

12/04

CURRICULUM VITAE

Karl W. Flessa

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Personal Data

Birth Date: August 3, 1946
Place of Birth: Nürnberg, Germany
Citizenship: U.S.A. (since 1950)

Education and Degrees

Ph.D., Geological Sciences, 1973. Brown University, Providence, Rhode Island
A.B., Geology, 1968. Lafayette College, Easton, Pennsylvania

Principal Administrative Appointments

Head, Department of Ecology and Evolutionary Biology, University of Arizona, 1997-1999
Project Director, Research Training Group: Analysis of Biological Diversification, 1992-1994
Program Director, National Science Foundation, 1988-1990
Director, University of Arizona Geology Field Camp; 1983, 1985-1988

Academic Appointments

Fellow, Udall Center for Studies in Public Policy, 2002-2003
Professor of Geosciences, University of Arizona, 1987-present
Professor of Ecology & Evolutionary Biology, University of Arizona, 1997-present
Visiting Professor, Facultad de Ciencias Marinas, Universidad Autónoma de Baja California,
Ensenada, México, 1999
Research Associate, Smithsonian Institution, 1988-1991
Associate Professor, University of Arizona; 1981-1987
Humboldt Fellow, Universität Tübingen, Germany, and University of Birmingham, U.K.; 1983-
1984
Research Associate, Arizona-Sonora Desert Museum; 1978-present
Assistant Professor, University of Arizona; 1977-1981
Assistant Professor, State University of New York at Stony Brook; 1972-1977
Senior Assistant, Marine Biological Laboratory; 6/72-8/72
Lecturer, Case Western Reserve University; 1/71-6/71

Research Interests

Current research interests focus on 1) the environmental history and conservation biology of the Colorado River Delta, 2) the taphonomy and paleoecology of Recent and Pleistocene invertebrates in the Gulf of California, 3) the quality of the fossil record, and 4) the biogeography of Recent bivalve mollusks.

Teaching Activity

Introductory Paleontology; Oceanography; Paleoecology; Biogeography; Field Geology; Macroevolution; The Creation-Evolution Controversy; Proposal-Writing Workshop; Extinction; Historical Geology; Dinosaurs.

Professional Affiliations

A.A.A.S., American Geophysical Union, Coastal Education and Research Foundation, Estuarine Research Federation, Geological Society of America (Fellow), National Center for Science Education, Paleontological Society, Peninsular Geological Society, S.E.P.M. (Society for Sedimentary Geology), Society for Conservation Biology.

Grant Funding, 1998-present

Active

Americas Program Dissertation Enhancement: The importance of Colorado River flow to endemic fish of the northern Gulf of California: Evidence from stable isotopes in fish otoliths.

Kirsten Rowell and Karl W. Flessa, co-P.I.s

National Science Foundation, \$9,155. 2003-2004

Research Experiences for Undergraduates Supplement: Growth rates in *Hexaplex nigritus*

Karl W. Flessa, P.I.

National Science Foundation, \$9,010. 2003-2004.

ITR: Collaborative Research: GEON--A research project to create cyberinfrastructure for the geosciences

A. Krishna Sinha and Chaitan Baru, Principal Investigators; many co-PIs

Karl W. Flessa, Co-Principal Investigator

National Science Foundation, \$4M (University of Arizona portion = \$400,000), 2002-2007

Estimating the minimum amount of Colorado River water needed to restore critical parts of the river's estuarine habitat in the northern Gulf of California

Karl W. Flessa, Principal Investigator

Environmental Defense, \$15,000, 2002-2003

Conservation paleobiology

Karl W. Flessa, Principal Investigator

National Science Foundation, \$240,000; 2002-2005

Increasing minority Ph.D. students in Geosciences at the University of Arizona (renewal)

Karl W. Flessa, Principal Investigator

Alfred P. Sloan Foundation, ~\$90,000; 2001-2004

Undergraduate mentoring in environmental biology: Research experiences in conservation biology

Robert Robichaux, Principal Investigator (K. Flessa, C. Craddock, and W. Shaw, co-PIs)

National Science Foundation, \$273,000; 2001-2004.

Previous support (since 1998)

Nature's fair share: Allocating water for the Colorado River delta.

