

David A. Burney

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EDUCATION:

Duke University Medical Center, Dept. Biological Anthropology & Anatomy, 1986-89.
Post-doctoral Research Associate.
Duke University, Durham, NC, 1983-86. Ph.D. Zoology, minor Botany.
University of Nairobi, Kenya, 1977-80. M.Sc. Conservation Biology.
North Carolina State University, Raleigh, NC, 1968-72. B.S. Zoology.

ACADEMIC AWARDS:

John Simon Guggenheim Memorial Foundation Fellowship (2005-06)
“An Ecological History of Prehistoric Kaua`i”
Duke University Teaching Fellowship (1983-84).
Rotary Foundation Graduate Fellowship (U. of Nairobi, 1977-78).
Aubrey Lee Brooks Memorial Scholarship (NCSU, 1968-72).

RESEARCH GRANTS AWARDED:

National Geographic Society, 2011-12, \$19,360. “Rodrigues Island as a Rosetta Stone for Understanding Late Prehistoric Extinctions.”
NSF Physical Anthropology, 2002-2006, \$191,498: “Integrated Analysis of Fossil Lemur Sites.”
NSF Physical Anthropology, 2000-2001, \$17,960: “High-risk Exploratory Research: Phreatic-zone Excavation and Integrated Site Analysis in Southwestern Madagascar.”
NSF Ecological Studies, 1997-2000, \$238,650: “Landscape-level Paleoecological Reconstructions for Kauai.”
National Geographic Society, 2001-2002, \$24,580: “Landscape Paleoecology and Integrated Site Analysis on Kaua`i.”
NOAA Human Dimensions of Global Change, 1994-98, \$109,422: “Impact of Human Activities and Climate Change in Madagascar, Hawaii, and Puerto Rico.”
NSF Ecological Studies, 1993-97, \$100,000: “Temporal Perspectives on Environmental Change and Extinction in Madagascar.”
NSF Conservation Biology, 1991-94, \$100,000: “Tropical Fire Histories from Charcoal Stratigraphy.”
NSF Instrumentation Grant (with J. Wehr) 1990-91, \$70,000: “Acquisition of Instrumentation for Enhancing Chemical Analyses in Ecological Research.”
National Geographic Society (with H.T. Wright) 1991-92, \$35,520: “Early Human Settlement on the Northwest Coast of Madagascar;” 1993, \$19,940:

“Environmental Change, Urban Development, and Urban Collapse in Northwestern Madagascar.”
NSF Geography and Regional Science (with G. Brook & J. Cowart) 1989-91, \$150,458: “Long Paleoenvironmental Records from African Cave Sediments.”
NSF Systematic Biology (with R.E. Dewar, R.D.E. MacPhee & N.A. Wells) 1985-87, \$160,000: “Extinction, Causation, and Explicit Tests: The Holocene Megafaunal Extinctions in Madagascar;” 1987-91, \$327,649: “Human Settlement, Environmental Change, and Megafaunal Extinction in Holocene Madagascar.”
Other grants from: NSF Dissertation Improvement Grants program, Smithsonian Institution, Wildlife Conservation Society, East African Wildlife Society, Nature Conservancy, NIH Biomedical, African Wildlife Foundation, Elsa Fund, Tinker Foundation, Fordham Faculty Research Grants, Duke University Graduate Travel Awards, Fauna Preservation Society of London, Kilauea Point Natural History Society, US Fish & Wildlife Service, USDA Natural Resources Conservation Service.

PROFESSIONAL EXPERIENCE:

Director of Conservation, National Tropical Botanical Garden, 2004-2012 (retired).
Professor of Conservation Paleobiology, 2011-present
Director of Living Collections and Horticulture, 2006-2008.

Co-Director, Kauaʻi Archaeological Field School Program, University of Hawaii-Manoa Anthropology Department, 2008-present.

Affiliate Graduate Faculty, UH Manoa Botany Department, 2009-present.

Professor, Dept. of Biological Sciences, Fordham University, 2004-2006.
Associate Professor (tenured 1994) Dept. of Biological Sciences, Fordham University, 1989-2003.

Associate Director, Fordham Environmental Studies Program, 2001-2006.

New York Botanical Garden, Instructor, Education Program, 1990-2003.

University of Hawaii, Kauaʻi Community College, Instructor, GIS/Remote Sensing Summer Course, 1998.

Duke University Medical Center, Dept. of Biological Anthropology & Anatomy, Post-doctoral Research Associate, 1986-89.

National Geographic Society and Duke University Primate Center, organizer of paleontological and paleoecological expeditions to Madagascar, 1984-present.

University of Nairobi, Botany Dept., Research Associate, 1984-85.

Duke University, Head Teaching Assistant, Ecology, 1983. Palynological Research Technician for D.A. Livingstone, 1982.

