

2006 LGP-Related Publications

General LGP

Howard-Williams, C. Peterson, D.

Climate change and integrated continent-wide ecosystem studies. Guest Editorial.

Antarctic science 18(4): 461-462, 2006.

doi: 10.1017/S0954102006000496

Howard-Williams, C. Peterson, D. Lyons, W.B. Cattaneo-Vietti, R. Gordon, S.

Measuring ecosystem response in a rapidly changing environment: the Latitudinal Gradient Project.

Antarctic science 18(4): 465-471, 2006.

doi: 10.1017/S0954102006000514

Marine Biology

Cummings, V. Thrush, S. Norkko, A. Andrew, N. Hewitt, J. Funnell, G. Schwarz, A.-M.

Accounting for local scale variability in benthos: implications for future assessments of latitudinal trends in the coastal Ross Sea.

Antarctic science 18(4): 633-644, 2006.

doi: 10.1017/S0954102006000666

De Domenico, F. Chiantore, M. Buongiovanni, S. Ferranti, M.P. Ghione, S. Thrush, S.

Cummings, V. Hewitt, J. Kroeger, K. Cattaneo-Vietti, R.

Latitude versus local effects on echinoderm assemblages along the Victoria Land coast, Ross Sea, Antarctica.

Antarctic science 18(4): 655-662, 2006.

doi: 10.1017/S095410200600068X

Guidetti, M. Marcato, S. Chiantore, M. Patarnello, T. Albertelli, G. Cattaneo-Vietti, R.

Exchange between populations of *Adamussium colbecki* (Mollusca: Bivalvia) in the Ross Sea.

Antarctic science 18(4): 645-653, 2006.

doi: 10.1017/S0954102006000678

Povero, P. Castellano, M. Ruggieri, N. Monticelli, L.S. Saggiomo, V. Chiantore, M. Guidetti,

M. Cattaneo-Vietti, R.

Water column features and their relationship with sediments and benthic communities along the Victoria Land coast, Ross Sea, summer 2004.

Antarctic science 18(4): 603-613, 2006.

doi: 10.1017/S0954102006000642

Ryan, K.G. Hegseth, E.N. Martin, A. Davy, S.K. O'Toole, R. Ralph, P.J. McMinn, A. Thorn,

C.J.

Comparison of the microalgal community within fast ice at two sites along the Ross Sea coast, Antarctica.

Antarctic science 18(4): 583-594, 2006.

doi: 10.1017/S0954102006000629

Schiaparelli, S. Lörz, A.-N. Cattaneo-Vietti, R.
Diversity and distribution of mollusc assemblages on the Victoria Land coast and the Balleny Islands, Ross Sea, Antarctica.
Antarctic science 18(4): 615-631, 2006.
doi: 10.1017/S0954102006000654

Sewell, M.A.
The meroplankton community of the northern Ross Sea: a preliminary comparison with the McMurdo Sound region.
Antarctic science 18(4): 595-602, 2006.
doi: 10.1017/S0954102006000630

Thrush, S. Dayton, P. Cattaneo-Vietti, R. Chiantore, M. Cummings, V. Andrew, N. Hawes, I. Kim, S. Kvitek, R. Schwarz, A.-M.
Broad-scale factors influencing the biodiversity of coastal benthic communities of the Ross Sea.
Deep-sea research II 53: 959-971, 2006.
doi:10.1016/j.dsr2.2006.02.006

Terrestrial Biology

Adams, B.J. Bardgett, R.D. Ayres, E. Wall, D.H. Aislabie, J. Bamforth, S. Bargagli, R. Cary, C. Cavacini, P. Connell, L. et al.
Diversity and distribution of Victoria Land biota.
Soil biology and biochemistry 38(10): 3003-3018, 2006.
doi:10.1016/j.soilbio.2006.04.030

Aislabie, J.M. Broady, P.A. Saul, D.J.
Culturable aerobic heterotrophic bacteria from high altitude, high latitude soil of La Gorce Mountains (8630'S, 147W), Antarctica.
Antarctic science 18(3): 313-321, 2006.
doi:10.1017/S0954102006000368

Aislabie, J.N. Chhour, K.-L. Saul, D.J. Miyauchi, S. Ayton, J. Paetzold, R.F. Balks, M.R.
Dominant bacteria in soils of Marble Point and Wright Valley, Victoria Land, Antarctica.
Soil biology and biochemistry 38(10): 3041-3056, 2006.
doi:10.1016/j.soilbio.2006.02.018