Karl W. Flessa, Principal Investigator

Udall Center for Studies in Public Policy and Institute for the Study of Planet Earth,
University of Arizona, \$5,000 and Spring Semester 2003 release time

Accomplishment-based renewal: Spatial, temporal and environmental resolution of shelly assemblages

Karl W. Flessa, Principal Investigator

National Science Foundation, \$224,000; 1998-2002

Scleroökologie: Rekonstruktion der Klima- und Umweltgeschichte des jüngsten Holozäns mit Mollusken-Chronologien

Bernd Schöne and Karl W. Flessa, Principal Investigators

Alexander von Humboldt Foundation, ~\$20,000; 1999-2001

Distribution and taxonomic status of *Mulinia coloradoensis* Dall (Mollusca, Bivalvia) in the Gulf

of California

Karl W. Flessa and Miguel A. Téllez-Duarte, Principal Investigators

Center for Biological Diversity and Defenders of Wildlife, \$3,800, 2000-2001

Renewal: Research training group in the analysis of biological diversification

Wayne Maddison, Principal Investigator (K.W. Flessa and 10 others, co-P.I.s)

National Science Foundation, \$898,000; 1996-2001

Increasing minority Ph.D. students in Geosciences at the University of Arizona

Karl W. Flessa, Principal Investigator

Alfred P. Sloan Foundation, \$90,000; 1997-2002

REU site: Undergraduate research experiences in conservation biology

Robert Robichaux, Principal Investigator (K. Flessa, C. Craddock, and W. Shaw, co-PIs)

National Science Foundation, \$145,000; 1999-2002

Upgrade of a stable isotope mass spectrometer by the addition of an automated carbonate preparation device

David Dettman, Principal Investigator, (K. Flessa, J. Quade, A. Cohen, co-P.I.s)

National Science Foundation, \$58,630; 1999-2001

Before the dams: Historical ecology of the Colorado Delta

Karl W. Flessa, Principal Investigator

Eppley Foundation for Research, \$15,000; 1999-2000

Conservation internships: A UA/Community partnership for the environment

Karl W. Flessa, Principal Investigator (R. Robichaux and W. Shaw, co-P.I.s)

University of Arizona Community Partnership Grants Program/Kellogg Foundation,
\$21,000; 1998-1999

Conservation implications of the population decline of the Colorado delta bivalve mollusk

Mulinia coloradoensis

Karl W. Flessa, Principal Investigator

Southwest Center for Biological Diversity, \$1,000; 1998-1999

One thousand years of Colorado River flow: The proxy record of oxygen isotopes in marine molluscs from the Colorado delta

Karl W. Flessa, Principal Investigator (D. Dettman and J. Zachos (co-PIs)

U.S. Geological Survey, Water Resources Research, \$90,000, 1996-1999

Taphonomy and paleoecological significance of a living fossil: The lingulid brachiopod *Glottidia*

palmeri

Karl W. Flessa, Principal Investigator

National Science Foundation, \$90,000, 1995-1998

Professional Activities

Editorial Board, *Paläontologische Zeitschrift*, 2005-2008.

Co-convenor, 2003 Geological Society of America Topical Session: Geologic Record of Biosphere Dynamics – a key to understanding the biotic effects of future environmental change.

Ad hoc assigning editor, *Conservation Biology*, 2003.

Chair, National Research Council Committee on the Geologic Record of Biosphere Dynamics – a key to understanding the biotic effects of future environmental change. 2002-2004.

Wissenschaftlicher Beirat, Forschungsinstitut Senckenberg, (External scientific advisory council of the Senckenberg Museum, Frankfurt am Main, Germany) 1999-2004.

