

NSW SCIENTIFIC COMMITTEE

Final Determination

The Scientific Committee, established by the *Threatened Species Conservation Act 1995* (the Act), has made a Final Determination to list the Blue-grey Mouse *Pseudomys glaucus* Thomas, 1910 as a SPECIES PRESUMED EXTINCT in Part 4 of Schedule 1 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 Blue-grey Mouse *Pseudomys glaucus* Thomas, 1910 (family Muridae) is described as “Head and body length *c.* 95 mm. Tail length *c.* 100 mm. Weight *c.* 25–30 g. Dorsal fur light bluish grey, soft and fine in texture; white below. Tail well haired, covered with short, white hairs over pink skin. Robust build. Similar in appearance to both *Pseudomys apodemoides* and *P. albocinereus*, but larger and with a longer skull than the former species, and smaller than the latter” (Dickman 2008).
2. Historically *Pseudomys glaucus* has been synonymised with Silky Mouse *P. apodemoides* and Ash-grey Mouse *P. albocinereus* (NPWS 2002) but the Blue-grey Mouse is now recognised as a distinct species (Mahoney and Richardson 1988; Menkhorst and Knight 2001; Dickman 2008; Lamoreux 2008; Woinarski *et al.* 2014; Jackson and Groves 2015).
3. The Blue-grey Mouse is known from only three specimens. The first two specimens were collected in ‘south Queensland’ and sent to the British Museum (Natural History) in 1892 (Thomas 1910). The third specimen was collected by Mr B.N. Parkins in 1956 at Cryon between Burren and Walgett, in northern New South Wales (NSW) and sent to the Australian Museum (Troughton 1967). The Blue-grey Mouse has not been recorded since in either NSW or Queensland (Woinarski *et al.* 2014).
4. Little is known of the biology of the Blue-grey Mouse. It was most likely a ground-dwelling, burrowing seed-eater that occurred in a relatively restricted area of inland southeastern Queensland and northeastern NSW inhabiting open forest and woodland with an understorey of shrubs (Dickman 1993; Dickman *et al.* 1993; Dickman *et al.* 2000a, 2000b; Dickman 2008; Woinarski *et al.* 2014). Most of these habitats in this region have been cleared for agriculture and the understorey of remaining areas of native vegetation have been seriously degraded by sheep grazing (NPWS 2002; Dickman 2008; Woinarski *et al.* 2014). Introduced predators such as feral cats (*Felis catus*) and red foxes (*Vulpes vulpes*) are also common in these areas (Dickman 2008). Habitat loss and degradation, as well as predation by introduced carnivores are thought to have caused the decline of the Blue-grey Mouse (Ayers *et al.* 1996; Dickman *et al.* 2000b; NPWS 2002; Woinarski *et al.* 2014). ‘Clearing of native vegetation’, ‘Predation by the Feral Cat *Felis catus* (Linnaeus, 1758)’ and ‘Predation by the European Red Fox *Vulpes vulpes* (Linnaeus, 1758)’ are listed as Key Threatening Processes under the Act.
5. The Blue-grey Mouse has not been recorded in NSW since 1956. The site where this specimen was collected has since been cleared for agriculture (NPWS 2002). Wildlife surveys throughout the 1990s in northern inland NSW did not detect the Blue-grey Mouse (NPWS 2002). Targeted surveys for the Blue-grey Mouse around Cryon in the early 1990s failed to detect any native rodents (NPWS 2002; Dickman 2008). Lamoreux (2008) and Woinarski *et al.* (2014) consider the Blue-grey Mouse to be extinct.
6. The Blue-grey Mouse *Pseudomys glaucus* Thomas, 1910 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
Scientific Committee

Exhibition period: 05/08/16 – 30/09/16

Proposed Gazettal date: 05/08/16

ESTABLISHED UNDER THE THREATENED SPECIES CONSERVATION ACT 1995

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