

British Antarctic Survey publications 2009

Publications are listed by programme

** = NERC employees who are not BAS staff

++ = collaborators in UK universities

%% = collaborators in the UK non-university public sector

= overseas collaborators

\$\$ = commercial sector collaborators

Q4 PROGRAMMES: GLOBAL SCIENCE IN THE ANTARCTIC CONTEXT

GEACEP: Greenhouse to Icehouse. Evolution of the Antarctic Cryosphere and Palaeoenvironment

Refereed research papers 2009 listed in ISI database

BARKER, S.++, DIZ, P.++, VAUTRAVERS, M.J., PIKE, J.++, KNORR, G.++, HALL, I.R.++, BROECKER, W.S.## 2009. Interhemispheric Atlantic seesaw response during the last deglaciation. *Nature*, **457**, No. 7233, 1097-1102

BONHAM, S.G.++, HAYWOOD, A.M.++, LUNT, D.J., COLLINS, M.%, SALZMANN, U. 2009. El Niño-Southern Oscillation, Pliocene climate and equifinality. *Philosophical Transactions of the Royal Society of London, Series A*, **367**, No. 1886, 127-156

FERRACCIOLI, F., ARMADILLO, E.##, JORDAN, T.A., BOZZO, E.##, CORR, H.F.J. 2009. Aeromagnetic exploration over the East Antarctic Ice Sheet: a new view of the Wilkes Subglacial Basin. *Tectonophysics*, **478**, No. 1-2, 62-77

FERRACCIOLI, F., ARMADILLO, E.##, ZUNINO, A.##, BOZZO, E.##, ROCCHI, S.##, ARMIENTI, P.## 2009. Magmatic and tectonic patterns over the Northern Victoria Land sector of the Transantarctic Mountains from new aeromagnetic imaging. *Tectonophysics*, **478**, No. 1-2, 43-61

HAYWOOD, A.M.++, CHANDLER, M.A.##, VALDES, P.J.++, SALZMANN, U., LUNT, D.J., DOWSETT, H.J.## 2009. Comparison of mid-Pliocene climate predictions produced by the HadAM3 and GCMAM3 General Circulation Models. *Global and Planetary Change*, **66**, 208-224. <http://dx.doi.org/10.1016/j.gloplacha.2008.12.014>

JORDAN, T.A., FERRACCIOLI, F., JONES, P.C., SMELLIE, J.L., GHIDELLA, M.E.##, CORR, H.F.J. 2009. Airborne gravity reveals interior of Antarctic volcano. *Physics of the Earth and Planetary Interiors*, **175**, Issues 3-4, 127-136

KENDER, S.**, PECK, V.L., JONES, R.W.\$\$, KAMINSKI, M.A.++ 2009. Middle Miocene oxygen minimum zone expansion offshore West Africa: evidence for global cooling precursor events. *Geology*, **37**, No. 8, 699-702

LUNT, D.J., HAYWOOD, A.M.++, FOSTER, G.L.++, STONE, E.J.++ 2009. The Arctic cryosphere in the Mid-Pliocene and the future. *Philosophical Transactions of the Royal Society of London, Series A*, **367**, No. 1886, 49-67

NELSON, A.E., **SMELLIE, J.L.**, HAMBREY, M.J.++, WILLIAMS, M.**,
VAUTRAVERS, M.J., **SALZMANN, U.**, McARTHUR, J.M.++, REGELOUS, M.++
2009. Neogene glacial debris flows on James Ross Island, northern Antarctic Peninsula, and their implications for regional climate history. *Quaternary Science Reviews*, **28**, No. 27-28, 3138-3160

SALZMANN, U., HAYWOOD, A.M.++, **LUNT, D.J.** 2009. The past is a guide to the future? Comparing Middle Pliocene vegetation with predicted biome distributions for the 21st century. *Philosophical Transactions of the Royal Society of London, Series A*, **367**, No. 1886, 189-204

SCHUMANN, G.++, **LUNT, D.J.**, VALDES, P.J.++, de JEU, R.A.M.##, SCIPAL, K.##,
BATES, P.D.++ 2009. Assessment of soil moisture fields from imperfect climate models with uncertain satellite observations. *Hydrology and Earth System Sciences*, **13**, Number 9, 1545-1553

