

- Amos, C.L., Feeney, T., Sutherland, T.F. & Luternauer, J.L. (1997) The stability of fine-grained sediments from the Fraser River delta. *Est Coast Shelf Sci* **45**: 507- 524.
- Amos, C.L., Grant, J., Daborn, G.R. & Black, K.S. (1992) Sea Carousel - a benthic annular flume. *Est Coast Shelf Sci* **34**: 557-577.
- Amos, C.L., Sutherland, T.F., Cloutier, D. & Patterson, S. (2000) Corrosion of a remoulded cohesive bed by saltating littorinid shells. *Cont Shelf Res* **20**: 1291- 1315.
- Andersen, T.J. (2001) Seasonal variation in erodibility of two temperate, microtidal mudflats. *Est Coast Shelf Sci* **53**: 1-12.
- Austin, I., Andersen, T.J. & Edelvang, K. (1999) The influence of benthic diatoms and invertebrates on the erodibility of an intertidal mudflat. *Est Coast Shelf Sci* **49**: 99-111.
- Bale, A.J., Uncles, R.J., Widdows, J., Brinsley, M.D. & Barrett, C.D. (2002) Direct observation of the formation and break-up of aggregates in an annular flume using laser reflectance particle sizing. In: *Fine Sediment Dynamics in the Marine Environment*. J.C Winterwerp & K.C. Kranenburg (Eds.) Elsevier Science B.V. 189-201.
- Black, K.S. (2002) Biological conditioning of natural sediments: Issues of importance to coastal process modelling. Irish Sea Forum, 4 October 2002.
- Black, K. (1997) Microbial factors contributing the erosion resistance in natural cohesive sediments. In *Cohesive Sediments* (Burt, N., Parker, R. & Watts, J.eds), INTERCOH '94, Wiley, 231-244.
- Black, K. S., Paterson, D. M. & Cramp, A. (eds) 1998. *Sedimentary Processes in the Intertidal Zone*. Geological Society, London, Special Publications. 139.
- Black, K.S., Paterson, D.M. & Davidson, I.R. (2002) Erosion of Cuttings Pile Sediments. A Laboratory Flume Study. *J Soc Underwater Technol* **25**(2): 51-59.

- Black, K.S. (1997) Biophysical factors contributing to erosion resistance in natural cohesive sediments. In *Cohesive Sediments* (Burt, N., Parker, R. & Watts, J. eds), INTERCOH '94, Wiley, 231-244.
- Black, K.S. & Paterson, D.M. (1997) Measurement of the erosion potential of cohesive, marine sediments: a review of current in situ technology. *J Mar Environmental Engineering* **4**(1), 43-84.
- Black, K.S., Tolhurst, T.J., Hagerthey, S.E. & Paterson, D.M. (2002) Working with Natural Cohesive Sediments. *J. Hydraulic Engineering* **128**: 1-7.
- Blanchard, G.F., Sauriau, P-G., Variou-Le Gall, V., Gouleau, D., Garet, M-J. & Oliver F. (1997) Kinetics of tidal resuspension of microbiota: testing the effects of sediment cohesiveness and bioturbation using flume experiments. *Mar Ecol Prog Ser* **151**: 17-25.
- Brampton, A.H. (1992) Engineering significance of British salt marshes. In. Allen JRL, Pye K, eds. *Saltmarshes: morphodynamics, conservation and engineering significance*. Cambridge, CUP.
- Brouwer, J.F.C., de Deckere, E.M.G.T. and Stal, L.J. (2003) Distribution of extracellular carbohydrates in three intertidal mudflats in Western Europe. *Estuarine, Coastal and Shelf Science* **56**: 313-324
- Burt, N., Parker, R. & Watts, J. (eds). 1997. *Cohesive Sediments*. Wiley & Sons, UK. pp458.
- Coles, S.M. (1979) Benthic microalgal populations on intertidal sediments and their role as precursors to salt marsh development. In: Jeffries, R.C. & Davies, A.J. (eds.): *Ecological processes in coastal environments: The first European Symposium of the British Ecological Society*. 25-42. Blackwell Scientific. Oxford.
- Daborn, G.R., Amos, C.L., Berlinsky, M., Christian, H., Drapeau, G., Faas, .W., Grant, J., Long, B., Paterson, D.M., Perillo, G.M.E. & Piccolo, M.C. (1993) An ecological "cascade" effect: Migratory birds affect stability of intertidal sediments. *Limnol Oceanogr* **38**(1): 225-231.

