

Dan Bowman -Scientific Publications

Refereed articles

1. Bowman, D., 1971,
Geomorphology of the Shore Terraces of the Late Pleistocene Lisan Lake (Israel).
Palaeogeogr. Palaeoclimatol. Palaeoecol., Vol. 9, pp. 183-209.
2. Bowman, D., 1975,
Sediment Entrainment in Shoaling Waves. *Transactions of the American Geophysical Union*, Vol. 56, No. 1, p. 370.
3. Bowman, D., 1977,
Stepped Bed Morphology in Arid Gravelly Channels. *Bull. of the Geological Society of America*, Vol. 88, pp. 291-298.
4. Bowman, D., 1978,
Determination of Intersection Points within a Telescopic Alluvial Fan Complex. *Earth Surface Processes*, Vol. 3, pp. 265-276.
5. Bowman, D. & Giladi, Y., 1979,
Pebble Analysis for Palaeoenvironmental Recognition - the Ubeidiya Living Floors. *Israel Journal of Earth Sciences*, Vol. 28, pp. 86-93.
6. Bowman, D., 1980,
Validity of Visually Estimated Wave Parameters. *Israel Journal of Earth Sciences*, Vol. 28, pp. 94-99.
7. Bowman, D., 1981,
Efficiency of Eigenfunctions for Discriminant Analysis of Subaerial Non-Tidal Beach Profiles. *Marine Geology*, Vol. 39, pp. 243-258.
8. Bowman, D., 1981,
Transformation Patterns of Subaerial Micro-Tidal Beaches. *Physical Geography*, Vol. 2 No. 1, pp. 34-46.
9. Goldsmith, V., Bowman, D. & Kiley, K., 1982,
Sequential Stage Development of Crescentic Bars, Southeastern Mediterranean. *Journal of Sedimentary Petrology*, Vol. 52, No. 1, pp. 233-249.
10. Bowman, D., 1982,
Iron Coating in Recent Terrace Sequences Under Extremely Arid Conditions. *Catena*, Vol. 9, No. 3/4, pp. 353-359.

11. Bowman, D., 1982,
Modal Beach Transformations and Morphological Interpretation - the
Southern Mediterranean Coast of Israel. *Israel Journal of Earth Sciences*, Vol. 31, No. 2-
4, pp. 95-100.
12. Bowman, D. & Goldsmith, V., 1983,
Bar Morphology of Dissipative Beaches - an Empirical Model. *Marine Geology*, Vol. 51,
No. 1-2, pp. 15-33.
13. Bowman, D., Karnieli, A., Issar, A. & Bruins, H.J., 1986,
Residual Colluvio-Aeolian Aprons in the Negev Highlands (Israel) as a
Paleo-Climatic Indicator. *Palaeogeogr. Palaeoclimatol. Palaeoecol.*, Vol. 56, pp.
89-101.
14. Bowman, D. & Gerson, R., 1986,
Morphology of the Latest Quaternary Surface-Faulting in the Gulf of Elat Region,
Eastern Sinai. *Tectonophysics*, Vol. 128, pp. 97-119.
15. Christiansen, Ch. & Bowman, D., 1986,
Sea-Level Changes, Coastal Dune Building and Sand Drift, North-Western Jutland,
Denmark. *Geografisk Tidsskrift*, Copenhagen, Vol. 86, pp. 28-31.
16. Bowman, D., Christiansen, Ch. & Magaritz, M., 1987,
Late-Holocene Coastal Evolution of the Hanstholm-Hjardemaal Region, NW Denmark,
Morphology, Sediments and Dating. *Geoskrifter*, No. 25, Institute of Geology, Aarhus
University, 36 pp.
17. Bowman, D., 1988,
The Declining But Non-Rejuvenating Base Level - the Lisan Lake, the Dead Sea Area,
Israel. *Earth Surface Processes*, Vol. 13, pp. 239-249.
18. Bowman, D., Rosen, D., Kit, E., Arad, D. and Slavitz, A. , 1988,
Flow Characteristics at the Rip Current Neck under Low Energy Conditions. *Marine
Geology*, Vol. 79, No. 1-2, pp. 41-54.
19. Bowman, D., Arad, D., Rosen, D., Kit, E., Goldbery, R. & Slavitz, A., 1988,
Flow Characteristics Along the Rip Current System Under Low Energy Conditions.
Marine Geology, Vol. 82, pp. 149-167.
20. Nyamweru, C.K. & Bowman, D., 1989,
Climatic Changes in the Chalbi Desert, North Kenya. *Journal of Quaternary Science*,
Vol. 4 (2), pp. 131-139.
21. Bowman, D., Christiansen, Ch., & Magaritz, M., 1989,
Late-Holocene Coastal Evolution in the Hanstholm - Hjardemaal Region,
NW Denmark: Morphology, Sediments and Dating. *Geografisk Tidsskrift*, ,
Vol. 89, pp. 49-57