SMELLIE, J.L., **HAYWOOD, A.M.**, **HILLENBRAND, C.-D.**, **LUNT, D.J.**, VALDES, P.J.++ 2009. Nature of the Antarctic Peninsula Ice Sheet during the Pliocene: geological evidence and modelling results compared. *Earth-Science Reviews*, **94**, Issues 1-4, 79-94

STEVENSON, J.A.++, **SMELLIE, J.L.**, McGARVIE, D.W.++, GILBERT, J.S.++,
CAMERON, B.I.## 2009. Subglacial intermediate volcanism at Kerlingarfjöll, Iceland: Magma-water interactions beneath thick ice. *Journal of Volcanology and Geothermal Research*; **185**, No.4; 337-351

Book chapters

HAYWOOD, A.M.++, **SMELLIE, J.L.**, ASHWORTH, A.C.##, CANTRILL, D.J.##,
FLORINDO, F.##, HAMBREY, M.J.++, **HILL, D.**, **HILLENBRAND, C.-D.**, **HUNTER, S.J.**, **LARTER, R.D.**, LEAR, C.H.++, PASSCHIER, S.##, VAN DE WAL, R.S.W.## 2009. Middle Miocene to Pliocene history of Antarctica and the Southern Ocean. In: FLORINDO, F., SIEGERT, M.J. (eds.). *Antarctic climate evolution*. Amsterdam, Elsevier. 401-463. (Developments in earth & environmental sciences; 8)

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BENTLEY, M.J.++, HODGSON, D.A., SMITH, J.A., Ó COFAIGH, C.++, DOMACK, E.W.##, LARTER, R.D., ROBERTS, S.J., BRACHFELD, S.##, LEVENTER, A.##, HJORT, C.##, HILLENBRAND, C.-D., EVANS, J.++ 2009. Mechanisms of Holocene palaeoenvironmental change in the Antarctic Peninsula region. *Holocene*, **19**, No. 1, 51-69

BURKHART, J.F.##, BALES, R.C.##, McCONNELL, J.R.##, HUTTERLI, M.A., FREY, M.M. 2009. Geographic variability of nitrate deposition and preservation over the Greenland Ice Sheet. *Journal of Geophysical Research*, **114**, No. D6, D06301, doi:10.1029/2008JD010600, 15p

JONES, P.D.++, BRIFFA, K.R.++, OSBORN, T.J.++, LOUGH, J.M.##, van OMMEN, T.D.##, VINTHER, B.M.##, LUTERBACHER, J.##, WAHL, E.R.##, ZWIERS, F.W.##, MANN, M.E.##, SCHMIDT, G.A.##, AMMANN, C.M.##, BUCKLEY, B.M.##, COBB, K.M.##, ESPER, J.##, GOOSSE, H.##, GRAHAM, N.##, JANSEN, E.##, KIEFER, T.##, KULL, C.##, KÜTTEL, M.##, MOSLEY-THOMPSON, E.##, OVERPECK, J.T.##, RIEDWYL, N.##, SCHULZ, M.##, TUDHOPE, A.W.++, VILLALBA, R.##, WANNER, H.##, WOLFF, E.W., XOPLAKI, E.##. 2009. High-resolution paleoclimatology of the last millennium: a review of current status and future prospects. *Holocene*, **19**, No. 1, 3-49

MUDELSEE, M., SCHOLZ, D.##, RÖTHLISBERGER, R., FLEITMANN, D.##, MANGINI, A.##, WOLFF, E.W. 2009. Climate spectrum estimation in the presence of timescale errors. *Nonlinear Processes in Geophysics*, **16**, No. 1, 43-56

SAUNDERS, K.M.##, HODGSON, D.A., MCMINN, A.## 2009. Quantitative relationships between benthic diatom assemblages and water chemistry in Macquarie Island lakes and their potential to reconstruct past environmental changes. *Antarctic Science*, **21**, No. 1, 35-49

SUGDEN, D.E.++, McCULLOCH, R.D.++, BORY, A.J.-M., HEIN, A.S.++ 2009. Influence of Patagonian glaciers on Antarctic dust deposition during the last glacial period. *Nature Geoscience*, **2**, No. 4, 281-285

