Emendation of the specific name of the frog Neobatrachus sudelli (Lamb, 1911) (Anura: Myobatrachidae).

Memoirs of the Queensland Museum 56(1): 116-117. 2012:- Lamb (1911) described three species of frog, Heleioporus sudelli, Hyla vinosa and Limnodynastes marmoratus. All three species were rapidly synonymised with previously known species (Heleioporus pictus (Peters 1863), Hyla lesueuri Duméril & Bibron, 1841 and Limnodynastes fletcheri Boulenger, 1888, respectively) by Fry (1912). The latter two species have subsequently remained in synonymy. Heleioporus sudelli has had a more tortuous taxonomic history. Loveridge (1935) synonymised both H. sudelli and H. pictus with H. eyrei (Gray 1845), but later in the same account states that pictus is 'a full species'. Parker (1940), without examining the type material, separated the three again, treating H. sudelli as a distinct species, but expressed the opinion that it might be a species of Limnodynastes. Parker also suggested that Heleioporus might be divisible into two genera, with Neobatrachus representing the pictus group. Main (1957) and Main et al. (1958) formalised the latter suggestion, but did not treat sudelli as a distinct species. Similarly, Hosmer (1958) and Moore (1961), based on examination of type specimens in the Queensland Museum and the Australian Museum, continued to treat H. sudelli as a synonym of Neobatrachus pictus. However, Roberts (1978) resurrected Neobatrachus sudelli, based on differences in calls and the morphology of the skin in the groin. Subsequently, Mahony & Robinson (1980) reported that the two species differed karyologically, with N. sudelli being tetraploid and N. pictus diploid. Subsequent work (Mahony & Roberts 1986) determined that N. centralis (Parker 1940), N. kunapalari Mahony & Roberts, 1986 and N. aquilonius Tyler et al., 1981 were also tetraploid. The relationship between these four tetraploid species has been the subject of much recent attention, with analyses of genetics and call structure concluding that N. sudelli, N. centralis and central Australian populations previously ascribed to N. aquilonius belong to a single lineage (Mahony et al. 1996; Roberts 1997a,b; Mable & Roberts 1997). While these studies concurred in suggesting that N. sudelli and N. centralis might be synonymous, they did not formally synonymise the two species; Roberts (1997a) stated 'the status of N. aquilonius and N. centralis as possible synonyms of N. sudelli was not resolved'. However, in the absence of differentiation in call structure, allozymes or mitochondrial DNA sequence data, and with few morphological characters purported to distinguish the two species (Hosmer 1958; Cogger 2000; Anstis 2002), Roberts (2010) formally synonymised N. centralis with N. sudelli, and hence N. sudelli now has a distribution extending into all mainland states and territories.

Despite the previous attention to the species, no author appears to have noticed that Lamb (1911) clearly stated that the species was named after Miss J. Sudell of Warwick, Queensland, the collector of the types. A search of the

online Queensland Births Deaths and Marriages website reveals that only a single person with surname Sudell was born in Queensland between 1870 and 1911: Jane Ann Sudell, born in 1880 at Warwick to Henry Sudell and Emma Jane Lamb, who had married in 1879. Emma Jane Lamb (née Harrison) was the widow of Joseph Spurr Lamb (d. 1878), and the mother of Joseph Lamb (b. 1869), describer of Neobatrachus sudelli. Hence, Jane Ann Sudell was Joseph Lamb's younger half-sister.

As the species was named after a woman, the species name, a noun in the genitive case that is not of Latin origin, must have a feminine termination (Article 31.1.2, ICZN, 2000), and as there is, in the original publication, without recourse to external sources of information, evidence of an inadvertent error in the formation of the species name (Article 32.5.1) I formally emend *Neobatrachus sudelli* to *Neobatrachus sudellae*.

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