

APPENDIX 1. Location details of shelters. NZTM = New Zealand Transverse Mercator.

Biogeographic zones following Walker et al. (2004b)

Shelter-001 Area: Cromwell Gorge, Sector: Upper Molyneux Face.

Grid Ref: NZTM 1302931 5001726. Year first visited: 1983 (now flooded). Zone I.

Shelter-002 Area: Cromwell Gorge, Sector: Leaning Rock.

Grid Ref: NZTM 1309182 4998391. Year first visited: 1983 (now flooded). Zone I.

Shelter-003 Area: Roxburgh Gorge, Sector: Conroys.

Grid Ref: NZTM 1309173 4978444. Year first visited: 1983. Zone IV.

Shelter-004 Area: Cromwell Gorge, Sector: Gibraltar Rock.

Grid Ref: NZTM 1304080 5001560. Year first visited: 1988. Zone I. Possibly ‘Gibraltar Rock Deposit’ of Wood and Walker (2008).

Shelter-005 Area: Kawarau Gorge, Sector: Kawarau Gorge.

Grid Ref: NZTM 1276223 5007508. Year first visited: 1988. Zone Uncertain.

Shelter-006 Area: Kawarau Gorge, Sector: Kawarau Gorge.

Grid Ref: NZTM 1287447 5002541. Year first visited: 2000. Zone Uncertain.

Shelter-007 Area: Cromwell Gorge, Sector: Firewood Ck.

Grid Ref: NZTM 1302259 5004356. Year first visited: 2000. Zone I.

Shelter-008 Area: Cromwell Gorge, Sector: Firewood Ck.

Grid Ref: NZTM 1302242 5004336. Year first visited: 2000. Zone I.

Shelter-009 Area: Roxburgh Gorge, Sector: Halfmile.

Grid Ref: NZTM 1316515 4980880. Year first visited: 2000. Zone II.

Shelter-010 Area: Roxburgh Gorge, Sector: Davis Bend.

Grid Ref: NZTM 1314782 4976982. Year first visited: 2000. Zone II.

Shelter-011 Area: Roxburgh Gorge, Sector: Halfmile.

Grid Ref: NZTM 1316548 4980911. Year first visited: 2000. Zone II.

Shelter-012 Area: Roxburgh Gorge, Sector: Doctors Point.

Grid Ref: NZTM 1314054 4973989. Year first visited: 2000. Zone III.

Shelter-013 Area: Roxburgh Gorge, Sector: Davis Bend.

Grid Ref: NZTM 1314838 4977132. Year first visited: 2000. Zone II.

Shelter-014 Area: Roxburgh Gorge, Sector: Davis Bend.

Grid Ref: NZTM 1314700 4975440. Year first visited: 2000. Zone III.

Shelter-015 Area: Roxburgh Gorge, Sector: Davis Bend.

Grid Ref: NZTM 1314650 4975330. Year first visited: 2000. Zone III.

Shelter-016 Area: Roxburgh Gorge, Sector: Doctors Point.

Grid Ref: NZTM 1314280 4974510. Year first visited: 2000. Zone III.

Shelter-017 Area: Roxburgh Gorge, Sector: Davis Bend.

Grid Ref: NZTM 1314740 4976660. Year first visited: 2000. Zone II.

Shelter-018 Area: Roxburgh Gorge, Sector: Doctors Point.

Grid Ref: NZTM 1313829 4973829. Year first visited: 2000. Zone III.

Shelter-019 Area: Roxburgh Gorge, Sector: Doctors Point.

Grid Ref: NZTM 1314380 4974740. Year first visited: 2000. Zone III.

Shelter-020 Area: Roxburgh Gorge, Sector: Graveyard Gully.

Grid Ref: NZTM 1317675 4981349. Year first visited: 2000. Zone III.

Shelter-021 Area: Roxburgh Gorge, Sector: Davis Bend.

Grid Ref: NZTM 1314681 4975659. Year first visited: 2000. Zone III.

Shelter-022 Area: Roxburgh Gorge, Sector: Shanty Ck.

Grid Ref: NZTM 1313904 4972266. Year first visited: 2005. Zone III.

Shelter-023 Area: Roxburgh Gorge, Sector: Doctors Point.