THOMAS, E.R., WOLFF, E.W., MULVANEY, R., JOHNSEN, S.J.##, STEFFENSEN, J.P.##, ARROWSMITH, C.** 2009. Anatomy of a Dansgaard-Oeschger warming transition: high-resolution analysis of the North Greenland Ice Core Project ice core. *Journal of Geophysical Research*, **114**, No. D8, D08102, doi:10.1029/2008JD011215, 9p

TINDALL, J.C.++, VALDES, P.J.++, SIME, L.C. 2009. Stable water isotopes in HadCM3: isotopic signature of El Niño-Southern Oscillation and the tropical amount effect. *Journal of Geophysical Research*, **114**, No. D4, D04111, doi:10.1029/2008JD010825, 12p

WOLFF, E.W., FISCHER, H.##, RÖTHLISBERGER, R. 2009. Glacial terminations as southern warmings without northern control. *Nature Geoscience*, **2**, No. 3, 206-209

Book chapters

MILLER, G. H.##, BRIGHAM-GETTE, J.##, ANDERSON, J.##, BAUCH, H.##, DOUGLAS, M. A.##, EDWARDS, M. E.##, ELIAS, S.##, FINNEY, B.##, FUNDER, S.##, HERBERT, T.##, HINZMAN, L.##, KAUFMAN, D.##, MACDONALD, G. J.##, ROBOCK, A.##, SERREZE, M.##, SMOL, J.## SPIELHAGEN, R.##, WOLFE, A. P.##, **WOLFF, E.W.** 2009. Temperature and precipitation history of the Arctic. In: ALLEY, R. B., BRIGHAM-GRETTE, J., MILLER, G., POLYAK, L. AND WHITE, J. W. C. (eds.). *Past climate variability and change in the Arctic and at high latitudes*. USGS, Washington DC, 31-90.

NAISH, T.##, CARTER, L.##, **WOLFF, E.W.**, POLLARD, D.##, POWELL, R.## 2009. Late Pliocene-Pleistocene Antarctic climate variability at orbital and suborbital scale: ice sheet, ocean and atmospheric interactions. In: FLORINDO, F., SIEGERT, M.J. (eds.). *Antarctic climate evolution*. Amsterdam , Elsevier, 465-529. (Developments in earth & environmental sciences; 8)

POLYAK, L.##, ANDREWS, J.##, BRIGHAM-GRETTE, J.##, DARBY, D.##, DYKE, A.##, FUNDER, S.##, HOLLAND, M.##, JENNINGS, A.##, SVELLE, J.##, SERREZE, M.##, **WOLFF, E.W.** 2009. History of sea ice in the Arctic. In: ALLEY, R. B., BRIGHAM-GRETTE, J., MILLER, G., POLYAK, L. AND WHITE, J. W. C. (eds.). *Past climate variability and change in the Arctic and at high latitudes*. USGS, Washington DC, 159-184.

Unrefereed publications

BARBANTE, C.##, FISCHER, H.##, MASSON-DELMOTTE, V.##, STOCKER, T.##, WAELBROECK, C.##, **WOLFF, E.W.** 2009. Toward a better understanding of climate of the last million years. *EOS Transactions*, **90**, No. 7, 55p.

BENTLEY, M.J.++, **HODGSON, D.A.** 2009. Antarctic ice sheet and climate history since the Last Glacial Maximum. *PAGES News*, **17**, No. 1, 28-29

RÖTHLISBERGER, R., ABRAM, N.J. 2009. Sea-ice proxies in Antarctic ice cores. *PAGES News*, **17**, No. 1, 24-26

GRADES: Glacial Retreat in Antarctica and Deglaciation of the Earth System

Refereed research papers 2009 listed in ISI database

BINGHAM, R.G., SIEGERT, M.J.++ 2009. Quantifying subglacial bed roughness in Antarctica: implications for ice-sheet dynamics and history. *Quaternary Science Reviews*, **28**, No. 3-4, 223-236