Nova Scientific Corporation, Div. of Carolina Biological Supply, Burlington, NC, Head of Scientific Publications Dept., 1981-82.

NC Division of Parks, Regional Naturalist, 1975-77, 1980-81; Naturalist, 1973-75.

OTHER WORK EXPERIENCE:

Technical consultant: contracts with United Nations Development Program, the National Museums of Kenya, The Nature Conservancy, Conservation International, World Wildlife Fund-International, BBC Natural History Unit, Discovery Channel, Walt Disney Productions, and other organizations to provide scientific and/or media assistance.

Television appearances: have made presentations on my research for the *National Geographic Channel*, *Discovery Channel*, *PBS*, and *Hawaii Public Television*.

Writer/photographer: author of *Back to the Future in the Caves of Kaua'i: A Scientist's Adventures in the Dark* (Yale Press); frequent contributor to popular magazines; have produced over 100 audiovisual programs on science subjects; have supplied photographs for books, brochures and gallery exhibitions. Received 1983 Award for Creative Excellence from the National Industrial Arts Film Festival for the educational filmstrip "The Cheetah: Portrait of an Endangered Species."

Board of Directors: North Salem Open Land Foundation (New York); Fordham U. Sigma Xi (President 1994-95); NC Friends of State Parks; Concerned Residents of North Salem; Hui o Laka (Kokee State Park); Botanical Gardens Conservation International-US..

Commercial Fisherman: First Mate aboard the *Carolina Princess*, 65-ft. seagoing vessel, February-June, 1980; continue to work 3.5 acre clam lease in Gloucester, NC and licensed to fish with crab pots, gill nets, and other commercial gear.

Part-time instructor at technical institutes (biological topics): Central Piedmont Community College, 1976; Stanly Technical Institute, 1974-76.

Farm manager, Garner, NC, 1972-73.

ADVANCED TECHNICAL TRAINING:

Quaternary Research Methods: seminars with D.A. Livingstone, Duke University, 1982, 1985.

Palynology: tutorials with Jean Maley and D.A. Livingstone, 1982-84.

Aerial Photography and Remote Sensing: course and laboratory experience with Siamak Khorram, Dept. of Forestry, N.C. State University, 1983.

Geographic Information Systems: intensive programming course in GIS techniques, Dept. of Electrical Engineering, NCSU, 1984.

Sediment Coring Techniques: tutorial and field work with D.A. Livingstone, 1983-84. Workshop experience in corer design and construction.

Multidisciplinary Excavation: post-doctoral training and professional collaborations with Ross MacPhee, Elwyn Simons, Henry Wright, Helen James and David Steadman.

Advanced speleological techniques: professional collaborations with George Brook.

Dating Methods: professional collaborations with Tom Stafford, Jr. (AMS ¹⁴C), James Cowart (U-series) and Gordon Jacoby (dendrochronology).

UNIVERSITY TEACHING EXPERIENCE:

Undergraduate: Ecology, Human Ecology, Honors Program Ecology, GIS/Remote Sensing, Paleobiology, Introductory Biology, Evolutionary Biology, Paleobotany, Biostatistics, Ethical Dimensions of Science, Natural History of the Hawaiian Islands, Archaeological Field Methods.

Graduate: Paleobiology, Biogeography, Palynology, Conservation Biology, Environmental Management, Mammalogy, Systematics.

Ph.D.'s mentored at Fordham University:

Reyes, Norman, 1993. *The modern diatom spectra of Madagascar and diatom-inferred late Quaternary climatic changes in northeastern and central Madagascar.*

Thomas, Patrick, 1996. *Behavioral and physiological responses of captive gaur (Bos gaurus) to stress.*

Colón, Christina, 1999. *Ecology of the Malay civet (Viverra zibellina) in a logged and an unlogged forest in Sabah, East Malaysia.*

Egan, Mary, 2000. *The identification of species by diagnostic molecular characters and the phylogenetic relationships of muntjac.*

Robinson, Guy, 2003. *Landscape paleoecology and late Quaternary extinctions in the Hudson Valley.*

Castellano, Christina, 2007. *Ecology and conservation of the wood turtle.*

Also mentored one M.S. thesis (Pravin Chandiramani).

At the Université d'Antananarivo (Madagascar), have co-mentored 8 graduate degrees..

UNIVERSITY SERVICE (FORDHAM):

Associate Director, Environmental Studies Program, 2001 – 2006.

Executive Committee, Honors Program, 2004

Faculty Task Force on Campus Culture, 2000

Member of University Research Council, 1994-2000.

Five Ecologist job-search committees, 1990-95.

University Science and Math Education Committee, 1994-95.

Master's Comprehensive Examiner, 1990-present.

Academic Computing Committee, 1989-90.

Graduate Curriculum Committee, 1994-present.

Departmental Graduate Admissions Committee, 1989-1998.

University Undergraduate Admissions Committee, 1993.