- Dade, B.W., Davis, J.D., Nichols, P.D., Nowell, A.R.M., Thistle, D. Trexler, M.B. & White, D.C. (1990) Effects of bacterial exopolymer adhesion on the entrainment of sand. *Geomicrobiology Journal*. **8**: 1-16.
- Dade, W.B., Nowell, A.R.M. & Jumars, P.A. (1992) Predicting erosion resistance of muds. *Mar Geol* **105**: 285-297.
- de Brouwer, J.F.C. & Stal, L.J. (2001) Short-term dynamics in microphytobenthos distribution and associated extracellular carbohydrates in surface sediments of an intertidal mudflat. *Mar Ecol Prog Ser* **218**: 33-44.
- de Brouwer, J.F.C., Bjelic, S., de Deckere, E.M.G.T. & Stal, L.J. (2000) Interplay between biology and sedimentology in a mudflat (Biezelingse Ham, Westerschelde, The Netherlands). *Cont Shelf Res* **20**: 1159-1177.
- de Deckere, E.M.G.T., Tolhurst, T.J. & de Brouwer, J.F.C. (2001) Destabilisation of cohesive intertidal sediments by infauna. *Est Coast Shelf Sci* **53**: 665-669.
- de Jong, V.N. & van den Bergs, J. (1987) Experiments on the resuspension of estuarine sediments containing benthic diatoms. *Est Coast Shelf Sci* **24**: 725-740.
- de Winder, B., Staats, N., Stal, L.J. & Paterson, D.M. (1999) Carbohydrate secretion by phototrophic communities in tidal sediments. *J Sea Res* **42**: 131-146.
- Decho, A.W. (1990) Microbial exopolymer secretions in ocean environments: their role(s) in food webs and marine processes. *Oceanogr Mar Biol Annu Rev* **28**:73-153.
- Decho, A.W. (2000) Microbial biofilms in intertidal systems: an overview. *Cont Shelf Res* **20**: 1257-1273.
- Defew, E.C., Tolhurst, T.J. & Paterson, D.M. (In press) Site-specific feature influence sediment stability of intertidal flats. *Hydrology & Earth System Science*.
- Defew, E.C., Tolhurst, T.J., Paterson, D.M. & Hagerthey, S.E. (In press). Can the stability of intertidal mudflats be predicted from proxy parameters? An *in situ* investigation. *Estuarine Coastal Sciences Association*.

- Fonseca, M.S. (1989) Sediment stabilization by *Halophita decipiens* in comparison to other seagrasses. *Est Coast Shelf Sci* **29**: 501-507.
- Fonseca, M.S., Fisher, J.S. & Zeiman, J.C. (1977) Influence of the seagrass *Zostera marina* L. on current flow. *Est Coast Shelf Sci* **15**: 351-364.
- Friend, P.L., Ciavola, P., Cappucci, S. & Santos, R. (In press) Bio-dependant bed parameters as a proxy tool for sediment stability in mixed habitat intertidal areas. *Nearshore Coast Oceanogr*
- Frostick, L.E. & McCave, I.N. (1979) Seasonal shifts of sediment within an estuary mediated by algal growth. *Est Coast Mar Sci* **9**: 569-576.
- Gerdol, V. & Hughes, R.G. (1994) Effect of *Corophium volutator* on the abundance of benthic diatoms, bacteria and sediment stability in two estuaries in southeastern England. *Mar Ecol Prog Ser* **114**: 109-115.
- Grant, J. & Daborn, G. (1994) The effects of bioturbation on sediment transport in an intertidal mudflat. *Neth J Sea Res* **32**: 63-72.
- Grant, J. & Gust, G. (1987) Prediction of coastal sediment stability from photopigment content of mats of purple sulphur bacteria. *Nature* **330**: 244-246.
- Grant, J., Bathmann, U.V. & Mills, E.L. (1986) The interaction between benthic diatom biofilms and sediment transport. *Est Coast Shelf Sci* **23**: 225-238.
- Greenland, D.J.; Lindstrom, G.R. & Quirk, J.P. (1961) Role of polysaccharides in stabilisation of natural soil aggregates. *Nature* **191**:1283-1284.
- Haag, I. & Westrich, B. (2001) Correlating erosion threshold and physicochemical properties of natural cohesive sediments. *Proc XXIX OADR Congress, Beijing* **2**: 84-90.
- Hakvoort, J.H.M., Heineke, M., Heymann, K., Kühl, H., Riethmüller, R. & Witte, G. (1998) A basis for mapping the erodibility of tidal flats by optical remote sensing. *Mar Fresh Res* **49**: 867-873.
- Han, J., Zhang, Z. Yu, Z. & Widdows, J. (2001) Differences in the benthic-pelagic particle flux (biodeposition and sediment erosion) at intertidal sites with

and without clam (*Ruditapes philippinarum*) cultivation in eastern China. *J Exp Mar Biol Ecol* **261**: 245-261.