EAGLES, G.++, GOHL, K.##, **LARTER, R.D.** 2009. Animated tectonic reconstruction of the Southern Pacific and alkaline volcanism at its convergent margins since Eocene times. *Tectonophysics*, **464**, No. 1-4, 21-29

GRAHAM, A.G.C., LARTER, R.D., GOHL, K.##, HILLENBRAND, C.-D., SMITH, J.A., KUHN, G.## 2009. Bedform signature of a West Antarctic palaeo-ice stream reveals a

multi-temporal record of flow and substrate control. *Quaternary Science Reviews*, **28**, No. 25-26, 2774-2793

HILLENBRAND, C.-D., EHRMANN, W.##, **LARTER, R.D.**, **BENETTI, S.**, DOWDESWELL, J.A.++, Ó COFAIGH, C.++, **GRAHAM, A.G.C.**, GROBE, H.## 2009. Clay mineral provenance of sediments in the southern Bellingshausen Sea reveals drainage changes of the West Antarctic ice sheet during the Late Quaternary. *Marine Geology*, **265**, No. 1-2, 1-18

HILLENBRAND, C.-D., KUHN, G.##, FREDERICHS, T.## 2009 . Record of a Mid-Pleistocene depositional anomaly in West Antarctic continental margin sediments: an indicator for ice-sheet collapse? *Quaternary Science Reviews*, **28**, No. 13-14, 1147-1159

HINDMARSH, R.C.A. 2009. Consistent generation of ice-streams via thermo-viscous instabilities modulated by membrane stresses. *Geophysical Research Letters*, **36**, No. 6, L06502, doi:10.1029/2008GL036877, 6p

JOHNSON, J.S., **SMELLIE, J.L.**, **NELSON, A.E.**, STUART, F.M.++ 2009. History of the Antarctic Peninsula Ice Sheet since the early Pliocene – Evidence from cosmogenic dating of Pliocene lavas on James Ross Island, Antarctica. *Global and Planetary Change*, **69**, No. 4, 205-213.

KING, E.C., **HINDMARSH, R.C.A.**, STOKES, C.R.++ 2009. Formation of mega-scale glacial lineations observed beneath a West Antarctic ice stream. *Nature Geoscience*, **2**, No. 8, 585 - 588

LARTER, R.D., **GRAHAM, A.G.C.**, GOHL, K.##, KUHN, G.##, **HILLENBRAND, C.-D.**, SMITH, J.A., DEEN, T.J., LIVERMORE, R.A., SCHENKE, H.W.## 2009. Subglacial bedforms reveal complex basal regime in a zone of paleo-ice stream convergence, Amundsen Sea Embayment, West Antarctica. *Geology*, **37**, No. 5, 411-414

MARTIN, C., GUDMUNDSSON, G.H., PRITCHARD, H.D., GAGLIARDINI, O.## 2009. On the effects of anisotropic rheology on ice flow, internal structure, and the age-depth relationship at ice divides. *Journal of Geophysical Research*, **114**, No. A4, F04001, doi:10.1029/2008JF001204, 18p

MARTIN, C., **HINDMARSH, R.C.A.**, NAVARRO, F.J.## 2009. On the effects of divide migration, along-ridge flow and basal sliding on isochrones near an ice divide. *Journal of Geophysical Research*, **114**, No. F2, F02006, doi:10.1029/JF001025, 17p

PRITCHARD, H.D., ARTHERN, R.J., VAUGHAN, D.G., EDWARDS, L.A.++ 2009. Extensive dynamic thinning on the margins of the Greenland and Antarctic ice sheets. *Nature*, Online Articles, doi:10.1038/nature08471

PUGH, R.S., McCABE, I.N.++, **HILLENBRAND, C.-D.**, KUHN, G.## 2009. Circum-Antarctic age modelling of Quaternary marine cores under the Antarctic Circumpolar Current: ice-core dust-magnetic correlation. *Earth and Planetary Science Letters*, **284**, No. 1-2, 113-123

REINARDY, B.T.I.++, **PUDSEY, C.J., HILLENBRAND, C.-D.**, MURRAY, T.++, EVANS, J.++ 2009. Contrasting sources for glacial and interglacial shelf sediments used to interpret changing ice flow directions in the Larsen Basin, northern Antarctic Peninsula. *Marine Geology*, **266**, No. 1-4, 156-171

