#### **Final Determination**

The Scientific Committee, established by the *Threatened Species Conservation Act 1995* (the Act), has made a Final Determination to list the Black-throated Finch (southern subspecies) *Poephila cincta cincta* (Gould, 1837) as a SPECIES PRESUMED EXTINCT in Part 4 of Schedule 1 and, as a consequence, omit reference to the Black-throated Finch (southern subspecies) *Poephila cincta cincta* (Gould, 1837) from Part 1 of Schedule 1 (Endangered species) of the Act. Listing of Species Presumed Extinct is provided for by Part 2 of the Act.

The Scientific Committee has found that:

- 1. The Black-throated Finch (southern subspecies) *Poephila cincta cincta* (Gould, 1837) (family Estrildidae) is a sleek but thickset grass-finch (length *c*. 12 cm; weight 15 g) with large head; short, thick, black, conical bill; broad, rounded wings; and short, black, rounded or square-tipped tail. Overall coloration brownish, with grey head and neck, black loral stripe, conspicuous large black bib, black rump and white uppertail coverts. Lower underbody white, with black patch on rear flanks; feet pinkish-red (Higgins *et al.* 2006). The southern subspecies *P. c. cincta* is distinguished from the northern subspecies *P. c. atropygialis* by white compared to black uppertail coverts and its richer brown coloration (Schodde and Mason 1999; Higgins *et al.* 2006).
- 2. The Black-throated Finch is endemic to northeastern and central eastern Australia. Historically it was distributed from northeastern New South Wales (NSW) north to Cape York Peninsula and west to central Queensland and northwest to the Gulf of Carpentaria. The two subspecies interbreed and intergrade in northeastern Queensland along the southern Atherton Tablelands (Burdekin-Lynd Rivers divide) to the Einasleigh Uplands (Schodde and Mason 1999; Higgins *et al.* 2006).
- 3. The Black-throated Finch inhabits dry, open, grassy woodlands and forests, as well as grasslands with seeding grasses and access to water (Zann 1976; Higgins *et al.* 2006). Most records are from along watercourses and are associated with riparian vegetation and dense grassy groundcover (Higgins *et al.* 2006). The Black-throated Finch is primarily granivorous, eating the seeds of native grasses, and mostly forages on the ground. Small invertebrates and their larvae are also consumed, especially in the breeding season (Zann 1976; Higgins *et al.* 2006). The Black-throated Finch may require a mosaic of different habitat types to provide food throughout the year (DOE 2015). The Black-throated Finch is gregarious, usually seen in pairs or flocks of up to 30 individuals. Flocks often forage, bathe, drink and rest together (Higgins *et al.* 2006). The Black-throated Finch is believed to be mostly sedentary but may move in response to drought or rainfall (Ley and Cook 2001; Higgins *et al.* 2006; DOE 2015).
- 4. Breeding in the Black-throated Finch occurs in loose colonies (nests up to 50 m apart) and can take place throughout the year whenever conditions are optimal. However, breeding most frequently occurs during autumn in the north and in spring in the south of its distribution (Higgins *et al.* 2006). Monogamous pairs produce 3–9 eggs (usually 5–6) which are laid in a fully enclosed oval nest with a long entrance tunnel. Nests are constructed of dried grass and lined with fine material. Nests are usually constructed in the outer branches of trees or shrubs near water but sometimes in grasses, tree hollows, burrows in termite mounds or in active raptor nests (Higgins *et al.* 2006; DOE 2015). Both sexes incubate the eggs, as well as feed and brood the young (Zann 1976; Higgins *et al.* 2006). Eggs take ~12 days to hatch and young are fledged at ~21 days posthatching. Young reach independence at 5–6 weeks but remain with their parents for several

months (Zann 1976; Higgins *et al.* 2006). Black-throated Finches can reach sexual maturity from 6 months and have an estimated life expectancy of 4–6 years (Shephard 1989). The generation length is estimated to be 3.5 years (Garnett *et al.* 2011). Black-throated Finches also construct non-breeding nests that are used for roosting (Higgins *et al.* 2006; Forshaw *et al.* 2012).