Grid Ref: NZTM 1313827 4973278. Year first visited: 2005. Zone III.

Shelter-024 Area: Roxburgh Gorge, Sector: Doctors Point .

Grid Ref: NZTM 1313725 4973127. Year first visited: 2005. Zone III.

Shelter-025 Area: Roxburgh Gorge, Sector: Doctors Point .

Grid Ref: NZTM 1313897 4973667. Year first visited: 2005. Zone III.

Shelter-026 Area: Roxburgh Gorge, Sector: Davis Bend.

Grid Ref: NZTM 1314720 4975530. Year first visited: 2005. Zone III.

Shelter-027 Area: Cromwell Gorge, Sector: Upper Molyneux Face.

Grid Ref: NZTM 1301948 5002004. Year first visited: 2007. Zone I.

Shelter-028 Area: Cromwell Gorge, Sector: Cairnmuir Gully.

Grid Ref: NZTM 1303372 5000963. Year first visited: 2007. Zone I.

Shelter-029 Area: Sector: Cairnmuir Gully.

Grid Ref: NZTM 1303383 5000882. Year first visited: 2007. Zone I.

Shelter-030 Area: Cromwell Gorge, Sector: Cairnmuir Gully.

Grid Ref: NZTM 1303458 5001078. Year first visited: 2007. Zone I.

Shelter-031 Area: Cromwell Gorge, Sector: Cairnmuir Gully.

Grid Ref: NZTM 1303526 5000960. Year first visited: 2007. Zone I.

Shelter-032 Area: Cromwell Gorge, Sector: Cairnmuir Gully.

Grid Ref: NZTM 1303590 5001094. Year first visited: 2007. Zone I.

Shelter-033 Area: Cromwell Gorge, Sector: Cairnmuir Gully.

Grid Ref: NZTM 1303565 5001115. Year first visited: 2007. Zone I.

Shelter-034 Area: Cromwell Gorge, Sector: Upper Molyneux Face.

Grid Ref: NZTM 1301781 5002451. Year first visited: 2007. Zone I.

Shelter-035 Area: Cromwell Gorge, Sector: Upper Molyneux Face.

Grid Ref: NZTM 1301953 5002513. Year first visited: 2007. Zone I.

Shelter-036 Area: Cromwell Gorge, Sector: Upper Molyneux Face.

Grid Ref: NZTM 1301985 5002551. Year first visited: 2007. Zone I.

Shelter-037 Area: Cromwell Gorge, Sector: Upper Molyneux Face.

Grid Ref: NZTM 1301993 5002545. Year first visited: 2007. Zone I.

Shelter-038 Area: Cromwell Gorge, Sector: Cairnmuir Ck.

Grid Ref: NZTM 1303462 5001069. Year first visited: 2007. Zone I.

Shelter-039 Area: Cromwell Gorge, Sector: Firewood Ck.

Grid Ref: NZTM 1302021 5004662. Year first visited: 2013. Zone I. Possibly 'Firewood Creek Rockshelter' of Wood and Walker (2008).

Shelter-040 Area: Cromwell Gorge, Sector: Firewood Ck.

Grid Ref: NZTM 1302339 5004323. Year first visited: 2013. Zone I.

Shelter-041 Area: Cromwell Gorge, Sector: Firewood Ck.

Grid Ref: NZTM 1302333 5004216. Year first visited: 2013. Zone I.

Shelter-042 Area: Cromwell Gorge, Sector: Firewood Ck .

Grid Ref: NZTM 1302129 5004570. Year first visited: 2013. Zone I.

Shelter-043 Area: Cromwell Gorge, Sector: Firewood Ck.

Grid Ref: NZTM 1302126 5004644. Year first visited: 2013. Zone I.

Shelter-044 Area: Cromwell Gorge, Sector: Firewood Ck.

Grid Ref: NZTM 1302123 5004462. Year first visited: 2013. Zone I.

Shelter-045 Area: Cromwell Gorge, Sector: Firewood Ck.

Grid Ref: NZTM 1302149 5004424. Year first visited: 2013. Zone I.

Shelter-046 Area: Cromwell Gorge, Sector: Firewood Ck.

Grid Ref: NZTM 1302197 5004395. Year first visited: 2013. Zone I.