- Herman, P.M.J., Middelburg, J.J. & Heip, C.H.R. (2001) Benthic community structure and sediment processes on an intertidal flat: results from the ECOFLAT project. *Cont Shelf Res* **21**: 2055-2071.
- Hoagland, K.D, Rosowski, J.R., Gretz, M.R. & Roemer, S.C. (1993) Diatom extracellular polymeric substances: Function, fine structure, chemistry and physiology. *J Phycology* **29**: 537-556.
- Holland, A.F., Zingmark, R.G. & Dean, J.M. (1974) Quantitative evidence concerning the stabilization of sediments by marine benthic diatoms. *Mar Biol* **27**: 191-196.
- Honeywill, C., Paterson, D.M. & Hagerthey, S.E. (2002) Instant determination of microphytobenthic biomass using fluorescence. *Eur J Phycol* **37**: 1-8.
- Lucas, C.H., Widdows, J., Brinsley, M.D., Salkeld, P.N. & Herman, P.M.J. (2000) Benthic-pelagic exchange of microalgae at a tidal flat. 1. Pigment analysis. *Mar Ecol Prog Ser* **196**: 59-73.
- Madsen, K.N., Nilsson, P. & Sundbäck, K. (1993) The influence of benthic microalgae on the stability of a subtidal sediment. *J Exp Mar Biol Ecol* **170**: 159-177.
- Manzenrieder, H. (1983) Retardation of initial erosion under biological effects in sandy tidal flats. *Leichtweiss, Inst. Tech. University Braunschweig*. 469-479.
- Meadows, P., Tait, J. & Hussain, S.A. (1990) Effects of estuarine infauna on sediment stability and particle sedimentation. *Hydrobiologia* **190**: 263-266.
- Meadows, P.S., Meadows, A., West, F.J.C., Shand, P.S. & Shaikh, M.A. (1998) Mussels and mussel beds (*Mytilus edulis*) as stabilisers of sedimentary environments in the intertidal zone. In Black, K.S., Paterson, D.M. and Cramp, A. (eds) *Sedimentary Processes in the Intertidal Zone*. Geological Society, London, Special Publications, 139: 331-347.
- Mitchener, H. & Torfs, H. (1996) Erosion of mud/sand mixtures. *Coast Eng* **29**: 1-25.

- Montague, C.L. (1986) Influence of biota on erodibility of sediments. In: Mehta, A.J. (ed.): *Lecture notes on coastal and estuarine studies* **14**: 251-269.
- Neumann, A.C., Gebelein, C.D. & Scoffin, T.P. (1970) The composition, structure and erodibility of subtidal mats, Abaco, Bahamas. *J Sed Petrol* **40**: 274-297.
- Nowell, A.R., Jumars, P.A. Eckman, J.E. (1981) Effects of biological activity on the entrainment of marine sediments. *Mar Geol* **42**: 133-153.
- Parker, W.R. (1998) On the characterisation of cohesive sediment for transport modelling. In: Burt, N., Parker, R. & Watts, J. (eds) . *Cohesive Sediments*. Wiley & Sons, UK. p3-14.
- Paterson, D.M. & Black, K. S. (1999) Water flow, sediment dynamics, and benthic biology. In: *Advances in Ecological Research* (Raffaelii, D & Nedwell, D. eds). OUP. Oxford p.155- 193.
- Paterson, D.M. (1988) The influence of epipellic diatoms on the erodibility of an artificial sediment. *10th Diatom Symposium* 345-355.
- Paterson, D.M. (1989) Short-term changes in the erodibility of intertidal cohesive sediments related to the migratory behaviour of epipellic diatoms. *Limnol Oceanogr* **34**: 223-234.
- Paterson, D.M. (1994) Microbiological mediation of sediment structure and behaviour. In: *Microbial mats* NATO ASI series. (eds P. Caumette ., L.J. Stal). Vol. 35, 97-109.
- Paterson, D.M., Crawford R.M. & Little, C. (1990) Subaerial exposure and changes in the stability of intertidal estuarine sediments. *Est Coast Shelf Sci* **30**: 541-556.
- Paterson, D.M., Tolhurst, T.J., Kelly, J.A., Honeywill, C., de Deckere, E.M.G.T., Huet, V., Shayler, S.A., Black., K.S., de Brouwer, J. & Davidson, I. (2000) Variations in sediment properties, Skeffling mudflat, Humber Estuary, UK. *Cont Shelf Res* **20**: 1373-1396.
- Paterson, D.M., Yallop, M. & Parkes, J. (1996) The role of microbial exopolymers in the stability of estuarine intertidal sediments and the related carbon flux. Final Report NERC award GR3/8056'a'