- 5. The Black-throated Finch (southern subspecies) has declined significantly in the last 150 years and is now rarely reported south of Clermont and Ayr, central Queensland (TSSC 2005; BTFRT 2007). In NSW, the Black-throated Finch (southern subspecies) was formerly widespread and 'tolerably abundant' in the Northern Tableland and Northwest Slopes Regions, from the Queensland border south to the upper Hunter Valley and west to the Liverpool Plains (Gould 1865; Cooper and McAllan 1995; Ley and Cook 2001; Forshaw *et al.* 2012). A decline in the subspecies in NSW was first noted in the early 1900s by North (1909), then by Cayley (1932). The Black-throated Finch (southern subspecies) has disappeared from its former range in NSW and since 1960 there have been fewer than 10 confirmed records of the subspecies from localities including Tenterfield (1963), Inverell (1965–1967), Ashford (1968), Gilgandra (1968), Boggabilla (1977), Swan Brook (1992), Pindari Dam (1994) and Bukkalla (1994) (Ley and Cook 2001; Higgins *et al.* 2006). The most recent records in NSW were all from riparian habitats including vegetation dominated by *Casuarina* and *Angophora* or *Leptospermum* and *Melaleuca* thickets adjacent to open grassy areas (BTFRT 2004). The Black-throated Finch (southern subspecies) has not been recorded in any conservation reserves in NSW (NPWS 1999).
- 6. In NSW there have been only three confirmed records of the Black-throated Finch (southern subspecies) since 1990, the last occurring in 1994 (Ley and Cook 2001; DOE 2015). Since 1994, the subspecies has not been recorded in NSW, despite general surveys (Barrett *et al.* 2003; BTFRT 2004) and, in 2000, specific intensive searches in the Inverell-Ashford, Tenterfield and Boggabilla districts in locations with suitable habitat and historical records (Ley and Cook 2001). The ongoing lack of records indicates that the southern subspecies of the Black-throated Finch is extinct in NSW as was suggested by Higgins *et al.* (2006) and DOE (2015). In southern Queensland the most recent record of the Black-throated Finch (southern subspecies) was from Stanthorpe in 1995 (TSSC 2005; BTFRT 2007).
- 7. Loss and degradation of habitat is the major threat to the Black-throated Finch (southern subspecies) (BTFRT 2004, 2007; TSSC 2005; Garnett et al. 2011). The decline of the Blackthroated Finch (southern subspecies) in northern NSW and southern Queensland coincided with the introduction of livestock (primarily sheep) grazing in the early 20<sup>th</sup> century (Franklin 1999; TSSC 2005; Garnett et al. 2011; Forshaw et al. 2012). Grazing by livestock and the introduced European Rabbit (Oryctolagus cuniculus) is thought to have degraded grassland habitats and riparian vegetation leading to a reduction of seed availability from native grasses (Franklin 1999; TSSC 2005; Garnett et al. 2011). The clearing and fragmentation of woodland for agriculture, especially cropping, which has been particularly extensive in the southern part of the subspecies' range, are also likely to have had a negative impact on the Black-throated Finch (southern subspecies) through the loss and degradation of riparian breeding habitat (Woinarski and Caterall 2004; TSSC 2005; BTFRT 2007; Garnett et al. 2011; Forshaw et al. 2012). Altered fire regimes and the spread of weeds and exotic grasses may also have been detrimental to the subspecies (Woinarski and Caterall 2004; TSSC 2005; BTFRT 2007; Garnett et al. 2011). All of these threats are on-going and are likely to be exacerbated by periodic drought (Garnett et al. 2011; Forshaw et al. 2012). 'Clearing of native vegetation' and 'Competition and grazing by the feral European Rabbit, Oryctolagus cuniculus (L.)' are listed as Key Threatening Processes under the Act.

- 8. The Black-throated Finch (southern subspecies) is currently listed as an Endangered species under the *Environment Protection and Biodiversity Conservation Act 1999*.
- 9. The Black-throated Finch (southern subspecies) *Poephila cincta cincta* (Gould, 1837) is eligible to be listed as a Species Presumed Extinct as, in the opinion of the Scientific Committee, it has not been recorded in its known or expected habitat in New South Wales, despite targeted surveys, over a time frame appropriate to its life cycle and form.

Dr Mark Eldridge Chairperson NSW Scientific Committee

Exhibition period: 30/09/16 – 25/11/16

Proposed Gazettal date: 30/09/16

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