SMITH, A.M., MURRAY, T.++ 2009. Bedform topography and basal conditions beneath a fast-flowing West Antarctic ice stream. *Quaternary Science Reviews*, **28**, No. 7-8, 584-596

SMITH, J.A., HILLENBRAND, C.-D., LARTER, R.D., GRAHAM, A.G.C., KUHN, G.## 2009. Sediment infill of subglacial meltwater channels on the West Antarctic continental shelf. *Quaternary Research*, **71**, No. 2, 190-200

WEIGELT, E.##, GOHL, K.##, UENZELMANN-NEBEN, G.##, **LARTER, R.D.** 2009. Late Cenozoic ice sheet cyclicity in the western Amundsen Sea Embayment - evidence from seismic records. *Global and Planetary Change*, **69**, No. 3, 162-169

Book chapters

COOPER, A.K.##, BRANCOLINI, G.##, ESCUTIA, C.##, KRISTOFFERSEN, Y.##, **LARTER, R.D.**, LEITCHENKOV, G.##, O'BRIEN, P.E.##, JOKAT, W.## 2009. Cenozoic climate history from seismic reflection and drilling studies on the Antarctic continental margin. In: FLORINDO, F., SIEGERT, M.J. (eds.). *Antarctic climate evolution*. Amsterdam, Elsevier. 115-228 + 6 foldouts. (Developments in earth & environmental sciences; 8).

BIOFLAME: Biodiversity, Functions, Limits and Adaptation from Molecules to Ecosystems

Refereed research papers 2009 listed in ISI database

BARNES, D.K.A., GALGANI, F.##, THOMPSON, R.++, BARLAZ, M.## 2009. Accumulation and fragmentation of plastic debris in global environments. *Philosophical Transactions of the Royal Society of London, Series B*, **364**, 1985-1998

BARNES, D.K.A., KAISER, S., GRIFFITHS, H.J., LINSE, K. 2009. Marine, intertidal, freshwater and terrestrial biodiversity of an isolated polar archipelago. *Journal of Biogeography*, **36**, No. 4, 756-769

BRANDT, A.##, **LINSE, K.**, SCHÜLLER, M.## 2009. Bathymetric distribution patterns of Southern Ocean macrofaunal taxa: Bivalvia, Gastropoda, Isopoda and Polychaeta. *Deep-Sea Research Part I*, **56**, No. 11-12, 2013-2025

CAMPBELL, H.++, DAVISON, W.##, **FRASER, K.P.P., PECK, L.S.**, EGGINTON, S.++ 2009. Heart rate and ventilation in Antarctic fishes are largely determined by ecotype. *Journal of Fish Biology*, **74**, No. 3, 535-552

CHONG, C.W.##, **DUNN, M.J., CONVEY, P.**, TAN, G.Y.A.##, WONG, R.C.S.##, TAN, I.K.P.## 2009. Environmental influences on bacterial diversity of soils on Signy Island, maritime Antarctic. *Polar Biology*, **32**, No. 11, 1571-1582