Editorial Board, *Geology*, 1995-2000, 2002-2004

Associate editor, *Palaios*, 2002 -

Initial Steering Committee, Geoinformatics Working Group, Division of Earth Sciences, National Science Foundation, 2000-2001

Convenor, NSF-sponsored workshop “Geobiology and the Earth Sciences in the Next Decade”, Washington, D.C., March, 1999

Past-President, President, President-elect, The Paleontological Society, 1996-2000

Committee of Visitors, Division of Earth Sciences, National Science Foundation, 1996

Co-editor, *Historical Biology*—an international journal of paleobiology, 1988-1993

Special Editor, *Evolution*, 1988-1994

Member, National Association of Geology Teachers-U.S.G.S. Cooperative Summer Field Training Program, 1988-1993

Associate Editor, *Paleobiology*, 1980-1989

Co-chair, Technical Services, 1987 Geological Society of America Annual Meeting, Phoenix, Arizona

Field Trip Leader, "Paleoecology and Taphonomy of Recent to Pleistocene Intertidal Deposits, Gulf of California", 1987 GSA Meeting, Phoenix

Co-convenor, 1986 North American Paleontological Convention Symposium: Biogeography of Extinction

Co-convenor, 1985 Paleontological Society Symposium: Evolutionary Paleobiogeography: Biogeographic Pattern and Evolutionary Process

Departmental Service

I served as Head of the Department of Ecology and Evolutionary Biology from 1997-1999. The Department had a faculty of 22, 12 postdocs, 60 graduate students, 800 undergraduate majors, and a staff of 15.

Departmental service in Geosciences has included participation in the following committees: graduate admissions, building design, computer services, promotion and tenure, faculty performance evaluation, and many faculty search committees. I served as chair of the faculty performance evaluation committee, four faculty search committees and the currently serve as the

chair of Graduate Policy Committee (oversees the department's graduate program). In 1991, I was the coordinating editor for the Department's ten-year academic program review.

University Service

Project Director and Executive Committee, Research Training Group: Analysis of Biological Diversification (a 5-department, NSF-funded, graduate and postdoctoral program) (1992-1994)

Representative, Graduate Council (represents Graduate College at Ph.D. orals and defenses) (1990-1998)

Chair, Graduate College Task Force on Graduate Teaching Assistant Training and Evaluation (1987-1988)

Member, El Coronado Ranch Advisory Committee (1983-1988)

University representative, Centro Intercultural de Estudios de Desiertos y Océanos (1992-2002)

Academic Assessment Team, Program for the Assessment of Institutional Priorities (PAIP) (1993)

University Award

Faculty of Science Award for Creative Teaching, 1988

Graduate students, post-doctoral students and visiting scientists

| M.S. | Ph.D. | Post-docs & Visiting Scientists |
|---------------------|--------------------------|--|
| Teresa Bone | Alan Cutler | John Alroy (post-doc) |
| Timothy Brown | David Goodwin | Sean Connally (post-doc) |
| Patricia Hartshorne | Michal Kowalewski | Franz Fürsich (visiting scientist) |
| Gretchen Hoffman | Keith Meldahl | Peter Holterhoff (post-doc) |
| Anthony Murer | Charlotte Otts | Michal Kowalewski (post-doc) |
| J. Lynn Myrick | Dena Smith | Peter Roopnarine (post-doc) |
| Richard Norris | | Marcello Simoes (visiting scientist) |
| Olivia Perez | <i>Current:</i> | Bernd Schöne (post-doc) |
| Glenn Richard | Guillermo Avila (@ UABC) | Dale Springer (visiting scientist) |
| Carlie Rodriguez | Carlos Cintra-Buenrostro | Sally Walker (research scientist) |
| Carmen Rosales | Kirsten Rowell | |
| Susan Sindlinger | Ta-Shana Taylor | <i>Current:</i> |
| Nancy Schmidt | | Allister Rees (research scientist) |
| Mary Watson | | |
| | | |
| <i>Current:</i> | | |
| Pennie Liebig | | |

PUBLICATIONS

Books

- Fürsich, F.T., and Flessa, K.W., eds., 1991. Ecology, taphonomy, and paleoecology of Recent and Pleistocene molluscan fauna of Bahia la Choya, northern Gulf of California. *Zitteliana* 18: 1-180.
- Flessa, K.W., ed., 1987. Paleocology and taphonomy of Recent to Pleistocene intertidal deposits, Gulf of California. Paleontological Society Special Publication 2, 237 p.