Shelter-047 Area: Cromwell Gorge, Sector: Firewood Ck.

Grid Ref: NZTM 1302158 5004597. Year first visited: 2013. Zone I.

Shelter-048 Area: Cromwell Gorge, Sector: Gibraltar Rock.

Grid Ref: NZTM 1302953 5002095. Year first visited: 2013. Zone I.

Shelter-049 Area: Cromwell Gorge, Sector: Gibraltar Rock.

Grid Ref: NZTM 1302822 5002373. Year first visited: 2013. Zone I.

Shelter-050 Area: Cromwell Gorge, Sector: Firewood Creek.

Grid Ref: NZTM 1302016 5004796. Year first visited: 2013. Zone I.

Shelter-051 Area: Cromwell Gorge, Sector: Upper Molyneux Face.

Grid Ref: NZTM 1301945 5002045. Year first visited: 2013. Zone I.

Shelter-052 Area: Cromwell Gorge, Sector: Upper Molyneux Face.

Grid Ref: NZTM 1301971 5002146. Year first visited: 2013. Zone I.

Shelter-053 Area: Cromwell Gorge, Sector: Upper Molyneux Face.

Grid Ref: NZTM 1302008 5002204. Year first visited: 2013. Zone I.

Shelter-054 Area: Cromwell Gorge, Sector: Upper Molyneux Face.

Grid Ref: NZTM 1301999 5002220. Year first visited: 2013. Zone I.

Shelter-055 Area: Cromwell Gorge, Sector: Upper Molyneux Face.

Grid Ref: NZTM 1301991 5002199. Year first visited: 2013. Zone I.

Shelter-056 Area: Cromwell Gorge, Sector: Upper Molyneux Face.

Grid Ref: NZTM 1302115 5002148. Year first visited: 2013. Zone I.

Shelter-057 Area: Cromwell Gorge, Sector: Upper Molyneux Face.

Grid Ref: NZTM 1302254 5001850. Year first visited: 2013. Zone I.

Shelter-058 Area: Cromwell Gorge, Sector: Upper Molyneux Face.

Grid Ref: NZTM 1302978 5001563. Year first visited: 2013. Zone I.

Shelter-059 Area: Cromwell Gorge, Sector: Upper Molyneux Face.

Grid Ref: NZTM 1302918 5001642. Year first visited: 2013. Zone I.

Shelter-060 Area: Cromwell Gorge, Sector: Upper Molyneux Face.

Grid Ref: NZTM 1302878 5001718. Year first visited: 2013. Zone I.

Shelter-061 Area: Cromwell Gorge, Sector: Upper Molyneux Face.

Grid Ref: NZTM 1302732 5001909. Year first visited: 2013. Zone I.

Shelter-062 Area: Cromwell Gorge, Sector: Upper Molyneux Face.

Grid Ref: NZTM 1302628 5002163. Year first visited: 2013. Zone I.

Shelter-063 Area: Cromwell Gorge, Sector: Upper Molyneux Face.

Grid Ref: NZTM 1302893 5002253. Year first visited: 2013. Zone I.

Shelter-064 Area: Cromwell Gorge, Sector: Upper Molyneux Face.

Grid Ref: NZTM 1302441 5002340. Year first visited: 2013. Zone I.

Shelter-065 Area: Cromwell Gorge, Sector: Upper Molyneux Face.

Grid Ref: NZTM 1302426 5002364. Year first visited: 2013. Zone I.

Shelter-066 Area: Cromwell Gorge, Sector: Upper Molyneux Face.

Grid Ref: NZTM 1301872 5002429. Year first visited: 2013. Zone I.

Shelter-067 Area: Cromwell Gorge, Sector: Upper Molyneux Face.

Grid Ref: NZTM 1301757 5002424. Year first visited: 2013. Zone I.

Shelter-068 Area: Cromwell Gorge, Sector: Upper Molyneux Face.

Grid Ref: NZTM 1301746 5002417. Year first visited: 2013. Zone I.

Shelter-069 Area: Cromwell Gorge, Sector: Cairnmuir Gully.

Grid Ref: NZTM 1303626 5001111. Year first visited: 2014. Zone I. Possibly 'Cairnmuir Gully Rockshelter A' of Wood and Walkter (2008).