Barrett, J.E. Virginia, R.A. Wall, D.H. Cary, S.C. Adams, B.J. Hacker, A.L. Aislabie, J.M.
Co-variation in soil biodiversity and biogeochemistry in northern and southern Victoria Land, Antarctica.
Antarctic science 18(4): 535-548, 2006.
doi: 10.1017/S0954102006000587

Barrett, J.E. Virginia, R.A. Hopkins, D.W. Aislabie, J. Bargagli, R. Bockheim, J.G. Campbell, I.B. Lyons, W.B. Moorhead, D.L. Nkem, J.N. et al.
Terrestrial ecosystem processes of Victoria Land, Antarctica.
Soil biology and biochemistry 38: 3019-3034, 2006.
doi:10.1016/j.soilbio.2006.04.041

Brabyn, L. Beard, C. Seppelt, R.D. Rudolph, E.D. Türk, R. Green, T.G.A.
Quantified vegetation change over 42 years at Cape Hallett, East Antarctica.
Antarctic science 18(4): 561-572, 2006.
doi: 10.1017/S0954102006000605

Cannone, N.
A network for monitoring terrestrial ecosystems along a latitudinal gradient in Continental Antarctica.
Antarctic science 18(4): 549-560, 2006.
doi: 10.1017/S0954102006000599

Elberling, B. Gregorich, E.G. Hopkins, D.W. Sparrow, A.D. Novis, P. Greenfield, L.G.
Distribution and dynamics of soil organic matter in an Antarctic dry valley.
Soil biology and biochemistry 38: 3095-3106, 2006.
doi:10.1016/j.soilbio.2005.12.011

Gregorich, E.G. Hopkins, D.W. Elberling, B. Sparrow, A.D. Novis, P. Greenfield, L.G. Rochette, P.
Emission of CO₂, CH₄ and N₂O from lakeshore soils in an Antarctic dry valley.
Soil biology and biochemistry 38: 3120-3129, 2006.
doi:10.1016/j.soilbio.2006.01.015

Hogg, I.D. Cary, S.C. Convey, P. Newsham, K.K. O'Donnell, A.G. Adams, B.J. Aislabie, J. Frati, F. Stevens, M.I. Wall, D.H.
Biotic interactions in Antarctic terrestrial ecosystems: Are they a factor?
Soil biology and biochemistry 38(10): 3035-3040, 2006.
doi:10.1016/j.soilbio.2006.04.026

Hofstee, E.H. Balks, M.R. Petchey, F. Campbell, D.I.
Soils of Seabee Hook, Cape Hallett, northern Victoria Land, Antarctica.
Antarctic science 18(4): 473-486, 2006.
doi: 10.1017/S0954102006000526

Hofstee, E.H. Campbell, D.I. Balks, M.R. Aislabie, J.
Groundwater characteristics at Seabee Hook, Cape Hallett, Antarctica.
Antarctic science 18(4): 487-495, 2006.
doi: 10.1017/S0954102006000538

Hopkins, D.W. Sparrow, A.D. Novis, P.M. Gregorich, E.G. Elberling, B. Greenfield, L.G.
Controls on the distribution of productivity and organic resources in Antarctic Dry Valley soils.
Proceedings of The Royal Society 273: 2687-2695, 2006.
doi: 10.1098/rspb.2006.3595

Hopkins, D.W. Sparrow, A.D. Elberling, B. Gregorich, E.G. Novis, P.M. Greenfield, L.G. Tilston, E.L.

Carbon, nitrogen and temperature controls on microbial activity in soils from an Antarctic dry valley.

Soil biology and biochemistry 38: 3130-3140, 2006.

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Nolan, L. Hogg, I.D. Stevens, M.I. Haase, M.

Fine scale distribution of mtDNA haplotypes for the springtail *Gomphiocephalus hodgsoni* (Collembola) corresponds to an ancient shoreline in Taylor Valley, continental Antarctica.

Polar biology 29: 813-819, 2006.

doi 10.1007/s00300-006-0119-4

Novis, P.M. Smissen, R.D.

Two genetic and ecological groups of *Nostoc commune* in Victoria Land, Antarctica, revealed by AFLP analysis.

Antarctic science 18(4): 573-, 2006.

581 doi: 10.1017/S0954102006000617

Panicker, G. Aislabie, J. Bej, A.K.

Analysis of aggregative behavior of *Pseudomonas* sp. 30-3 isolated from Antarctic soil.