Journal Articles and Notes

Submitted manuscripts

- Avila-Serrano, G., Flessa, K.W., Miguel A. Téllez-Duarte, M.A. and Cintra-Buenrostro C.E., Distribution of the shelly intertidal macrofauna of the Colorado River delta, northern Gulf of California, México. *Pacific Science*. In revision.
- Rowell, K., Flessa, K.W. and Dettman, D., The importance of Colorado River flow to nursery habitats of the Gulf Corvina (*Cynoscion othonopterus*). *Canadian Journal of Fisheries and Aquatic Sciences*. In revision.

Manuscripts in press

- Cintra-Buenrostro, C.E., Flessa, K.W., and Avila-Serrano, G., 2005. Predatory damage in subfossil shells reveals consequences of reduced flow to the Colorado River estuary. *Palaios* 20:

Published journal articles

- Cintra-Buenrostro, C.E., and Flessa, K.W., 2004. Cavidades, mordiscos y peladas: herramientas para determinar la importancia trófica de una especie en desvanecimiento dentro del delta del río Colorado, México. *Ciencia y Mar* 8: 3-19.
- Dettman, D.L., Flessa, K.W., Roopnarine, P.D., Schöne, B.R., and Goodwin, D.H., 2004. The use of oxygen isotope variation in shells of estuarine mollusks as a quantitative record of seasonal and annual Colorado River discharge. *Geochimica et Cosmochimica Acta*. 68: 1253-1263
- Goodwin, D.H., Flessa, K.W., Téllez-Duarte, Dettman, D.L., Schöne, B.R. and Avila-Serrano, G.A., 2004. Detecting time-averaging and spatial mixing using oxygen isotope variation: a case study. *Palaeogeography, Palaeoclimatology, Palaeoecology* 205: 1-21..
- Liebig, P. M., Taylor, T.A. and Flessa, K.W., 2003. Bones on the beach: Marine mammal taphonomy of the Colorado Delta, Mexico. *Palaios* 18: 168-175.
- Rodland, D.L., Kowalewski, M., Dettman, D.L. Flessa, K.W., Atudorei, V, and Sharp, Z.D., 2003. High-resolution analysis of $\delta^{18}\text{O}$ in the biogenic phosphate of modern and fossil lingulid brachiopods. *Journal of Geology* 111: 441-453.
- Schöne, B.R., Flessa, K.W., Dettman, D.L. and Goodwin, D.H., 2003. Upstream dams and downstream clams: Growth rates of bivalve mollusks unveil impact of river management on estuarine ecosystems (Colorado River Delta, Mexico). *Estuarine, Coastal and Shelf Science* 54: 715-726.
- Flessa, K.W., 2002. Conservation paleobiology. *American Paleontologist*, 10 (1): 2-5.