- Paulic, M., Montague, C.L. & Mehta, A.J. (1986) Influence of light on sediment erodibility. In (Shen, H.W. ed), *Third Int. Symp. on River Sedimentation*, Mississippi, 1758-1764.
- Pender, G., Meadows, P.S. & Tait, J. (1994) Biological impact on sediment processes in the coastal zone. *Proc. Instn. Civ. Engrs Wat., Marit. & Energy* **106**: 53-60.
- Riethmüller, R., Hakvoort, J.H.M., Heineke, M., Heymann, K., Kühl, H. & Witte, G. (1998) Relating erosion threshold to tidal flat surface colour. In Black, K.S., Paterson, D.M. & Cramp, A. (eds) *Sedimentary Processes in the Intertidal Zone*. Geological Society, London, Special Publications, **139**: 283-293.
- Riethmüller, R., Heineke, M., Kühl, H. & Keuker-Rüdiger, R. (2000) Chlorophyll *a* concentration as an index of sediment surface stabilisation by microphytobenthos? *Cont Shelf Res* **20**: 1351-1372.
- Ruddy, G. Turley, C.M. & Jones, T.E.R. (1998) Ecological interaction and sediment transport on an intertidal mudflat I: Evidence for a biologically mediated-sediment water interface. In : Black, K.S., Paterson, D.M. & Cramp, A (eds) *Sedimentary Processes in the Intertidal Zone*. Geological Society, Special Publication, **139**: 135-148.
- Scoffin, T.P. (1970) The trapping and binding of subtidal carbonate sediments by marine vegetation in Bimini Lagoon, Bahamas. *J Sed Petrol* **40**: 249-273.
- Scoffin, T.P. (1968) An underwater flume. *J Sed Petrol* **38**: 244-247.
- Shaikh, M. A., Meadows, A. & Meadows, P. (1998) Biological control of avalanching and slope stability in the intertidal zone In: (Black, K. S., Paterson, D. M., & Cramp, A. eds). *Sedimentary Processes in the Intertidal Zone*. Geological Society, London, Special publication. **139**: 309-329.
- Smith, D.J. & Underwood, G.J.C. (1998) Exopolymer production by intertidal epipellic diatoms. *Limnol Oceanogr* **43**: 1578-1591.
- Stal, L. (1994) Microbial mats in coastal environments. In: Stal, L. J. , Caumette, P. (eds.). *Microbial mats*. Structure, Development and Environmental Significance. NTO ASI Series 35: 21-32, Springer Verlag, Heidelberg.

- Sutherland, T.F., Amos, C.L., Grant, J. (1998) The erosion threshold of biotic sediments. A comparison of methods. In: Black, K.S., Paterson, D.M. & Cramp, A (eds) *Sedimentary Processes in the Intertidal Zone*. Geological Society, Special Publication, **139**: 295-307.
- Sutherland, T.F., Grant, J. & Amos, C.L. (1998) The effect of carbohydrate production by the diatom *Nitzschia curvilineata* on the erodibility of sediment. *Limnol Oceanogr* 43 (1): 65-72.
- Sutherland, T.F., Amos, C.L. & Grant, J. (1998) The effect of buoyant biofilms on the erodibility of sublittoral sediments of a temperate microtidal estuary. *Limnol Oceanogr* **43** (2): 225-235.
- Sun, H., Dong, H., Paterson, D.M., Perkins, R.G., Player, M.A. & Watson, J. (2002) In-line digital video holography for the study of erosion processes in sediments. *Measurement Sci Tech* **13**: L7-L12.
- Taylor, I. & Paterson, D.M. (1998) Microspatial variation in carbohydrate concentrations with depth in the upper millimetres of intertidal cohesive sediments. *Est Coast Shelf Sci* **46**: 359-370.
- Tolhurst, T.J., Black, K.S., Shayler, S.A., Mather, S., Black, I., Baker, K. & Paterson, D.M. (1999) Measuring the *in situ* erosion threshold of intertidal sediments with the Cohesive Strength Meter (CSM). *Est Coast Shelf Sci* **49**: 281-294.
- Tolhurst, T.J., Gust, G. & Paterson, D.M. (2002) The influence of an extracellular polymeric substance (EPS) on cohesive sediment stability. In *Fine Sediment Dynamics in the marine environment* (eds: Winterwerp JC, Kranenburg C). *Proceedings in Marine Science* **5**: 409-425.
- Underwood, G.J.C. & Paterson, D.M. (1993) Recovery of intertidal benthic diatoms after biocide treatment and associated sediment dynamics. *J Mar Biol Assoc UK* **73**: 25-45.
- Underwood, G.J.C. & Smith, D.J. (1998) Predicting epipellic diatom exopolymer concentrations in intertidal sediments from sediment Chlorophyll *a*. *Microb Ecol* 35: 116-125.

