

Supplementary Information Table 1

Reference Number	Citation
1	Campbell, I.B., Claridge, G.G.C. and Balks, M.R., 1994. The effect of human activities on moisture content of soils and underlying permafrost from the McMurdo Sound region, Antarctica. <i>Antarctic Science</i> , 6(3), pp.307-314.
2	Campbell, I., Claridge, G., Campbell, D., & Balks, M. 1998. Permafrost Properties In The Mcmurdo Sound Dry Valley Region Of Antarctica.
3	Klein, A.G., Kennicutt, M., Wolff, G.A., Sweet, S.T., Gielstra, D.A., & Bloxom, T. 2004. Disruption of Sand-Wedge Polygons at McMurdo Station, Antarctica: An Indication of Physical Disturbance. <i>In 61st Eastern Snow Conference</i> . Citeseer.
4	Kiernan, K. and McConnell, A., 2001. Impacts of geoscience research on the physical environment of the Vestfold Hills, Antarctica. <i>Australian Journal of Earth Sciences</i> , 48(5), pp.767-776.
5	Burgess, J., Spate, A., & Norman, F. 1992. Environmental impacts of station development in the Larsemann Hills, Princess Elizabeth Land, Antarctica. <i>Journal of Environmental Management</i> , 36(4), 287-299.
6	Sheppard D.S., Campbell, I.B., Claridge, G.C.C. & Deely J.M. 1994. Contamination of soils about Vanda Station, Antarctica, Institute of Geological and Nuclear Sciences Science Report 94/20. Lower Hutt: IGNS, New Zealand, 140pp.
7	Sheppard, D., Claridge, G., & Campbell, I. 2000. Metal contamination of soils at Scott Base, Antarctica. <i>Applied Geochemistry</i> , 15(4), 513-530.
8	Balks, M.R., Paetzold, R.F., Kimble, J.M., Aislabie, J., & Campbell, I.B. 2002. Effects of hydrocarbon spills on the temperature and moisture regimes of Cryosols in the Ross Sea region. <i>Antarctic Science</i> , 14(4), 319-326.
9	Pertierra, L.R., Lara, F., Tejedo, P., Quesada, A., & Benayas, J. 2013. Rapid denudation processes in cryptogamic communities from Maritime Antarctica subjected to human trampling. <i>Antarctic Science</i> , 25(02), 318-328.
10	Tejedo, P., Benayas, J., Cajiao, D., Albertos, B., Lara, F., Pertierra, L.R., Andres-Abellan, M., Wic, C., Lucianez, M.J., Enriquez, N., Justel, A., & Reck, G.K. 2016. Assessing environmental conditions of Antarctic footpaths to support management decisions. <i>Journal of Environmental Management</i> , 177, 320-330.
11	O'Neill, T.A., Balks, M.R., & López-Martínez, J. 2015. Ross Island recreational walking tracks: relationships between soil physiochemical properties and track usage. <i>Polar Record</i> , 51(04), 444-455.
12	Tejedo, P., Justel, A., Rico, E., Benayas, J., & Quesada, A. 2005. Measuring impacts on soils by human activity in an Antarctic Special Protected Area. <i>Terra Antarctica Reports</i> , 12, 57-62.
13	Campbell, I.B., Claridge, G.G.C. and Balks, M.R., 1998. Short-and long-term impacts of human disturbances on snow-free surfaces in Antarctica. <i>Polar Record</i> , 34(188), pp.15-24.
14	Tejedo, P., Pertierra, L.R., Benayas, J., Convey, P., Justel, A., & Quesada, A. 2012. Trampling on maritime Antarctica: can soil ecosystems be effectively protected through existing codes of conduct? <i>Polar Research</i> , 31(1).
15	Ohtani, S., Suyama, K., Yamamoto, H., Aridomi, Y., Itoh, R., & Fukuoka, Y. 2000. Distribution of soil algae at the monitoring sites in the vicinity of Syowa Station between austral summers of 1992/1993 and 1997/1998. <i>Polar Bioscience</i> , 13, 113-132.
16	Claridge, G., Campbell, I.B., Powell, H., Amin, Z., & Balks, M.R. 1995. Heavy metal contamination in some soils of the McMurdo Sound region, Antarctica. <i>Antarctic Science</i> , 7(01), 9-14.
17	Sheppard, D., Deely, J., & Edgerley, W. 1997. Heavy metal content of meltwaters from the Ross Dependency, Antarctica. <i>New Zealand Journal of Marine and Freshwater Research</i> , 31(3), 313-325.
18	Goldsworthy, P., Canning, E., & Riddle, M. 2003. Soil and water contamination in the Larsemann Hills, East Antarctica. <i>Polar Record</i> , 39(04), 319-337.
19	Tejedo, P., Justel, A., Benayas, J., Rico, E., Convey, P., & Quesada, A. 2009. Soil trampling in an Antarctic Specially Protected Area: tools to assess levels of human impact. <i>Antarctic Science</i> , 21(03), 229-236.
20	Enríquez, N., Tejedo, P., Benayas, J., Albertos, B., & Lucíañez, M.J. 2018. Collembola of Barrientos Island, Antarctica: first census and assessment of environmental factors determining springtail distribution. <i>Polar Biology</i> , 41(4), 713-725.

