

Woodland Bird Monitoring Summary Report

Woodland birds are often used as an indicator of ecosystem health due to their sensitivity to environmental changes. Therefore, monitoring of birds can help to determine the overall ecological health of the catchment and monitor changes in vegetation condition over time.

Kleinfelder were previously engaged in 2012 to undertake woodland bird monitoring surveys under the Wybong Catchment Health Improvement Program, a partnership project between Hunter Local Land Services and Glencore aimed at improving land management practices and riparian health. Following completion of the project in 2014, Kleinfelder were re-engaged to undertake follow up bird monitoring in 2020

Sixteen permanent monitoring points were established in 2012 across five broad habitat types within the Wybong catchment, namely riparian, grassland, woodland, dry forest and wet forest. Each of the sites were surveyed in Autumn and Spring between 2012 and 2014 and again in 2020.

A total of 128 species were recorded throughout the monitoring period, including 11 threatened species such as the Brown tree creeper (vulnerable), Dusky Woodswallow (vulnerable), Grey-crowned Babbler (vulnerable), Speckled Warbler (vulnerable) and Varied Sittella (vulnerable). The critically endangered Regent Honeyeater was also observed. A further 16 species of significance were recorded. This included birds that are infrequently recorded in the Hunter Valley region or have been identified as species in decline in the NSW wheat-sheep belt such as the Jacky Winter and Red-capped Robin.

Photos - Clockwise from left: Hooded Robin, Speckled Warbler, Painted Honeyeater (Dr. Daniel O'Brien)



Woodland Bird Monitoring Summary Report

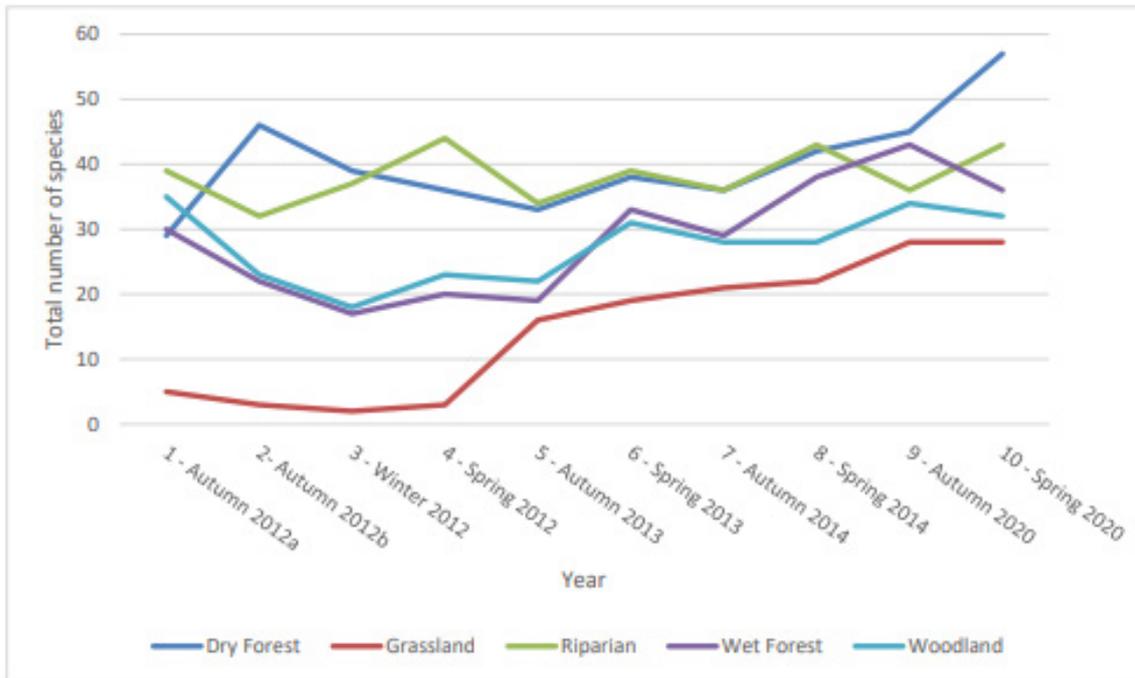


Figure 1. Total number of species recorded within each habitat class during each monitoring event throughout the monitoring program.

The five most common species across all sites were Australian Magpie, Striated Pardalote, Noisy Friarbird, Noisy Miner and Australian Raven.



Dry forest monitoring sites recorded the highest number of bird species present, with an average of 58 birds per site. Wet forest sites had an average of 54 species present while riparian, woodland and grassland sites recorded an average of 50, 39 and 29 different species, respectively.

Since 2012, overall species richness (number of species) has increased over time with the greatest changes occurring in dry forest and grassland sites. Meanwhile, species richness has remained relatively constant in riparian, wet forest and woodland monitoring sites (see Figure 1). An increase in species richness can be indicative of improved ecological health but may also be driven by climatic conditions and changes in habitat availability.

Photo - Regent Honeyeater (Iestyn Taylor)