President, Fordham University Sigma Xi chapter, 1994-95. Board of Directors, 1989-present.

PROFESSIONAL SERVICE:

- Science Advisor: True Nature Foundation (The Netherlands); Makauwahi Cave Reserve (Kaua`i); Revive and Restore (San Francisco).
- Symposium Organizer: “Cave Research and Conservation” for the Natural History Conference II, New York State Museum, 1992.
“Bird and Mammal Research in New York State” for the Natural History Conference III, New York State Museum, 1993.
“Island Paleoeology: Draining the Past to Irrigate the Future” for the Society for Conservation Biology, Hilo, HI, 2001.
- Grant Proposal Reviewer: National Science Foundation, National Geographic Society, Eppley Foundation, NOAA Global Change Program.
- Journal Article Reviewer: *Nature*, *International Journal of Primatology*, *Evolutionary Anthropology*, *Quaternary Research*, *Palynology*, *Journal of Paleolimnology*, *National Geographic*, *Science*, *The Holocene*, *PNAS*, *Cave and Karst Studies*, *Journal of Quaternary Science*, *Quaternary Science Reviews*, *Pacific Science*.
- Interviewed by: *Science*, *The Nature Conservancy Magazine*, *Environmental Review*, *National Public Radio*, *Newsweek*, *New York Newsday*, *PBS-TV*, *Science Times Television*, and *Discovery Channel*.
- Participant in NASA-sponsored workshops and climate/vegetation databases, 1995,96,98.

FULL-LENGTH, PEER-REVIEWED PUBLICATIONS:

These are scientific journal articles, plus book chapters () that were subjected to substantial peer review. For non-reviewed publications, see next section “Other Relevant Publications.”*

- Burney, D.A., J.P. Hume, G. Middleton, L. Steel, L.P. Burney, and N. Porch, 2015. Stratigraphy and chronology of karst features on Rodrigues Island, SW Indian Ocean. *Journal of Cave and Karst Studies* 77(1):37-51. doi:10.4311/2013PA0132.
- Dietl, G.P., S.M. Kidwell, M. Brenner, D.A. Burney, K.W. Flessa, S.T. Jackson, and P.L. Koch, 2015. Conservation Paleobiology: Leveraging knowledge of the past to inform conservation and restoration. *Annual Reviews of Earth and Planetary Sciences* 43:3.1-3.25. doi: 10.1146/annurev-earth-040610-133349.
- Butler, R., D. Burney, and D. Walsh, 2014. Paleotsunami evidence on Kaua`i and numerical modeling of a great Aleutian tsunami. *Geophysical Research Letters* 41: 1-8; doi: 10.1002/2014GL061232.
- Thomson, V.A., O. Lebrasseur, J. J. Austin, T.L. Hunt, D.A. Burney, T. Denham, N. J. Rawlence, J.R. Wood, J. Gongora, L.G. Flink, A. Linderholm, K. Dobney, G. Larson, and A. Cooper, 2014. Reply to Beavan, Bryant, Storey and Matisoo-Smith: Ancestral Polynesian “D” haplotypes reflect authentic Pacific chicken lineages *Proceedings of the National Academy of Sciences, USA* 111 (35) E3585-E3586; doi:10.1073/pnas.1411566111