21	Ayres, E., Nkem, J.N., Wall, D.H., Adams, B.J., Barrett, J.E., Broos, E.J., Parsons, A.N., Powers, L.E., Simmons, B.L. and Virginia, R.A., 2008. Effects of human trampling on populations of soil fauna in the McMurdo Dry Valleys, Antarctica. <i>Conservation Biology</i> , 22(6), pp.1544-1551.
22	Freckman, D.W. and Virginia, R.A., 1997. Low-diversity Antarctic soil nematode communities: distribution and response to disturbance. <i>Ecology</i> , 78(2), pp.363-369.
23	Chong, C.W., Pearce, D.A., Convey, P., Tan, G.A., Wong, R.C., & Tan, I.K. 2010. High levels of spatial heterogeneity in the biodiversity of soil prokaryotes on Signy Island, Antarctica. <i>Soil Biology and Biochemistry</i> , 42(4), 601-610.
24	Chong, C.W., Annie Tan, G.Y., Wong, R.C.S., Riddle, M.J., & Tan, I.K.P. 2009. DGGE fingerprinting of bacteria in soils from eight ecologically different sites around Casey Station, Antarctica. <i>Polar Biology</i> , 32(6), 853-860.
25	O'Neill, T., Balks, M., Stevenson, B., López-Martínez, J., Aislabie, J. and Rhodes, P., 2013. The short-term effects of surface soil disturbance on soil bacterial community structure at an experimental site near Scott Base, Antarctica. <i>Polar biology</i> , 36(7), pp.985-996.
26	Kerry, E. 1990. Microorganisms colonizing plants and soil subjected to different degrees of human activity, including petroleum contamination, in the Vestfold Hills and MacRobertson Land, Antarctica. <i>Polar Biology</i> , 10(6), 423-430.
27	Wilson, K.J., Taylor, R.H., and Barton, K.J (1990). The impact of man on Adelie penguins at Cape Hallett, Antarctica. In: Kerry, K.R., and Hempel, G. (Eds). <i>Antarctic ecosystems: ecological change and conservation</i> . Springer-Verlag.
28	Pertierra, L.R., Lara, F., Benayas, J., Lewis-Smith, R.I., & Hughes, K.A. 2017. Conflicting science requirements impact on rare moss conservation measures. <i>Antarctic Science</i> , 30(01), 13-21.
29	Klein, A.G., Sweet, S.T., Kennicutt II, M.C., Wade, T.L., Palmer, T., & Montagna, P. 2014. Long term monitoring of human impacts to the terrestrial environment at McMurdo station. <i>Antarctic futures: Human engagement with the Antarctic environment</i> . Dordrecht: Springer, 213-227.
30	Azmi, O., & Seppelt, R. 1998. The broad-scale distribution of microfungi in the Windmill Islands region, continental Antarctica. <i>Polar Biology</i> , 19(2), 92-100.
31	Molina-Montenegro, M.A., Carrasco-Urra, F., Acuña-Rodríguez, I., Oses, R., Torres-Díaz, C. and Chwedorzewska, K.J., 2014. Assessing the importance of human activities for the establishment of the invasive <i>Poa annua</i> in Antarctica. <i>Polar Research</i> , 33(1), p.21425.