- Schöne, B.R., Goodwin, D.H., Flessa, K.W., Dettman, D.L. and Roopnarine, P.D., 2002. Sclerochronology and growth of the bivalve mollusks *Chione (Chionista) fluctifraga* and *Chione (Chionista) cortezi* in the northern Gulf of California, Mexico. *The Veliger*, 45: 45-54.
- Schöne, B.R., Lega, J., Flessa, K.W., Goodwin, D.H. and Dettman, D.L., 2002. Reconstructing daily temperatures from growth rates of the intertidal bivalve mollusk *Chione cortezi* (northern Gulf of California, Mexico). *Palaeogeography, Palaeoclimatology, Palaeoecology* 184: 131-146.
- Glenn, E.P., Zamora-Arroyo, F., Nagler, P.L., Briggs, M., Shaw, W. and Flessa, K.W., 2001. Ecology and conservation biology of the Colorado River delta, Mexico. *Journal of Arid Environments*. 49: 5-15.
- Rodriguez, C., Flessa, K.W., Téllez-Duarte, M.A., Dettman, D.L. and Avila-Serrano, G.A., 2001. Macrofaunal and isotopic estimates of the former extent of the Colorado River estuary, Upper Gulf of California, México. *Journal of Arid Environments*, 49: 183-193.
- Goodwin, D.H., Flessa, K.W., Schöne, B.R. and Dettman, D.L., 2001. Cross-calibration of daily growth increments, stable isotope variation, and temperature in the Gulf of California bivalve mollusk *Chione (Chionista) cortezi*: Implications for paleoenvironmental analysis. *Palaios*, 16: 387-398.
- Rodriguez, C., Flessa, K.W. and Dettman, D.L., 2001. Effects of upstream diversion of Colorado River water on the estuarine bivalve mollusc *Mulinia coloradoensis*. *Conservation Biology*, 15: 249-258.
- Flessa, K.W. 2001. Time-averaging. In Briggs, D.E.G., and Crowther, P., eds. *Paleobiology II*. Blackwells, 292-296.
- Kowalewski, M., Avila Serrano, G.E., Flessa, K.W. and Goodfriend, G.A., 2000. Dead delta's former productivity: Two trillion shells at the mouth of the Colorado River. *Geology*, 28: 1059-1062.
- Flessa, K.W., 2000. Funding scenarios for an international research initiative in paleontology. In: Lane, R.H., Steininger, F.F., Kaesler, R.L., Ziegler, W. and Lipps, J., eds. *Fossils and the Future. Paleontology in the 21st Century*. Frankfurt, Senckenberg-Buch Nr. 74, pp. 13-18.
- Flessa, K.W. and Smith, D.M., 2000. Paleontology in academia: Recent trends and future opportunities. In: Lane, R.H., Steininger, F.F., Kaesler, R.L., Ziegler, W. and Lipps, J., eds. *Fossils and the Future. Paleontology in the 21st Century*. Frankfurt, Senckenberg-Buch Nr. 74, pp. 43-52.
- Flessa, K.W., and Steininger, F.F., 2000. Introduction: Dynamic history of the Earth-Life system. In: Lane, R.H., Steininger, F.F., Kaesler, R.L., Ziegler, W. and Lipps, J., eds. *Fossils and the Future. Paleontology in the 21st Century*. Frankfurt, Senckenberg-Buch Nr. 74, pp. i – v.
- Kowalewski, M. and Flessa, K.W., 2000. Seasonal predation of migratory shorebirds recorded in shells of brachiopods from Baja California, Mexico. *Bulletin of Marine Science* 66: 405-416.
- Kowalewski, M., Goodfriend, G.A. and Flessa, K.W., 1998. High-resolution estimates of temporal mixing within shell beds: The evils and virtues of time-averaging. *Paleobiology* 24: 287-304.
- Flessa, K.W., 1998. Well-traveled cockles: Shell transport during the Holocene transgression of the southern North Sea. *Geology* 26: 187-190.
- Goodfriend, G.A. and Flessa, K.W., 1997. Radiocarbon reservoir ages in the Gulf of California: Roles of upwelling and flow from the Colorado River. *Radiocarbon* 39: 139-148.