Soil biology and biochemistry 38(10): 3152-3157, 2006.

doi:10.1016/j.soilbio.2006.02.006

Pannewitz, S. Green, T.G.A. Schlenzog, M. Seppelt, R.D. Sancho, L.G. Schroeter, B.

Photosynthetic performance of *Xanthoria mawsonii* Dodge in coastal habitats, Ross Sea region, continental Antarctica.

Lichenologist 38: 67-81, 2006.

Sinclair, B.J. Scott, M.B. Klok, C.J. Terblanche, J.S. Marshall, D.J. Reyers, B. Chown, S.L.

Determinants of terrestrial arthropod community composition at Cape Hallett, Antarctica.

Antarctic science 18(3): 303-312, 2006.

doi: 10.1017/S0954102006000356

Sinclair, B.J. Stevens, M.I.

Terrestrial microarthropods of Victoria Land and Queen Maud Mountains, Antarctica: Implications of climate change.

Soil biology and biochemistry 38(10): 3158-3170, 2006.

doi:10.1016/j.soilbio.2005.11.035

Sinclair, B.J. Terblanche, J.S. Scott, M.B. Blatch, G.L. Klok, C.J. Chown, S.L.

Environmental physiology of three species of Collembola at Cape Hallett, North Victoria Land, Antarctica.

Journal of insect physiology 52: 29-50, 2006.

Stevens, M.I. Hogg, I.D.

Contrasting levels of mitochondrial DNA variability between mites (*Penthalodidae*) and springtails (*Hypogastruridae*) from the Trans-Antarctic Mountains suggest long-term effects of glaciation and life history on substitution rates, and speciation processes.

Soil biology and biochemistry 38(10): 3171-3180, 2006.

doi:10.1016/j.soilbio.2006.01.009

Stevens, M.I. Fjellberg, A. Greenslade, P. Hogg, I.D. Sunnucks, P.

Redescription of the Antarctic springtail *Desoria klovstadi* using morphological and molecular evidence.

Polar biology. doi:10.1007/s003000-006-0120-y, 2006.

Brabyn, L., Beard, C., Seppelt, R., Tuerk, R., Green, T.G.A. Submitted. Quantified Long Term Vegetation Change at Cape Hallett, Antarctica. *Ecology*. Submitted.

Geochemistry

Burnett, L., D. Moorhead, I. Hawes and C. Howard-Williams.

Environmental factors associated with deep chlorophyll maxima in dry valley lakes, South Victoria Land, Antarctica.

Arctic, Antarctic and Alpine Research 38:179-189, 2006.

Healy, M. Webster-Brown, J.G. Brown, K.L. Lane, V.

Chemistry and stratification of Antarctic meltwater ponds II: Inland ponds in the McMurdo Dry Valleys, Victoria Land.

Antarctic science 18(4): 525-533, 2006.

doi: 10.1017/S0954102006000575

Wait, B.R. Webster-Brown, J.G. Brown, K.L. Healy, M. Hawes, I.

Chemistry and stratification of Antarctic meltwater ponds I: Coastal ponds near Bratina Island, McMurdo Ice Shelf.

Antarctic science 18(4): 515-524, 2006.

doi: 10.1017/S0954102006000563

Witherow, R. Lyons, W.B. Bertler, N.A.N. Welch, K.A. Mayewski, P.A. Sneed, S.B. Nylén, T. Handley, M.J. Fountain, A.

The aeolian flux of calcium, chloride and nitrate to the McMurdo Dry Valleys landscape: evidence from snow pit analysis.

Antarctic science 18(4): 497-505, 2006.

doi: 10.1017/S095410200600054X

Soils and Geomorphology:

Elliott, C.

Rock weathering along the Victoria Land coast, Antarctica.

Ph.D., University of Canterbury, 2006.

Hofstee, E.H. [Recipient of LGP Postgraduate Scholarship 04/05]
Soils and hydrology of Seabee Hook, Cape Hallett, Antarctica.
M.Sc., University of Waikato, 2006.

Palaeoclimate

Bertler, N.A.N. Naish, T.R. Mayewski, P.A. Barrett, P.J.
Opposing oceanic and atmospheric ENSO influences on the Ross Sea Region, Antarctica.
Advances in geosciences 6: 83-86, 2006.

Bertler, N.A.N. Naish, T.R. Oerter, H. Kipfstuhl, S. Barrett, P.J. Mayewski, P.A. Kreutz, K.
The effects of joint ENSO Antarctic Oscillation forcing on the McMurdo Dry Valleys, Antarctica.
Antarctic science 18(4): 507-514, 2006.
doi: 10.1017/S0954102006000551