Watola, G. 2011. The Discovery of New Zealand's Birds. (3rd Edition in prep.) Based on: Watola, G. 2009. The Discovery of New Zealand's Birds. (2nd Edition) Arun Books, Orewa, New Zealand.
Updated and amended text supplied by George Watola, October, 2011.

Page numbers follow Watola, G. 2009 (2nd Edition)

Little shearwater: pp 72-74.

Little Shearwater *Puffinus assimilis* sensu lato 1838 Norfolk Island

The early history of discovery of the "Little Shearwater" complex is confusing. Solander's *Nectris munda* are not identifiable. A *Nectris munda* was taken off Ninety-mile Beach, Northland on 6/1/1770 (Lysaght 1959).

The various races of Little Shearwater may be treated as separate species in future reviews (Holdaway et al. 2001). However, Austin et al. (2004) treated the taxa below as subspecies of *P. assimilis*, but some may be upgraded according to further research. Genetic distances point to *P. elegans* and *P. a. haurakiensis* being good species, with *P. a. kermadecensis* being a subspecies of either *P. a. assimilis* or *P. a. haurakiensis* (Crochet 2004). Holdaway et al. (2001) recognized *P. a. kermadecensis* as separate from *P. a. assimilis*. Scofield & Onley (2007), Miskelly et al. (2009) & Checklist Committee (OSNZ) (2010) recognized *P. elegans*, but kept the other forms as subspecies.

Christian (2005) recorded two forms of Little Shearwater on Norfolk Island, with the more recent arrival (from the Kermadecs?) being smaller, with a different call and possibly breeding later than *P. (a.) assimilis*. This sympatry would indicate that these two forms at least are good species.

Due to some taxa being described at much later dates than the original records, it is difficult to determine historical first dates. As the small shearwaters observed on Cook's first voyage cannot be confidently identified as Little Shearwaters, then the first record of the complex may be that of the Norfolk Island Little Shearwater in 1838.

Norfolk Island Little Shearwater *Puffinus assimilis assimilis* Gould 1838, Native 1838 Norfolk Island 26/11/1937 Muriwai Beach, Northland

Gould described it in 1838. However Gould thought his birds came from New South Wales. Gray (1862) listed it as coming from Norfolk Island, so it must have been rediscovered there by then. Schodde et al. (1983) thought it was not seen again until 1908, by Bassett-Hull (1910). Bassett-Hull (1910) recorded an egg being given to him by Dr Metcalfe which was taken on 23 July 1892.

W.P. Wardlaw found a specimen beach-washed at Muriwai Beach in November 1937 (Fleming & Serventy 1943). This was placed in the Australian Museum. There have been two subsequent records, also at Muriwai (17/6/1939 & 4/11/1939; both in Auckland Museum). A beach-wrecked shearwater found on Ninety Mile Beach in June 1983 was identified as *P. a. tunneyi* at the National Museum, but apparently later reidentified (as Kermadec Little Shearwater?).

Kermadec Little Shearwater *Puffinus assimilis kermadecensis* Murphy 1927, Endemic 1927 Kermadec Islands

Subsequently. Hartert pointed out about 1915 that this taxon differed from the nominate form, after Mathews had described yet another 'new' taxon *howensis* (Fleming & Serventy 1943). The Kermadec form was not

described until 1927 by Murphy.

Recent work by Austin et al. (2004) shows that this taxon differs from the nominate form by 1.6-1.8%, and may just qualify for specific status. Holdaway et al. (2001) treated it as a good species. In November and December, juveniles are frequently wrecked on the Auckland west coast (Imber 1985).

North Island Little Shearwater *Puffinus assimilis haurakiensis* C.A. Fleming & Serventy 1943, Endemic December 1880 Morotiri (= Big Chicken Island), Hen & Chickens Islands

Oliver stated that Little Shearwaters were found off the Three Kings and Poverty Bay on Cook's first voyage, but these were referred to the notorious *Nectris munda*. Hutton supposedly saw Little Shearwaters off Great Barrier Island in summer 1867/1868, but later referred his *P. assimilis* to *P. gavia* (Finsch 1872). In December 1880 Reischek found this taxon breeding on Morotiri (= Big Chicken Island), one of the Hen & Chickens Islands.

Mathews in 1912 confused matters by assigning this form to *Puffinus gavia*, an entirely different species. He also, on other occasions, united it with *assimilis*. Murphy in 1927 considered that a large "Little Shearwater" existed in New Zealand, but Mathews' efforts had muddled the situation.

Oliver (1930) recognised this taxon as larger than *P. a. assimilis*, but referred it to *P. a. kempi* Mathews 1912, a synonym of *P. elegans*. Finally, Fleming & Serventy (1943) validly described it. This taxon is a large, stout-billed form. Oliver thought it should be merged with *P. a. kermadecensis*, but Holdaway et al. (2001) considered it a full species, based on lice and calls. Austin et al. (2004) showed it diverges from *assimilis* by 2.0-2.7%, and could be considered a good species.