- Thomson, V.A., O. Lebrasseur, J. J. Austin, T.L. Hunt, D.A. Burney, T. Denham, N. J. Rawlence, J.R. Wood, J. Gongora, L.G. Flink, A. Linderholm, K. Dobney, G. Larson, and A. Cooper, 2014. Using ancient DNA to study the origins and dispersal of ancestral Polynesian chickens across the Pacific. *Proceedings of the National Academy of Sciences, USA* 111(13): 4826-4831; doi: 10.1073.pnas.1320412111
- Middleton, G.J. and D.A. Burney, 2013. Rodrigues – An Indian Ocean calcarenite: Its history, study and management. In, *Coastal Karst Landforms* (M.J. Lace and J.E. Mylroie, eds., pp. 261-276. Springer, Dordrecht. DOI 10/1007/978-94-007-5016-6_12. *
- Pedrono, M., O.L. Griffiths, A. Clausen, L.L. Smith, C.J. Griffiths, L. Wilme', and D.A. Burney, 2013. Using a surviving lineage of Madagascar's vanished megafauna for ecological restoration. *Biological Conservation* 159(2013): 501-506; doi: 10.1016/j.biocon.2012.11.027.
- Wood, K.R., D.A. Burney, A. Allison, and R. Fisher, 2013. *Emoia empar* (Squamata, Scincidae): not extinct in the Hawaiian Islands. *Oryx* 47(3): 328. Doi:10.1017.50030605313000616
- Vasey, N., D.A. Burney, and L.R. Godfrey, 2012. Coprolites associated with *Archaeolemur* remains in north-western Madagascar suggest dietary diversity and cave use in a subfossil prosimian. In, *Leaping Ahead: Advances in Prosimian Biology*, J. Masters, M. Gamba, and F. Genin, eds., pp. 149-156. Springer, Dordrecht. DOI 10.1007/978-1-4614-4511-1_17
- Burney, D.A., 2010. *Back to the Future in the Caves of Kaua'i: A Scientist's Adventures in the Dark*. New Haven, Yale University Press.
- Godfrey, L.R., W.L. Jungers, and D.A. Burney, 2010. Subfossil lemurs of Madagascar. In: L. Werdelin and W. Sanders, eds. *Cenozoic Mammals of Africa*. University of California Press, pp. 351-367.*
- McNeil, C.L., D.A. Burney, and L.P. Burney, 2010. Evidence disputing deforestation as the cause for the collapse of the ancient Maya polity of Copan, Honduras. *Proceedings of the National Academy of Sciences, USA* 107:1017-1022.
- Burney, David A. 2009. Climate Change. In *Encyclopedia of Islands*, edited by Rosemary G. Gillespie and David A Clague. Berkeley, California: University of California Press, pp. 169-171.*
- Burney, D.A. N. Vasey, L.R. Godfrey, Ramilisonina, W.L. Jungers, M. Ramarolahy, and L. Raharivony, 2008. New findings from Andrahomana Cave, southeastern Madagascar. *Journal of Cave and Karst Studies* 70(1): 13-24. .
- Burney, D.A., and G.S. Robinson, 2008. Excavating and interpreting flooded megafaunal sites. *Palaeontographica Americana* 61:43-48.
- Lemelin, P., M.W. Hamrick, B.G. Richmond, L.R. Godfrey, W.L. Jungers, and D.A. Burney, 2008. New hand bones of *Hadropithecus stenognathus*: Implications for

- the paleobiology of the Archaeolemuridae. *Journal of Human Evolution* 54: 405-413.
- Robinson, G.S. and D.A. Burney, 2008. The Hyde Park mastodon: Palynological clues to megafaunal extinction *Palaeontographica Americana* 61: 291-299.
- Ryan, T.M., D.A. Burney, L.R. Godfrey, U.B. Gohlich, W.L. Jungers, N. Vasey, Ramilisonina, A. Walker, and G.W. Weber, 2008. A reconstruction of the Vienna skull of *Hadropithecus stenognathus*. *Proceedings of the National Academy of Sciences, USA* 105 (31): 10698-10571.
- Brook, B.W., D. Bowman, D.A. Burney, T.F. Flannery, M.K. Gagan, R. Gillespie, C. N. Johnson, P. Kershaw, J.W. Magee, P.S. Martin, G.H. Miller, B. Peiser and R.G. Roberts, 2007. *Quaternary Science Reviews*, 26: 560-564
- Burney, D.A. and L.P. Burney, 2007. Paleoecology and “inter-situ” restoration on Kauaʻi, Hawaiʻi. *Frontiers in Ecology and the Environment* 5(9): 483-490.
- Goodman, S.M., N. Vasey, and D.A. Burney, 2007. Description of a new species of subfossil shrew tenrec (Afrosoricida: Tenrecidae: *Microgale*) from cave deposits in southeastern Madagascar. *Proceedings of the Biological Society of Washington* 120(4): 367-376.
- Burney, D.A., 2006. Finding the connections between paleoecology, ethnobotany, and conservation in Madagascar. *Ethnobotany Research and Applications* 3: 391-394 <http://www.ethnobotanyjournal.org/vol3/i1547-3465-03-385.pdf>.
- Burney, D.A., and W.K.P. Kikuchi, 2006. A millennium of human activity at Makauwahi Cave, Mahaʻulepu, Kauaʻi. *Human Ecology* 34:219-247. DOI: 10:1007/s10745-006-9015-3.
- Donlan, C.J., J. Berger, C.E. Bock, J.H. Bock, D.A. Burney, J.A. Estes, D. Foreman, P.S. Martin, G.W. Roemer, F.A. Smith, M.E. Soulé, and H.W. Greene, 2006. Pleistocene rewilding: An optimistic vision for 21st century conservation. *American Naturalist* 168: 660-681. DOI: 10.1086/508027
- Godfrey, L.R, Jungers, W.L., Burney, D.A., Vasey, N., Ramilisonina, Wheeler, W., Lemelin, P., Shapiro, L.J., Schwartz, G.T., King, S.J., Ramarolahy, M.F., Raharivony, L.L., and Randria, G.F.N., 2006. New discoveries of skeletal elements of *Hadropithecus stenognathus* from Andrahomana Cave, southeastern Madagascar. *Journal of Human Evolution* 51: 395-410. doi:10:1016/j.jhevol.2006.04.012.
- Goodman, S.M., N. Vasey, and D.A. Burney, 2006. The subfossil occurrence and paleoecological implications of *Macrotarsomys petteri* (Rodentia: Nesomyidae) in extreme southeastern Madagascar. *Comptes Rendus Paleovol* 5: 953-962. DOI: 10:1016/j.crvp.2006.09.008