- CLARK, M.S., PECK, L.S.** 2009. Triggers of the HSP70 stress response: environmental responses and laboratory manipulation in an Antarctic marine invertebrate (*Nacella concinna*). *Cell Stress and Chaperones*, **13**, Online doi:10.1007/s12192-009-0117-x, 12p
- CLARK, M.S., THORNE, M.A.S., PURAĆ, J., BURNS, G., HILLYARD, G., POPOVIĆ, Ž.##, GRUBOR-LAJŠIĆ, G.##, WORLAND, M.R.** 2009. Surviving the cold: molecular analyses of insect cryoprotective dehydration in the Arctic springtail *Megaphorura arctica* (Tullberg). *BMC Genomics*, **10** Article 328, doi:10.1186/1471-2164/10/328, 19p
- CLARKE, A., GRIFFITHS, H.J., BARNES, D.K.A., MEREDITH, M.P., GRANT, S.M.** 2009. Spatial variation in seabed temperatures in the Southern Ocean: implications for benthic ecology and biogeography. *Journal of Geophysical Research*, **114**, No. G3, G03003, 10.1029/2008JG000886, 11p
- CONVEY, P., STEVENS, M.I.##, HODGSON, D.A., SMELLIE, J.L., HILLENBRAND, C.-D., BARNES, D.K.A., CLARKE, A., PUGH, P.J.A.++, LINSE, K., CARY, S.C.##** 2009. Exploring biological constraints on the glacial history of Antarctica. *Quaternary Science Reviews*, **28**, No. 27-28, 3035-3048
- DENEKAMP, N.Y.##, THORNE, M.A.S., CLARK, M.S., KUBE, M.##, REINHARDT, R.##, LUBZENS, E.##** 2009. Discovering genes associated with dormancy in the monogonont rotifer *Brachionus plicatilis*. *BMC Genomics*, **10**, Article 108, doi:10.1186/1471-2164/10/108, 17p
- GRANT, R.A.++, LINSE, K.** 2009. Barcoding Antarctic biodiversity: current status and the CAML initiative, a case study of marine invertebrates. *Polar Biology*, **32**, No. 11, 1629-1637
- GRIFFITHS, H.J., BARNES, D.K.A., LINSE, K.** 2009. Towards a generalized biogeography of the Southern Ocean benthos. *Journal of Biogeography*, **36**, No. 1, 162-177
- HARPER, E.M.++, PECK, L.S., HENDRY, K.R.++** 2009. Patterns of shell repair in articulate brachiopods indicate size constitutes a refuge from predation. *Marine Biology*, **156**, No. 10 1993-2000
- KAISER, S., BARNES, D.K.A., SANDS, C.J., BRANDT, A.##** 2009. Biodiversity of an unknown Antarctic Sea: assessing isopod richness and abundance in the first benthic survey of the Amundsen continental shelf. *Marine Biodiversity*, **39**, No. 1, 27-43
- KUKLINSKI, P.##, BARNES, D.K.A.** 2009. A new genus and three new species of Antarctic cheilostome Bryozoa. *Polar Biology*, **32**, No. 9, 1251-1259
- McGAUGHRAN, A.##, REDDING, G.P.##, STEVENS, M.I.##, CONVEY, P.** 2009. Temporal metabolic rate variation in a continental Antarctic springtail. *Journal of Insect Physiology*, **55**, No. 2, 130-135.
- MORLEY, S.A., HIRSE, T.##, PÖRTNER, H.O.##, PECK, L.S.** 2009. Geographical variation in thermal tolerance within Southern Ocean marine ectotherms. *Comparative Biochemistry and Physiology*, **153**, 154-161

MORLEY, S.A., TAN, K.S.##, DAY, R.W.##, MARTIN, S.M.\$\$, PÖRTNER, H-O.##, **PECK, L.S.** 2009. Thermal dependency of burrowing in three species within the bivalve genus *Laternula*: a latitudinal comparison. *Marine Biology*, **156**, No. 10 1977-1984.

MORLEY, S.A., LURMAN, G.L.##, SKEPPER, J.N.++, PÖRTNER, H.O.##, **PECK, L.S.** 2009. Thermal plasticity of mitochondria: a latitudinal comparison between Southern Ocean molluscs. *Comparative Biochemistry and Physiology*, **152A**, No. 3, 423-430

NEWMAN, L.##, CONVEY, P., GIBSON, J.A.E.##, LINSE, K. 2009. Antarctic paleobiology: glacial refugia and constraints on past ice-sheet reconstructions. *PAGES News*, **17**, No. 1, 22-24

PARNIKOZA, I.##, CONVEY, P., DYKYY, I.##, TROKHYMETS, V.##, MILINEVSKY, G.##, TYSCHENKO, O.##, INOZEMTSEVA, D.##, KOZERETSKA, I.## 2009. Current status of the Antarctic herb tundra formation in the central Argentine Islands. *Global Change Biology*, **15**, No. 7, 1685-1693

PECK, L.S., CLARK, M.S., MORLEY, S., MASSEY, A., ROSSETTI, H. 2009. Animal temperature limits and ecological relevance: effects of size, activity and rates of change. *Functional Ecology*, **23**, No. 2, 248-256