Shelter-070 Area: Cromwell Gorge, Sector: Lower Molyneux Face.

Grid Ref: NZTM 1305793 5000185. Year first visited: 2014. Zone I.

Shelter-071 Area: Cromwell Gorge, Sector: Lower Molyneux Face.

Grid Ref: NZTM 1305718 5000240. Year first visited: 2014. Zone I.

Shelter-072 Area: Cromwell Gorge, Sector: Lower Molyneux Face .

Grid Ref: NZTM 1305721 5000248. Year first visited: 2014. Zone I.

Shelter-073 Area: Cromwell Gorge, Sector: Lower Molyneux Face.

Grid Ref: NZTM 1305714 5000242. Year first visited: 2014. Zone I.

Shelter-074 Area: Cromwell Gorge, Sector: Lower Molyneux Face.

Grid Ref: NZTM 1305679 5000346. Year first visited: 2014. Zone I.

Shelter-075 Area: Cromwell Gorge, Sector: Lower Molyneux Face.

Grid Ref: NZTM 1305894 5000437. Year first visited: 2014. Zone I.

Shelter-076 Area: Cromwell Gorge, Sector: Lower Molyneux Face.

Grid Ref: NZTM 1307026 4999212. Year first visited: 2014. Zone I.

Shelter-077 Area: Cromwell Gorge, Sector: Lower Molyneux Face.

Grid Ref: NZTM 1306383 4999171. Year first visited: 2014. Zone I.

Shelter-078 Area: Cromwell Gorge, Sector: Lower Molyneux Face.

Grid Ref: NZTM 1306515 4999549. Year first visited: 2014. Zone I.

Shelter-079 Area: Cromwell Gorge, Sector: Lower Molyneux Face.

Grid Ref: NZTM 1305138 5000709. Year first visited: 2014. Zone I.

Shelter-080 Area: Cromwell Gorge, Sector: Lower Molyneux Face.

Grid Ref: NZTM 1307253 4999078. Year first visited: 2014. Zone I.

Shelter-081 Area: Cromwell Gorge, Sector: Lower Molyneux Face.

Grid Ref: NZTM 1307722 4998677. Year first visited: 2014. Zone I.

Shelter-082 Area: Cromwell Gorge, Sector: Northburn Ck.

Grid Ref: NZTM 1305288 5009225. Year first visited: 2014. Zone I.

Shelter-083 Area: Cromwell Gorge, Sector: Lower Molyneux Face.

Grid Ref: NZTM 1307738 4998684. Year first visited: 2014. Zone I.

Shelter-084 Area: Cromwell Gorge, Sector: Lower Molyneux Face.

Grid Ref: NZTM 1307357 4999207. Year first visited: 2014. Zone I.

Shelter-085 Area: Cromwell Gorge, Sector: Cairnmuir Gully.

Grid Ref: NZTM 1303573 5001549. Year first visited: 2014. Zone I.

Shelter-086 Area: Cromwell Gorge, Sector: Cairnmuir Gully.

Grid Ref: NZTM 1303990 5001280. Year first visited: 2014. Zone I.

Shelter-087 Area: Cromwell Gorge, Sector: Cairnmuir Gully.

Grid Ref: NZTM 1303646 5001285. Year first visited: 2014. Zone I.

Shelter-088 Area: Cromwell Gorge, Sector: Cairnmuir Gully.

Grid Ref: NZTM 1303661 5001231. Year first visited: 2014. Zone I.

Shelter-089 Area: Cromwell Gorge, Sector: Cairnmuir Gully.

Grid Ref: NZTM 1303637 5001216. Year first visited: 2014. Zone I.

Shelter-090 Area: Cromwell Gorge, Sector: Lower Molyneux Face.

Grid Ref: NZTM 1304788 5000730. Year first visited: 2014. Zone I.

Shelter-091 Area: Cromwell Gorge, Sector: Cromwell Bridge.

Grid Ref: NZTM 1302432 5005785. Year first visited: 2014. Zone I.

Shelter-092 Area: Cromwell Gorge, Sector: Gibraltar Rock.

Grid Ref: NZTM 1301778 5003408. Year first visited: 2014. Zone I.

Shelter-093 Area: Roxburgh Gorge, Sector: Halfmile .