- Krause, D.W., P.M. O'Connor, A.H. Rasoamiamanana, G.A. Buckley, D. Burney, M.T. Carrano, P.S. Chatrath, J.J. Flynn, C.A. Forster, L.R. Godfrey, W.L. Jungers, R.R. Rogers, K.E. Samonds, E.L. Simons, and A.R. Wyss, 2006. The importance of keeping the island's vertebrate fossils in the public domain. *Madagascar Conservation and Development* 1:43-47.
- Burney, D.A., and T.F. Flannery, 2005. Fifty millennia of catastrophic extinctions after human contact. *Trends in Ecology and Evolution* 20:395-401.
- Donlan, C.J., H.W. Greene, J. Berger, C.E. Bock, J.H. Bock, D.A. Burney, J.A. Estes, D. Foreman, P.S. Martin, G.W. Roemer, F.A. Smith, and M.E. Soulé, 2005. Rewilding North America. *Nature* 436:913-914.
- Godfrey, L.R., G.M. Semprebon, G.T. Schwartz, D.A. Burney, W.L. Jungers, E.K. Flanagan, F.P. Cuzzo, and S.J. King, 2005. New insights into old lemurs: The trophic adaptations of the Archaeolemuridae. *International Journal of Primatology* 26:825-854.
- Jungers, W.L., P. Lemelin, L.R. Godfrey, R.E. Wunderlich, D.A. Burney, E.L. Simons, P.S. Chatrath, H.F. James, and G.F.N. Randria, 2005. The hands and feet of *Archaeolemur*: metrical affinities and their functional significance. *Journal of Human Evolution* 49: 36-55.
- Perez, V.R., L.R. Godfrey, M.N. Nowak-Kemp, D.A. Burney, J. Ratsimbazafy, and N. Vasey, 2005. Evidence of early butchery of giant lemurs in Madagascar. *Journal of Human Evolution* 49:722-742.
- Robinson, G.S., L.P. Burney, and D.A. Burney, 2005. Landscape paleoecology and megafaunal extinction in southeastern New York State. *Ecological Monographs*, 75:295-315.
- Burney, D.A., L.P. Burney, L.R. Godfrey, W.L. Jungers, S.M. Goodman, H.T. Wright, and A.J.T. Jull, 2004. A chronology for late prehistoric Madagascar. *Journal of Human Evolution* 47:25-63.
- Burney, D.A., G.S. Robinson, and L.P. Burney, 2003. *Sporormiella* and the late Holocene extinctions in Madagascar. *Proceedings of the National Academy of Sciences, USA*. 100: 10800-10805.
- Burney, L.P., and D.A. Burney, 2003. Charcoal stratigraphies for Kaua'i and the timing of human arrival. *Pacific Science*. 57(2):211-226.
- Burney, D.A., 2003. Madagascar's prehistoric ecosystems. In, *The Natural History of Madagascar*, pp. 47-51, S. Goodman and J. Benstead, (eds.), Univ. Chicago Press, Chicago.*
- Burney, D.A., 2002. Late Quaternary chronology and stratigraphy of twelve sites on Kaua'i. *Radiocarbon* 44(1):13-44.