- Underwood, G.J.C. & Paterson D.M. (1993) Seasonal changes in diatom biomass, sediment stability and biogenic stabilisation in the Severn Estuary. *J Mar Biol Ass UK* **73**: 871-887.
- Underwood, G.J.C. (1997) Microalgal colonisation in a saltmarsh restoration scheme. *Est Coast Shelf Sci* **44** (4): 471-481.
- Vos, P.C., De Boer, P.L. & Misdrop, R. (1988) Sediment stabilization by benthic diatoms in intertidal sandy shoals. In: De Boer, P.L. (ed.): *Tide-influenced Sedimentary Environments and Facies*: 511-526. Reidel.
- Wetherbee, R, Lind, J.L., Burke, J. & Quatrano, R.S. (1998) The first kiss: establishment and control of initial adhesion by raphid diatoms. *J Phycol* **34**: 9-15.
- Widdows, J. & Brinsley, M. (2002) Impact of biotic and abiotic processes on sediment dynamics and the consequences to the structure and functioning of the intertidal zone. *J Sea Res* **48**: 143-156.
- Widdows, J., Brinsley, M.B., Salkeld, P.N. & Elliott, M. (1998) Use of annular flumes to determine the influence of current velocity and biota on material flux at the sediment-water interface. *Estuaries* **21**: 552-559.
- Widdows, J., Brinsley, M.D. & M. Elliott. (1998) Use of *in situ* flume to quantify particle flux (deposition rates and sediment erosion) for an intertidal mudflat in relation to changes in current velocity and benthic macrofauna. In: *Sedimentary processes in the intertidal zone*. (Black, K.S., Paterson, D.M. & Cramp, A., eds), p.85-97. London: Geological Society. (Geological Society Special Publication No. 139)
- Widdows, J., Brinsley, M.D., Bowley, N. & Barrett., C. (1998) A benthic annular flume for in situ measurement of suspension feeding / biodeposition rates and erosion potential of intertidal cohesive sediments. *Est Coast Shelf Sci* **46**: 27-38.
- Widdows, J., Brinsley, M.D., Salkeld, P.N. & Lucas, C.H. (2000) Influence of biota on spatial and temporal variation in sediment erodibility and material flux on a tidal flat (Westerschelde, The Netherlands). *Mar Ecol Prog Ser* **194**: 23-37.

- Widdows, J., Brown, S., Brinsley, M.D., Salkeld, P.N. & Elliot, M. (2000) Temporal changes in intertidal sediment erodibility: influence of biological and climatic factors. *Cont Shelf Res* **20**: 1275-1289.
- Widdows, J., Lucas, J.S., Brinsley, M.D., Salkeld, P.N. & Staff, F.J. (2002) Investigation of the effects of current velocity on mussel feeding and mussel bed stability using an annular flume. *Helgoland Mar Res* **56**: 3-12.
- Williamson, H.J., & Ockenden, M.C. (1996) ISIS: an instrument for measuring erosion shear stress in situ. *Est Coast Shelf Sci* **42**: 1-18.
- Willows, R.I., Widdows, J. & Wood, R. (1998) Influence of an infaunal bivalve on the erosion of an intertidal cohesive sediment: a flume and modelling study. *Limnol Oceanogr* **43**: 1332-1343.
- Wiltshire, K.H., Tolhurst, T., Paterson, D.M., Davidson, I. & Gust, G. (1998) Pigment fingerprints as markers of erosion. In: Black, K.S., Paterson, D.M. & Cramp, A. (eds) *Sedimentary Processes in the Intertidal Zone*. Geol Soc Lond Special Publications **139**: 99-114
- Wood, R. & Widdows, J. (2002) A model of sediment transport over an intertidal transect, comparing the influences of biological and physical factors. *Limnol Oceanogr* **47**: 848-855.