22. Bowman, D., 1990,
Climatically Triggered Gilbert-type Lacustrine Fan Deltas, The Dead Sea Area, Israel. *Special Publ. International. Assoc. Sedimentologists*, Vol. 10, pp. 273-280.
23. Christiansen, Ch., Dalsgaard, K., Moller, J.T., and Bowman, D., 1990,
Coastal Dunes in Denmark, Chronology in Relation to Sea Level. *Catena Supplement* , Vol. 18, pp. 61-70.
24. Bowman, D., Birkenfeld, H. and Rosen, D.S., 1992,
The Longshore flow component in low-energy rip channels: The Mediterranean, Israel. *Marine Geology*, Vol. 108, pp. 259 -27
25. Bowman, D. and Gross, T., 1992,
The highest stand of Lake Lisan : - 150 meter below MSL. *Isr. Jour. Earth Sci.* Vol. 41, p. 233-237.
26. Bowman, D., 1993,
Morphodynamics of the stagnating Zwin inlet, The Netherlands. *Sedimentary Geology* , Vol. 4 , pp. 219-239.
27. Hartmann, D. and Bowman, D., 1993,
Efficiency of the Log-Hyperbolic distribution, a case study: pattern of sediment sorting in a small tidal inlet- Het Zwin, The Netherlands. *Jour. of Coastal Research*, Vol. 9 (4), pp. 1044-1053.
28. Bowman, D., 1995,
Active surface ruptures on the northern Arava fault, the Dead Sea Rift. *Isr. Jour. Earth Sci.*, Vol. 44, pp. 51-59.
29. Krzyskowski, D. and Bowman, D., 1997,
Neotectonic deformation of Pleistocene deposits along the Sudetic Marginal Fault, Southeastern Poland. *Earth Surface Processes* 22, 545 - 562.
30. Hoz, R., Bowman, D. and Chacham, T., 1997.
The Psychometric and Edumetric Validity of Dimensions of Geomorphological knowledge which are tapped by Concept Mapping. *Jour. of Research in Science Teaching*, vol. 34. 925 - 947.
31. Bowman, D., Manor-Samsonov, N. and Golik, A., 1998, Dynamics of litter pollution on the Israeli Mediterranean Beaches - a Budgetary litter flux approach. *Jour. of Coastal Research*, Florida, no. 2, 418 - 432.
32. Korjenkov, A., Bowman, D., Haselton, K. and Porat, N., 1999. Recent Drainage diversions under thrusting conditions in the Suusamyr Valley, the Tien Shan Range, Kyrgyzstan. *Isr. J. Earth Sci.* 48, 63 -79.

33. Bowman, D., Banet -Davidovich, D., Bruins, H.J. and J. Van der Plicht, 2000. Dead Sea shoreline facies with seismically-induced soft-sediment deformation structures, Israel. *Israel J. of Earth Sci.* 49,197 - 214.
34. Ezra, Sh., Feinstein, Sh., Pelly, I., Bowman, D., Miloslavsky, I., 2000. Weathering of fuel oil on the East Mediterranean coast, Ashdod, Israel. *Organic Geochemistry* 31, 1733 - 1741.
35. Hoz, R., Bowman, D. and Kozminsky, E., 2001. The differential effects of prior knowledge on learning : A study of two consecutive courses in earth sciences. *Instructional Sciences* 29, 187-201
36. Bowman, D., Bruins, H. J., Van der Plicht, J., 2001. Load structures seismites and historic earthquakes in the Dead Sea area (Israel) : Chronological benchmarking with ¹⁴C dating, *Radiocarbon* 43, 1383-1390.
37. Avni, R., Bowman, D., Shapira, A., Nur, A. 2002. The epicenter of the 1927 Jericho earthquake in the Holy Land - an anatomy of erroneous interpretation of historical documents. *J. of Seismology* 6, 469-476.
38. Ben- David, R., Eyal, Y., Zilberman, E. and Bowman, D. 2002. Fluvial systems response to Rift Margin tectonics - an example from Makhtesh Ramon area, Southern Israel. *Geomorphology* 45, 147-163.
39. Bowman, D., Pranzini, E. 2003. Reversed response within a segmented detached breakwater, the Tuscany coast, Italy - a case study. *Coastal Engineering* 49, 263-274.
40. Hoz, R., Kainan, A., Bowman, D., Goldstein, O., Omri, A. 2003. Institutional change in teacher education: the faculty's tale. *J. Education for Teaching* 29, 249-264.
41. Bowman, D., Korjenkov, A., Porat, N. 2004. Late-Pleistocene seismites from Lake Issyk-Kul, the Tien Shan range, Kyrghyzstan. *Sedimentary Geology* 163, 211-218.
42. Bowman, D., Korjenkov, A., Porat, N., Czassny, B. 2004. Morphological response to Quaternary deformation at an intermontane basin piedmont, the northern Tien Shan, Kyrghyzstan. *Geomorphology* 63, 1-24.
43. Bowman, D., Shachnovich-Firtel, Y., Devora, Sh. 2007. Stream channel convexity induced by continuous base level lowering, the Dead Sea, Israel. *Geomorphology*, 92, 1-2, 60-75.
45. Bowman, D., Ferri, S., Pranzini, E. 2007. Efficacy of beach dewatering - Alassio, Italy. *Coastal Engineering* 54, 791-800.
46. D. Bowman, J. Guillén, L. López, V. Pellegrino, 2009. Planview geometry and morphological characteristics of pocket beaches on the Catalan coast (Spain). *Geomorphology* 108,191-199.