- Burney, D.A., H.F. James, L.P. Burney, S.L. Olson, W. Kikuchi, W.L. Wagner, M. Burney, D. McCloskey, D. Kikuchi, F.V. Grady, R. Gage, and R. Nishek, 2001. Fossil evidence for a diverse biota from Kaua'i and its transformation since human arrival. *Ecological Monographs* 71(4):615-641.
- Burney, D.A., 1999. Rates, patterns, and processes of landscape transformation and extinction in Madagascar. In, *Extinctions in Near Time: Causes, Contexts, and Consequences*, pp. 145-164, R. MacPhee, ed. Plenum, New York.*
- Burney, D.A., and Ramilisonina, 1998. The kilopilopitsofy, kidoky, and bokyboky: Accounts of strange animals from Belo-sur-mer, Madagascar, and the megafaunal "extinction window." *American Anthropologist*, 100(4): 1-10.
- Asquith, A., and D.A. Burney, 1998. Honey bees attracted to the semiochemical methyl eugenol, used for male annihilation of the Oriental Fruit Fly (Diptera: Tephritidae). *Proc. Hawaiian Entomological Society* 33:57-66.
- Jolly, D., I.C. Prentice, R. Bonnefille, A. Ballouche, M. Bengo, P. Brenac, G. Buchet, D. Burney, J-P. Cazes, R. Cheddadi, T. Ector, H. Elenga, S. Elmoutaki, J. Guiot, F. Laarif, H. Lamb, A-M. Lezine, J. Maley, M. Mbenza, O. Peyron, M. Reille, I. Reynaud-Farrera, G. Riollet, J.C. Ritchie, E. Roch, L. Scott, I. Ssemmanda, H. Straka, M. Umer, E. Van Campo, S. Vilimumballo, A. Vincens, and M. Waller, 1998. Biome reconstruction from pollen and plant macrofossil data for Africa and the Arabian peninsula at 0 and 6000 years. *Journal of Biogeography* 25:1007-1027.
- Burney, D.A., 1997a. Theories and facts regarding Holocene environmental change before and after human colonization. In, *Natural Change and Human Impact in Madagascar*, pp. 75-89, S.M. Goodman and B.D. Patterson, eds. Smithsonian Press, Washington.*
- Burney, D. A., 1997b. Tropical islands as paleoecological laboratories: gauging the consequences of human arrival. *Human Ecology*, 25:437-457.
- Burney, D.A., H.F. James, F.V. Grady, J.-G. Rafamantanantsoa, Ramilisonina, H.T. Wright, and J.B. Cowart, 1997. Environmental change, extinction, and human activity: evidence from caves in NW Madagascar. *Journal of Biogeography* 24:755-767.
- James, H.F., and D.A. Burney, 1997. The diet and ecology of Hawaii's extinct flightless waterfowl: evidence from coprolites. *Biological Journal of the Linnean Society* 62:279-297.
- Burney, D.A., 1996a. Paleoecology of humans and their ancestors. In, *East African Ecosystems and Their Conservation*, pp. 17-34. T.R. McClanahan and T.P. Young, eds., Oxford U. Press, New York.*

- Burney, D.A., 1996b. Climate change and fire ecology as factors in the Quaternary biogeography of Madagascar. In, *Biogéographie de Madagascar*, pp. 49-58. W. Lourenco, ed. ORSTOM, Paris.*
- Burney, D.A., 1996c. Historical perspectives on human-assisted biological invasions. *Evolutionary Anthropology* 4(6): 216-221.
- Wright, H.T., P. Verin, Ramilisonina, D.A. Burney, L.P. Burney, and K. Matsumoto, 1996. The evolution of settlement systems in the Bay of Boeny and the Mahavavy River Valley, north-western Madagascar. *Azania* 31:37-73.
- Burney, D.A., R.V. DeCandido, L.P. Burney, F.N. Kostel-Hughes, T.W. Stafford, Jr., and H.F. James, 1995. A Holocene record of climate change, fire ecology and human activity from montane Flat Top Bog, Maui. *Journal of Paleolimnology* 13: 209-217.
- Simons, E.L., D.A. Burney, P.S. Chatrath, L.R. Godfrey, W.L. Jungers, and B. Rakotosamimanana, 1995. AMS ¹⁴C dates on extinct lemurs from caves in the Ankarana Massif of northern Madagascar. *Quaternary Research* 43: 249-254.
- Burney, D.A., G.A. Brook, and J.B. Cowart, 1994. A Holocene pollen record for the Kalahari Desert of Botswana from a U-series dated speleothem. *The Holocene* 4(3): 225-232.
- Burney, D.A., L.P. Burney, and R.D.E. MacPhee, 1994. Holocene charcoal stratigraphy from Laguna Tortuguero, Puerto Rico, and the timing of human arrival on the island. *Journal of Archaeological Science* 21(3): 273-281.
- Dewar, R.E., and D.A. Burney, 1994. Recent research in the paleoecology of the highlands of Madagascar and its implications for prehistory. *Taloha* 12:79-87.
- Matsumoto, K., and D.A. Burney, 1994. Late Holocene environments at Lake Mitsinjo, northwestern Madagascar. *The Holocene* 4(1): 16-24.
- Burney, D.A., 1993. Late Holocene environmental changes in arid southwestern Madagascar. *Quaternary Research* 40: 98-106.
- Burney, D.A., and L.P. Burney, 1993. Modern pollen deposition in cave sites: Experimental results from New York State. *New Phytologist* 124: 523-535.
- Wright, H.T., R. Andrianalvoarivony, I. Bailiff, D. Burney, H. Haas, V. Raharijaona, S. Rakotovololona, D. Rasamuel, and R. Dewar, 1992. Datation absolue de sites archeologiques du centre de Madagascar: Presentation des determinations. *Taloha* 11: 121-146.
- MacPhee, R.D.E., and D.A. Burney, 1991. Dating of modified femora of extinct dwarf *Hippopotamus* from southern Madagascar: Implications for constraining human colonization and vertebrate extinction events. *Journal of Archaeological Science* 18: 695-706.