PECK, L.S., MASSEY, A., THORNE, M., CLARK, M.S. 2009. Lack of acclimation in *Ophionotus victoriae*: brittle stars are not fish. *Polar Biology*, **32**, No. 3, 399-402

SUTHERLAND, W.J.++ ; ADAMS, W.M.++ ; ARONSON, R.B.## ; AVELING, R.\$\$; BLACKBURN, T.M.\$\$; BROAD, S.\$\$; CEBALLOS, G.## ; CÔTÉ, I.M.## ; COWLING, R.M.## ; DA FONSECA, G.A.B.## ; DINERSTEIN, E.## ; FERRARO, P.J.## ; FLEISHMAN, E.## ; GASCON, C.## ; HUNTER, M.## ; HUTTON, J.%% ; KAREIVA, P.## ; KURIA, A.## ; MACDONALD, D.W.++ ; MACKINNON, K.## ; MADGWICK, F.J.## ; MASCIA, M.B.## ; McNEELY, J.## ; MILNER-GULLAND, E.J.++ ; MOON, S.++ ; MORLEY, C.G.## ; NELSON, S.%% ; OSBORN, D.** ; PAI, M.## ; PARSONS, E.C.M.## ; **PECK, L.S.** ; POSSINGHAM, H.## ; PRIOR, S.V.++ ; PULLIN, A.S.++ ; RANDE, M.R.W.\$\$; RANGANATHAN, J.## ; REDFORD, K.H.## ; RODRIGUEZ, J.P.## ; SEYMOUR, F.## ; SOBEL, J.## ; SODHI, N.S.## ; STOTT, A.%% ; VANCE-BORLAND, K.## ; WATKINSON, A.R.++ 2009. One hundred questions of importance to the conservation of global biological diversity. *Conservation Biology*; **23**, No. 3; 557-567

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. *Antarctic Science*; **21**, No. 3; 229-236

TIN, T.##, FLEMING, Z.L.++, **HUGHES, K.A.**, AINLEY, D.G.##, CONVEY, P., MORENO, C.A.##, PFEIFFER, S.##, SCOTT, J.##, SNAPE, I.## 2009. Impacts of local human activities on the Antarctic environment. *Antarctic Science*, **21**, No. 1, 3-33

WEBB, K.E.##, BARNES, D.K.A., GRAY, J.S.## 2009. Benthic ecology of pockmarks in the Inner Oslofjord, Norway. *Marine Ecology Progress Series*, **387**, 15-25

WEBB, K.E.##, **BARNES, D.K.A.**, PLANKE, S.## 2009. Pockmarks: refuges for marine benthic biodiversity? *Limnology and Oceanography*, **54**, No. 5, 1776-1788

YERGEAU, E.##, SCHOONDEMARK-STOLK, S.A.##, BRODIE, E.L.##, DÉJEAN, S.##, DeSANTIS, T.Z.##, GONÇALVES, O.##, PICENO, Y.M.##, ANDERSEN, G.L.##, KOWALCHUK, G.A.## 2009. Environmental microarray analyses of Antarctic soil microbial communities. *ISME Journal*, **3**, No. 3, 340-351

Refereed research papers 2009 NOT listed in ISI database

CLARK, M.S., PECK, L.S. 2009. HSP70 heat shock proteins and environmental stress in Antarctic marine organisms: A mini-review. *Marine Genomics*, **2**, No. 1, 11-18

LÖRZ, A.-N.##, MAAS, E.W.##, **LINSE, K.**, COLEMAN, C.O.## 2009. Do circum-Antarctic species exist in peracarid Amphipoda: a case study in the genus *Epimeria* Costa, 1851 (*Crustacea, Peracarida, Epimeriidae*). *ZooKeys*, **18**, Special Issue doi: 10.3897/zookeys.18.103, 37p

Unrefereed publications

DANIS, B.##, **GRIFFITHS, H.J.** 2009. Polar science: bid for freely accessible biodiversity archive. *Nature*, **458**, No. 7240, 830.

DISCOVERY 2010: Integrating Southern Ocean Ecosystems into the Earth System

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PSPE - Oceans

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