47. D. Bowman, T. Svoray, Sh. Devora, I. Shapira, J. B. Laronne, 2010. Extreme rates of channel incision and shape evolution in response to a continuous, rapid base level fall, the Dead Sea, Israel. *Geomorphology* 114, 227-237.
48. Y. Storz-Peretz, D. Bowman, J.B. Laronne and T. Svoray, 2011. Rapid incision of a small, coarse and steep fan-delta in response to base level fall: The case of Nahal Qedem, the Dead Sea, Israel. *Earth surface processes and Landforms* 36, 467-480.
49. D. Bowman, Sh. Devora, T. Svoray, 2011. Drainage organization on the newly emerged Dead Sea bed, Israel. *Quaternary International* 233, 53-60.

Published scientific reports and technical papers

1. Kit, E., Rosen, D., Szlavitz, A., & Bowman, D., 1985, Analysis of Current Data. Coastal and Marine Engineering Research Institute, P.N. 145/85, Technion City, Haifa, 684 pp.
2. Bowman, D., Arad, D., Rosen, D. & Kit, E., 1985, Bathymetry and Wave Climate Data of the Herzlia Beach. Final Research Report submitted to the Ministry of Energy and Infra-structure.
3. Bowman, D. & Birkenfeld, H., 1988, Bed Forms Along Rip Channels, Northern Gaza Strip. Report Submitted to the National Council for Research and Development, 33 pp.
4. Bowman, D. & Gross, T., 1989, Neotectonics in the Northern Arava Rift. Report submitted to the Earth Science Section, Ministry of Energy and Infrastructure, 53 pp
5. Bowman, D. & Golik, A., 1989, Litter on the Southern Mediterranean Beaches of Israel. Final research report submitted to the Ministry of the Environment, 31 pp.
6. Bowman, D., 1990, Morphodynamics of the Zwin inlet. Final research report submitted to the Royal Netherland Academy of Sciences, 62 pp.
7. Bowman, D., 1991, Fan Deltas of the Messina Strait, Calabria, Italy: Where are the seismic fingerprints? Research report submitted to the Ministry of Science and Technology, 10 pp.
8. Bowman, D., Arkin, Y., Karnieli, A. and Roskin, Y., 1995, Active fracturing along the Rift margin. Final resesarch report submitted to the Earth Science Administration, 53 pp.

9. Porat, N., Bowman, D., Raved, N. and Enzel Y., 1998, Luminescence dating of the Nahal Darga Holocene Section - Comparison with ^{14}C ages. TR - GSI/13/98, 10p.
10. Schechnovitz-firtel, J. and Bowman, D., 1998, The morphological efficiency of the receding Dead Sea base level. Final research report submitted to the Earth Science Administration, ES - 27- 98.
11. Haselton, K., Bowman, D., Korjenkov, A., Mamyrov, E., Strecker, M., Turdukulov, A., 1998. Recent deformation and denudation in the Tien Shan and Pamir mountains of the Kyrgyz Republic, pp. 58-72. Ministry of Education, Science and Culture of the Kyrgyz Republic, Bishkek.
12. Haselton, K., Bowman, D., Korjenkov, A., 1999. Periodic Report 1 April 1998 to 31 March 1999 for INTAS Project 96-1923 "Recent deformation and denudation in the Tien Shan and Pamir mountains of Kyrgyzstan".
13. Porat, N., Bowman, D., Enzel, Y., Raved, N. 2000. Luminescence dating of the Nahal Darga Holocene section-comparison with ^{14}C dates. Geological survey of Israel current research, vol.12 , 239-243.
14. Bowman, D., Debra, Sh., Savoray, T. 2004. The effect of the receding Dead Sea as a base level. Final research report submitted to the Dead Sea Drainage Authority (in Hebrew), 23 pp. 47 figures, photos & air photos.

