of hundreds of volunteers are currently being undermined by the increase in burning of large areas of the Cockatoo's key stringybark feeding habitat, particularly across south-western Victoria.



Figure 2: Tenison Woods College have grown over 1000 SERTBC food trees.

## Fire presents a major threat to the recovery and survival of the SERTBC.

Extensive and intense bushfires and inappropriate planned burning of the Cockatoo's stringybark feeding habitat can seriously affect the seed production of these trees, and therefore the availability of food for the Cockatoos, particularly where the canopy is scorched.

Stringybarks that have been subject to canopy scorch produce an average of 50% fewer seeds for ten years after being burnt. Availability of food is the main factor limiting the population size of the SERTBC, so any reduction in food availability poses a key threat to the population.

The Recovery Team has calculated that the SERTBC population can tolerate up to 15% of their food trees across the range having reduced productivity, **but no more**. Any increase in canopy scorch beyond an average of 15% is likely to result in further reductions in the population.



Figure 3: Important stringybark habitat of the SERTBC severely scorched during a planned burn in Tooloy-Lake Mundi Wildlife Reserve (west of Casterton) in May 2014, where only weeks earlier a flock of 370 birds was recorded in the adjacent State Forest. The stringybark woodlands of the Casterton district represent some of the Cockatoo's most important feeding habitat, regularly supporting large flocks.

In November 2013, the Victorian Department of Environment and Primary Industries (DEPI) reported that the proportion of SERTBC habitat that had been subject to canopy scorch in the last 10 years had risen to 23%, and was expected to increase to 25–27% by the end of autumn 2014. The estimated proportion of habitat scorched has recently reported to have reached 24.3% as at the end of June 2014. This figure may increase up to 25.5% and possibly 26.1% by the end of 2016/17 if hectare targets are achieved by DEPI.

This is almost twice the agreed maximum of 15% and is nearly double that considered sustainable to support the current population of Cockatoos. The Recovery Team believes that this increase in the incidence of canopy scorch is likely to have a significant negative impact on the population.

Under the *EPBC Act 1999* any action that is likely to have a significant impact on a species of National Environmental Significance must be referred to the Australian Government for assessment, and fire is known to be a key threatening process to the SERTBC. Thus, any burning activities that pose a significant threat to the population **must** be referred for assessment under the Act.

DEPI has not referred the 2014 burning program, despite the Recovery Team's warnings about further increases in scorched habitat and their severe impact on the species. Furthermore, DEPI has failed to comply with fire management objectives defining percentage scorch as outlined in the SERTBC Victorian Flora and Fauna Guarantee Action Statement.

DEPI has a long-term responsibility and understanding not to scorch more than 15% of the SERTBC habitat in a 10-year period. It remains unclear why DEPI is progressing with its planned burn program in the knowledge that this action has the potential to increase the total proportion of habitat scorched and significantly impact on the already critically small population of SERTBCs.

Much of the burning is driven by the Victorian Government's policy to burn 5% of all public land in Victoria each year. The Recovery Team welcomes the call by Neil Comrie, Royal Commission Implementation Monitor, to review the 5% target, stating that "*Area based hectare targets alone will not necessarily reduce the bushfire risk to life and property in Victoria and may have adverse environmental outcomes."* This is certainly the case for SERTBCs.

## **Recommendation:**

To prevent further declines in SERTBC and start to return the 10-year extent of scorched stringybark in the SERTBC range toward the recommended maximum of 15% **it is imperative** that DEPI substantially reduces the area of SERTBC habitat scorched during planned burning operations across public land in Victoria.

The SERTBC Recovery Team, in partnership with BirdLife Australia, is committed to working with DEPI to reduce the threat of fire in SERTBC habitat. The establishment of a strategic fire-planning reference group has been proposed to assist this process.