- Brook, G.A., D.A. Burney, and J.B. Cowart, 1990a. Desert paleoenvironmental data from cave speleothems with examples from the Chihuahuan, Somali-Chalbi, and Kalahari deserts. *Palaeogeography, Palaeoclimatology, Palaeoecology* 76: 311-329.
- Brook, G.A., D.A. Burney, and J.B. Cowart, 1990b. Paleoenvironmental data for Ituri, Zaire, from sediments in Matupi Cave, Mt. Hoyo. *Virginia Museum of Natural History Memoirs* 1: 49-70.
- Brook, G.A., D.A. Burney, J.B. Cowart, and B.B. Ellwood, 1990. Present and former deserts: Evidence of environmental change from cave sediments in East Africa and the American Southwest. *Studia Carsologica* 2: 19-28.
- Bliley, D.J., and D.A. Burney, 1988. Late Pleistocene climatic factors in the genesis of a Carolina bay. *Southeastern Geology* 29(2): 83-101.
- Burney, D.A., 1988. Modern pollen spectra from Madagascar. *Palaeogeography, Palaeoclimatology, Palaeoecology* 66: 63-75.
- Burney, D.A., 1987a. Late Holocene vegetational change in central Madagascar. *Quaternary Research* 28(1): 130-143.
- Burney, D.A., 1987b. Pre-settlement vegetation changes at Lake Tritrivakely, Madagascar. *Palaeoecology of Africa* 18: 357-381.
- Burney, D.A. 1987c. Late Quaternary stratigraphic charcoal records from Madagascar. *Quaternary Research* 28(2): 274-280.
- Burney, D.A., and L.P. Burney, 1987. Recent paleoecology of Nags Head Woods on the North Carolina Outer Banks. *Bulletin of the Torrey Botanical Club* 114(2): 156-168.
- MacPhee, R.D.E., D.A. Burney, and N.A. Wells, 1985. Early Holocene chronology and environment of Ampasambazimba, a Malagasy subfossil lemur site. *International Journal of Primatology* 6(5): 461-487.

OTHER RELEVANT PUBLICATIONS

Full-length, peer-reviewed publications in review (), short articles in peer-reviewed journals (**), conference proceedings and published abstracts (+), magazine articles (§), theses (t), and book reviews (r).*

- Burney, D.A., 2014. Foreword. *Extinct Madagascar: Picturing the Island's Past*, by S. M. Goodman and W.L. Jungers. Univ. Chicago Press, Chicago.
- Burney, D.A., 2013. Forbidden Island. *Private Journey*, winter, 2013.

- Burney, D., L.P. Burney, J. Juvik, M. McKenzie, and R. O'Brien, 2013. Hawaiian tortoise grazing experiments hope to replicate Round Island native ecosystem restoration success. *The Tortoise* 2:108-109. §
- Wood, K.R., D.A. Burney, A. Allison, and R. Fisher, 2013. *Emoia empar* (Squamata, Scincidae): not extinct in the Hawaiian Islands. *Oryx* 47(3): 328.
Doi:10.1017.50030605313000616 **
- Burney, D.A., 2012. Kilauea Point, past and future. In, *Keepers of the Light, Land, and Life: A Look at Kilauea Point over 100 years*, pp. 73-76, Kilauea Point Natural History Association.
- Burney, D.A., J.O. Juvik, L.P. Burney, and T. Diagne, 2012. Can unwanted suburban tortoises rescue native Hawaiian plants? *The Tortoise* 1: 104-115. §
- Burney, D.A., 2011. Rodrigues Island: Hope thrives at the François Leguat Giant Tortoise and Cave Reserve. *Madagascar Conservation and Development* 6(1):3-4. **
- Burney, D.A., 2010. Discovering an insect Armageddon (and 'one strange duck'). *Bulletin of the National Tropical Botanical Garden* XXVII(3): 22-26. §
- Burney, D.A., 2009. Are we naïve to think we can save rare plants from extinction? *Sibbaldia* 7: 61-76. §
- Burney, D.A. and L.P. Burney 2008. Inter situ conservation: Opening a "third front" in the battle to save rare Hawaiian plants. *BGjournal* 6(1): 16-19. §
- Burney, D.A. and L.P. Burney, 2008. Time portal. *Natural History* October, p. 74. §
- Burney, D.A. and L.P. Burney, 2007. Learning from the past to save plants for the future. *Public Garden* 3: 30-33. §
- Burney, D.A. and L.P. Burney, 2007. Ecological restoration through community outreach (and community outreach through ecological restoration). *The Bulletin of the National Tropical Botanical Garden* 25: 8-13. §
- Burney, D.A., 2006. Paleolithic art demystified. *Trends in Ecology and Evolution* 21:602-603. r
- Burney, D.A., and E. Dubey, 2006. Growing people: Community-based career development opportunities working with plants. *Plant Talk* 43: 46-47. §
- Burney, D.A., 2005. Digging into the past to find the future. *Plant Talk* 39:46-47. §
- Burney, D.A., and T.F. Flannery, 2005. Response to Wroe et al.: Island extinctions versus continental extinctions. *Trends in Ecology and Evolution* 21:63-64.**