- Kowalewski, M., Dyreson, I., Marcot, J.D., Vargas, J.A., Flessa, K.W. and Hallman, D.P., 1997. Phenetic discrimination of biometric simpletons: Paleobiological implications of morphospecies in the lingulide brachiopod *Glottidia*. *Paleobiology*. 23: 444-532.
- Kowalewski, M., Flessa, K.W. and Marcot, J.D., 1997. Predatory scars on the shells of a Recent lingulide brachiopod: Paleontological and ecological implications. *Acta Palaeontologica Polonica*. 42: 497-532.
- Cadee, G., Walker, S. and Flessa, K.W., 1997. Shell repair in gastropods from Cholla Bay, Sonora, Mexico. *Palaeogeography, Palaeoclimatology, Palaeoecology* 126: 67-78.
- Goodfriend, G.A., Flessa, K. W. and Hare, P.E., 1997. Variation in amino acid epimerization rates and amino acid composition among shell layers in the bivalve *Chione* from the Gulf of California. *Geochimica et Cosmochimica Acta* 61: 1487-1493.
- Meldahl, K.H., Flessa, K.W. and Cutler, A.H., 1997. Time-averaging and postmortem skeletal survival in benthic fossil assemblages: Quantitative comparisons among Holocene environments. *Paleobiology*: 23: 207-229.
- Flessa, K.W. and Jablonski, D., 1996. The geography of evolutionary turnover: A global analysis of extant bivalves. *In*: Erwin, D., Jablonski, D., and Lipps, J., eds., *Evolutionary Paleobiology*, Univ. Chicago Press, p. 376-397.
- Kowalewski, M. and Flessa, K.W., 1996. Improving with age: The fossil record of lingulide brachiopods and the nature of taphonomic megabiases. *Geology* 24: 977-980.
- Hallman, D.P., Flessa, K.W., Kowalewski, M., Hertweck, G., Aggen, J. and Carlton, J., 1996. Ternary taphograms and the comparative taphonomy of Recent mollusks from the North Sea and the Gulf of California. *Senckenbergiana maritima* 27: 115-121.
- Kidwell, S.M. and Flessa, K.W., 1996. The quality of the fossil record: Populations, species and communities. *Ann. Rev. Earth Planet. Sci.* 24:433-464. [Reprint, with addendum, of Kidwell and Flessa (1995)]
- Myrick, J.L. and Flessa, K.W., 1996. Bioturbation rates in Bahia la Choya, Sonora, Mexico. *Ciencias Marinas* 22: 23-46.
- Springer, D.A. and Flessa, K.W., 1996. Faunal gradients in surface and subsurface shelly accumulations from a Recent clastic tidal flat, Bahia la Choya, northern Gulf of California, Mexico. *Palaeogeography, Palaeoclimatology, Palaeoecology* 126: 261-280.
- Cutler, A.H. and Flessa, K.W., 1995. Bioerosion, dissolution and precipitation as taphonomic agents at high and low latitudes. *Senckenbergiana maritima* 25: 115-121.
- Flessa, K.W. and Jablonski, D., 1995. Biogeography of Recent marine bivalve molluscs and its implications for paleobiogeography and the geography of extinction: A progress report. *Historical Biology* 10: 25-47.
- Kidwell, S.M. and Flessa, K.W., 1995. The quality of the fossil record: Populations, species, and communities. *Annual Reviews of Ecology and Systematics* 26: 269-299.
- Kowalewski, M. and Flessa, K.W., 1995. Comparative taphonomy and faunal composition of shelly cheniers from northeastern Baja California, Mexico. *Ciencias Marinas* 21: 155-177.
- Kowalewski, M., Flessa, K.W. and Hallman, D.P., 1995. Ternary taphograms: Triangular diagrams applied to taphonomic analysis. *Palaios* 10: 478-483.
- Flessa, K.W. and Kowalewski, M., 1994. Shell survival and time-averaging in nearshore environments: Estimates from the radiocarbon literature. *Lethaia* 27: 153-165.
- Kowalewski, M., Flessa, K.W. and Aggen, J.A., 1994. Taphofacies analysis of Recent shelly cheniers (beach ridges), northeastern Baja California, Mexico. *Facies* 31: 209-424.
- Kowalewski, M. and Flessa, K.W., 1994. A predatory drillhole in the lingulid *Glottidia palmeri*, Dall (Brachiopoda; Inarticulata) from the Recent tidal flats of the lower Colorado Delta, northeastern Baja California, Mexico. *Journal of Paleontology* 68: 1403-1405.

