

Attn: Laura Boren  
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**Preliminary genetic identification of dolphin recovered dead on Ripiro Beach,  
DOC incident ID: H243/13**

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A dolphin found dead on Ripiro Beach south of Glinks Gully on 13 September 2013 (DOC incident ID: H243/13) was visually identified as either a Hector's or Maui's dolphin female by field staff of the Department of Conservation. A small skin sample was collected from the dolphin and forwarded to the University of Auckland for genetic identification of the subspecies. Previous research has shown that the two subspecies are genetically distinct, differing at both maternally-inherited mitochondrial (mt) DNA haplotypes and at biparentally-inherited microsatellite genotypes, i.e., DNA profiles (Hamner *et al.* 2012, Hamner *et al.* 2013).

Preliminary genetic results are available at this time for sex and microsatellite genotypes, although not for the mtDNA haplotype. The genetic sex of the dolphin was confirmed to be female. The standard subspecies assignment procedure used for this species, based on a reference set of 10 microsatellites (Hamner *et al.* 2012), indicated that it is a Maui's dolphin with high confidence (membership coefficient = 0.979, based on assignment in the program *Structure*, as in Hamner *et al.* 2013). Its genotype does not match to any previously sampled dolphin in our DNA register. Further analyses are underway to sequence the mtDNA haplotype and determine if this dolphin has the single mtDNA haplotype, referred to as 'G', shared by all previous samples of confirmed Maui's dolphins.

**Literature Cited**

- Hamner, R. M., R. Constantine, M. Oremus, M. Stanley, P. Brown and C. S. Baker. 2013. Long-range movement by Hector's dolphins provides potential genetic enhancement for critically endangered Maui's dolphin. *Marine Mammal Science*: DOI: 10.1111/mms.12026.
- Hamner, R. M., F. B. Pichler, D. Heimeier, R. Constantine and C. S. Baker. 2012. Genetic differentiation and limited gene flow among fragmented populations of New Zealand endemic Hector's and Maui's dolphins. *Conservation Genetics* 13: 987-1002.