Chapters in collective volumes - conference Proceedings, Festschriften, etc.

1. Bowman, D., 1974, Geomorphology of River Terraces on the Western Bank of the Dead Sea. Geomorphic Processes in Arid Environments, International Symp. Field Program, Jerusalem, Hebrew University, Geography Dept., pp. 40-51.
2. Bowman, D., 1981, Spatial & Temporal Changes of the Southern Beaches of Israel. Proc. 2nd Annual Coastal Conference, Tel-Aviv, Institute of Petroleum and Energy, pp. 13-19.
3. Bowman, D., Goldsmith, V. & Kiley, K., 1982, Lag and Thresholds in the Bar Development Along the Mediterranean Coast of Israel. Proc. 3rd Ann. Israel Coastal Meeting, pp. 24-32.
4. Paldi, R., Bowman, D., & Goldsmith, V., 1982, Israel Coastal Processes, Bibliography 1975-1982. Proc. 3rd Ann. Israel Coastal Meeting, pp. I-IX.

5. Goldsmith, V., Bowman, D., Kiley, K., Burdick, B., Mart, Y. & Sofer, S., 1983, Morphology and Dynamics of Crescentic Bar Systems. *Proceedings of the 18th International Conference of Coastal Engineering*, Capetown, South Africa, American Society of Civil Engineers, Vol. 2, pp. 9
6. Gerson, R., Grossman, S. & Bowman, D., 1985, Stages in the Creation of a Large Rift Valley, Geomorphic Evolution Along the Southern Dead Sea Rift. In Morisawa, M. & Hack, J.T.(Eds.). *Tectonic Geomorphology*, Allen & Unwin, Boston, pp. 53-73.
7. Hoz, R., Tomer, Y., Bowman, D. & Chayoth, R., 1987, The Use of Concept Mapping to Diagnose Misconceptions in Biology and Earth Sciences. In J.D. Novak (Ed.): *Proceedings of the Second International Seminar on Misconceptions and Educational Strategies in Science and Mathematics*, Cornell University, Ithaca, N.Y. pp. 245 - 256.
8. Christiansen, Ch. and Bowman, D., 1990, Longterm beach and shoreface changes, NW Jutland, Denmark: effects of change in in wind direction. In Beukema, J.J. et al. (Eds), *Expected Effects of Climatic Change on Marine Coastal Ecosystems*, Kluwer Academic, pp. 113-122.
9. Bowman, D. & Laronne, J., (Eds.), 1992, *Proceedings of the 1st Geomorphological Meeting*, Department of Geography, Ben-Gurion University of the Negev, 39 pp.
10. Bowman, D., 1993, Neotectonics in the northern Arava. *Isr. Geol. Soc. Annual Meeting, Field Trips Guide Book*, pp. 35-43.
11. Bowman, D., 1997, Geomorphology of the Dead Sea Western Margin. in: *The Dead Sea: The Lake and its setting*. Niemi, T.M., Ben Avraham, Z. and Gat, J., (edits), Oxford University Press, pp. 217-225.
12. Bowman, D. (ed) 1997. *Geomorphology in the Dead Sea area - field trip guide book*. Israel Geomorphological Research Group.
13. Bowman, D. Pranzini, E., 2008, Shoreline monitoring: review and recommendations, in Pranzini, E., Wetzel, L.(eds), *Beach erosion monitoring, Results from Beachmed-e/Optimal Project*, pp.15-24.
14. Bowman, D., 2010. The Dead Sea Graben: Geomorphology of the lowest spot on Earth. in: *Geomorphological landscapes of the world*. Migon , P., (ed.), Springer, pp.247-255.

Unrefereed professional articles and publications

1. Bowman, D., 1972,
"Achziv - Rosh Hanikra" Morphology and Sediments of the Northern Coast of Israel.
The Council of Sulam-Zor and Gaaton, 53 pp.
2. Bowman, D., 1984,
ISRAEL, Commission on the Coastal Environment, Inter. Geographical Union,
Bibliography 1979-1982. Edited by R.P. Paskoff, pp. 112-116.
3. Bowman, D., 1986,
About Waves and Breakers. Eitanim, Vol. 39, pp. 136-138