

Appendix B

Scale Heterogeneity and Its Implications for Discrete Choice Analysis

In this Appendix we provide examples of the choice sets for data set 1 and data set 2.

Data set 1

The choice set used for the discrete choice experiment in empirical examples 1.HCL, 1.CL and 1.SALC regarding preferences for a marine biodiversity offset package is shown below (Figure B1). The survey framing was that a project would take place, and respondents were asked only for their preferences regarding the attributes of the offset package to achieve no-net-loss ecologically (Burton et al. 2017).

Consider the following options. Assuming these are the only options available to you, which one would you choose?

	Option 1	Option 2	Option 3
Species protected	Eastern Curlew	Ruddy Turnstone	Eastern Curlew
Location	Western Australia	China	Northern Territory
Proportion of direct and indirect offset	Indirect: 50%	Indirect: 30%	Indirect: 50%
	Direct: 50%	Direct: 70%	Direct: 50%
	Option 1 <input type="radio"/>	Option 2 <input type="radio"/>	Option 3 <input type="radio"/>

Figure B1. Example discrete choice question from study of marine biodiversity offsets (Burton et al. 2017). Data set 1 is derived from this study.

Data set 2

The choice set used for the discrete choice experiment in empirical examples 2.HCL and 2.HCL-WTP regarding public values for marine ecosystems (Burton et al. 2015) is provided in Figure B2.

Features <u>in the reserve network</u>	Option 1	Option 2
Of 9 bioregions...	4 contain zones with high protection level	4 contain zones with high protection level
Of 14 seafloor types...	7 can be found in zones with high protection level	10 can be found in zones with high protection level
Of 8 important ecological areas...	4 are partly covered by zones with high protection level	6 are partly covered by zones with high protection level
Of 3 important areas for White sharks...	1 is partly covered by a zone with high protection level	1 is partly covered by a zone with high protection level
% of areas less than 1500m depth in protection zones (10% in total)	1% is covered by zones with high protection level	1% is covered by zones with high protection level
Additional cost to you each year, for 10 years	\$0	\$250

Figure B2. Example choice question from a marine ecosystems valuation survey (Burton et al. 2015). Data set 2 is derived from this study.

References

- Burton M, Jennings S, Fragnol et al (2015) The south east commonwealth marine reserves network – public knowledge, perceptions and values survey. Marine Biodiversity NERP Theme 2: supporting management of marine biodiversity. NERP Marine Biodiversity Hub, Australia
- Burton M, Rogers A, Richert C (2017) Community acceptance of biodiversity offsets: Evidence from a choice experiment. *Australian Journal of Agricultural and Resource Economics* 61 (1):95-114