Grid Ref: NZTM 1316532 4980901. Year first visited: 2014. Zone III.

Shelter-094 Area: Cromwell Gorge, Sector: Firewood Creek.

Grid Ref: NZTM 1304082 5004122. Year first visited: 2014. Zone I.

Shelter-095 Area: Cromwell Gorge, Sector: John Bull Ck .

Grid Ref: NZTM 1304399 5010637. Year first visited: 2014. Zone I.

Shelter-096 Area: Cromwell Gorge, Sector: John Bull Ck.

Grid Ref: NZTM 1304402 5010561. Year first visited: 2014. Zone I.

Shelter-097 Area: Cromwell Gorge, Sector: John Bull Ck.

Grid Ref: NZTM 1303670 5010250. Year first visited: 2014. Zone I.

Shelter-098 Area: Cromwell Gorge, Sector: Northburn Ck.

Grid Ref: NZTM 1304126 5008868. Year first visited: 2015. Zone I.

Shelter-099 Area: Cromwell Gorge, Sector: Northburn Ck .

Grid Ref: NZTM 1305006 5008343. Year first visited: 2015. Zone I.

Shelter-100 Area: Cromwell Gorge, Sector: Cairnmuir Gully.

Grid Ref: NZTM 1304268 5001187. Year first visited: 2016. Zone I.

Shelter-101 Area: Cromwell Gorge, Sector: Cairnmuir Gully.

Grid Ref: NZTM 1304230 5001191. Year first visited: 2016. Zone I.

Shelter-102 Area: Kawarau Gorge, Sector: Kawarau Gorge.

Grid Ref: NZTM 1294823 5003997. Year first visited: 2017. Zone I. 'Kawarau Gorge Rock Shelter' of Wood and Walker (2008) and the 'Kawarau' sheleter of Wood et al. (2008).

Shelter-103 Area: Kawarau Gorge, Sector: Kawarau Gorge.

Grid Ref: NZTM 1293111 5006400. Year first visited: 2017. Zone I.

Shelter-104 Area: Roxburgh Gorge, Sector: Doctors Point.

Grid Ref: NZTM 1314110 4974272. Year first visited: 2018. Zone I.

Shelter-105 Area: Roxburgh Gorge, Sector: Butchers Point. Probably 'Roxburgh Gorge C' shelter of Wood and Walker (2008).

Grid Ref: NZTM 1315599 4979302. Year first visited: 2018. Zone II.

Shelter-106 Area: Roxburgh Gorge, Sector: Halfmile.

Grid Ref: NZTM 1316443 4980788. Year first visited: 2018. Zone II.

Shelter-107 Area: Roxburgh Gorge, Sector: Halfmile.

Grid Ref: NZTM 1316463 4980808. Year first visited: 2018. Zone II.

Shelter-108 Area: Roxburgh Gorge, Sector: Halfmile.

Grid Ref: NZTM 1316466 4980812. Year first visited: 2018. Zone II.

Shelter-109 Area: Roxburgh Gorge, Sector: Halfmile.

Grid Ref: NZTM 1316561 4980923. Year first visited: 2018. Zone II.

Shelter-110 Area: Cromwell Gorge, Sector: Firewood Ck.

Grid Ref: NZTM 1302040 5004632. Year first visited: 2018. Zone I.

Shelter-111 Area: Cromwell Gorge, Sector: Cairnmuir Gully.

Grid Ref: NZTM 1303592 5001013. Year first visited: 2021. Zone I.

Shelter-112 Area: Cromwell Gorge, Sector: Lower Molyneux Face.

Grid Ref: NZTM 1304483 5001132. Year first visited: 2021. Zone I.

Shelter-113 Area: Cromwell Gorge, Sector: Lower Molyneux Face.

Grid Ref: NZTM 1304511 5001111. Year first visited: 2021. Zone I.

Shelter-114 Area: Cromwell Gorge, Sector: Upper Molyneux Face.

Grid Ref: NZTM 1303313 5001339. Year first visited: 2021. Zone I.

Shelter-115 Area: Cromwell Gorge, Sector: Upper Molyneux Face.

Grid Ref: NZTM 1303440 5001256. Year first visited: 2021. Zone I.