- Flessa, K.W., Cutler, A.H. and Meldahl, K.H., 1993. Time and taphonomy: Quantitative estimates of time-averaging and stratigraphic disorder in a shallow marine habitat. *Paleobiology* 19: 266-286.
- Flessa, K.W., 1993. Time-averaging and temporal resolution in Recent marine shelly faunas. *In*: Kidwell, S.M. and Behrensmeyer, A.K., eds. *Taphonomic Approaches to Time Resolution in Fossil Assemblages*. Paleontological Society Short Courses in Paleontology No. 6: 9-33.
- Flessa, K.W., Kowalewski, M. and Walker, S.E., 1992. Post-collection taphonomy: Shell destruction and the Chevrolet. *Palaios* 7: 533-554.
- Flessa, K.W. and Fürsich, F.T., 1991. Quantitative analyses of molluscan communities and taphocoenoses of Bahia la Choya (Gulf of California, Sonora, Mexico). *Zitteliana* 18: 79-88.
- Fürsich, F.T. and Flessa, K.W., 1991. The origin and interpretation of Bahia la Choya (northern Gulf of California) taphocoenoses: Implications for paleoenvironmental analysis. *Zitteliana* 18: 165-170.
- Fürsich, F.T., Flessa, K.W., Aberhan, M., Feige, A. and Schödelbauer, S., 1991. Sedimentary habitats and molluscan faunas of Bahia la Choya (Gulf of California, Sonora, Mexico). *Zitteliana* 18: 5-51.
- Flessa, K.W., 1991. Extinction. *McGraw-Hill Encyclopedia of Science and Technology*.
- Flessa, K.W., 1990. The "facts" of mass extinction. *In*: Sharpton, V.L. and Ward, P.D., eds., *Global catastrophes in Earth history: An interdisciplinary conference on impacts, volcanism, and mass mortality*. Geological Society of America Special Paper 247, pp. 1-7.
- Cutler, A.H. and Flessa, K.W., 1990. Fossils out of sequence: Computer simulations and strategies for dealing with stratigraphic disorder. *Palaios* 5: 227-235.
- Flessa, K.W., 1990. NSF funding for sedimentary geology. *Palaios* 5: 393.
- Flessa, K.W., 1990. All generalizations about NSF are false. Including this one. *Palaios* 5: 489-495.
- Meldahl, K.H. and Flessa, K.W., 1990. Taphonomic pathways and comparative ecologic and taphonomic facies in a modern intertidal/shallow shelf environment. *Lethaia* 23: 43-60.
- Flessa, K.W. and Hardy, M.C., 1988. Devonian conodont biogeography: Quantitative analysis of provinciality. *Historical Biology* 1: 103-134.
- Flessa, K.W. and Ekdale, A.A., 1987. Paleocology and taphonomy of Recent to Pleistocene intertidal deposits, Gulf of California. *In*: Davis, G.H., and VandenDolder, E.M., eds., *Geologic Diversity of Arizona and its Margins: Excursions to Choice Areas*. Arizona Bureau of Geology and Mineral Technology Special Paper 5, pp. 295-308.
- Hartshorne, P.M., Gillespie, W.B. and Flessa, K.W., 1987. Population structure of live and dead gastropods from Bahia la Choya. *In*: Flessa, K.W., ed., *Paleocology and Taphonomy of Recent to Pleistocene Intertidal Deposits, Gulf of California*. Paleontological Society Special Publication 2, pp. 139-149.
- Fürsich, F.T. and Flessa, K.W., 1987. Taphonomy of tidal flat molluscs in the northern Gulf of California: Paleoenvironmental analysis despite the perils of preservation. *Palaios* 2: 543-559.
- Jablonski, D. and Flessa, K.W., 1986. The taxonomic structure of shallow-water marine faunas: Implications for Phanerozoic extinctions. *Malacologia* 27: 43-66.
- Flessa, K.W. and others, 1986. Causes and consequences of extinction: Group report. *In*: Raup, D.M. and Jablonski, D., eds., *Pattern and Process of the History of Life*. Springer, pp. 235-257.
- Flessa, K.W. and Jablonski, D., 1985. Declining Phanerozoic background extinction rates: effect of taxonomic structure? *Nature* 313: 216-218.

- Flessa, K.W. and Thomas, R.H., 1985. Modeling the biogeographic regulation of evolutionary rates, pp. 355-376. *In*: Valentine, J.W., ed., *Phanerozoic Diversity Patterns: Profiles in Macroevolution*. Princeton Univ. Press.
- Jablonski, D., Flessa, K.W. and Valentine, J.W., 1985. Biogeography and paleobiology. *Paleobiology* 11: 75-90.
- Flessa, K.W. and Brown, T.J., 1983. Selective solution of macroinvertebrate calcareous hard parts: A laboratory study. *Lethaia* 16: 193-206.
- Flessa, K.W. and Jablonski, D., 1983. Extinction is here to stay. *Paleobiology* 9: 315-321.
- Flessa, K.W. 1981. Regulation of mammalian faunal similarity between the continents. *Jour. Biogeography* 8: 427-437.
- Heller, P.L. and Flessa, K.W., 1981. Comment on 'Late Oligocene transgression of middle Atlantic Coastal Plain.' *Geology* 9: 290-292.
- Flessa, K.W., 1980. Biological effects of continental drift and plate tectonics. *BioScience* 30: 518-523.
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