- Burney, D.A., D. Bender, S. Perlman, C. Salvador, and C. Wichman, 2005. The National Tropical Botanical Garden: Creating a Genetic Safety Net for Hawaii's vanishing flora. *BG Journal* 2:17-19. §
- Burney, D.A., L.P. Burney, W.L. Jungers, and L.R. Godfrey, 2004. Radiocarbon dating of the extinctions in late prehistoric Madagascar. *American Journal of Physical Anthropology* Suppl. 38:70-71. +
- Burney, D.A., 2003. Box 5. Extinction in Madagascar: The anatomy of a catastrophe. *Evolutionary Anthropology* 12:261.**
- Perez, V.R., D.A. Burney, L.R. Godfrey, and M. Nowak-Kemp, 2003. Box 4. Butchered sloth lemurs. *Evolutionary Anthropology* 12:260.**
- Godfrey, L.R., G.M. Semprebon, G.T. Schwartz, D.A. Burney, W.L. Jungers, E.K. Flanagan, and S.J. King, 2003. What were the "monkey lemurs" of Madagascar up to? *American Journal of Physical Anthropology* Suppl. 36:182. +
- Burney, D.A., D.W. Steadman, and P.S. Martin, 2002. Evolution's second chance: forward-thinking paleoecologists advocate jump-starting diminishing biodiversity. *Wild Earth* 12(2):12-15. §
- Burney, D.A., 2002. Sifaka predation by a large boa. *Folia Primatologica* 73:144-145.**
- Burney, D.A., 2002. Understanding biological invasions in Hawaii. *Environmental Review* 9(4):1-8. Interview conducted by D. Taylor. §
- Burney, D.A., 2001. A down-under look at North America. *Natural History* 110(6):76-78. r
- Burney, D.A., 2002. Explicit tests for models of ecosystem collapse in late Holocene Madagascar. In, S. Leroy and I.S. Stewart, *Environmental Catastrophes and Recovery in the Holocene*, volume of abstracts, pp. 18-19. Brunel University, London (UK), 28 August-2 September, 2002. +
- Robinson, G., D.A. Burney, and L.P. Burney, 2001. Landscape paleoecology and late Quaternary extinctions in the Hudson Valley. *Geological Society of America Abstracts* 33(1):2743. +
- Burney, D.A., 2000. Watching from the Edge of Extinction. *Quarterly Review of Biology* 75:338-339. r
- Burney, D.A., 2000. Amazon Pollen Manual and Atlas. *Quarterly Review of Biology* 75:460. r
- Robinson, G., D.A. Burney, and L.P. Burney, 2000. Megafaunal fossil sites of the lower Hudson Valley region. *New York Natural History Conference* VI:41. +

- Martin, P.S. and D.A. Burney, 1999. Bring back the elephants! *Wild Earth*, Spring 1999, 57-64. Reprinted in *Whole Earth Magazine*. §
- Burney, D.A., W.L. Jungers, H.F. James, L.R. Godfrey, 1998. The paleoecology of *Archaeolemur*: An extinct prosimian for all seasons. In, XVIIth Congress of the International Primatological Society. +
- Godfrey, L.R., Ganzhorn, J., Jungers, W.L., Simons, E.L., Burney, D.A., and Rakotosamimanana, B., 1998. Primate communities of Madagascar: Past and present. In, XVIIth Congress of the International Primatological Society. +
- Burney, D.A., 1997. Rates, patterns and processes of landscape transformation and extinction in Madagascar. Proceedings of “Humans and other catastrophes: A new look at extinctions and the extinction process.” Symposium sponsored by the Center for Biodiversity and Conservation, American Museum of Natural History, April 17, 1997, 6 p. +
- Burney, D.A., 1996. Quaternary vegetation changes in Madagascar. In, *Pour la Création d'une Banque Africaine de Données Palynologiques*, Symposium proceedings, p. 4, Paris, 8-11 September. +
- Burney, D.A., and 11 co-authors, 1996. Belo-sur-mer and other integrated sites from Holocene Madagascar. *Paleontological Society Spec. Pub.* 8:56. +
- James, H.F., and D.A. Burney, 1996. Flightlessness and folivory in Hawaii's extinct flightless waterfowl. *Paleontological Society Spec. Pub.* 8:194. +
- Burney, D. A., 1995. Historical perspectives on biological invasions. Proceedings of the Seventh Annual Symposium on the Frontiers of Science, National Academy of Sciences, Irvine, CA, Nov. 2-4, 1995. 7 p. +
- Burney, D.A., 1995. Vinavina sy ny tena fiovan'ny tontolo iainana nisy nadritry ny vanim-potoana “Holocene” taloha sy taorian'ny fisian'ny olombelona (Malagasy, “Theories and facts on Holocene environmental change before and after human colonization”). In, *Fiovan'ny tontolo iainana eto Madagasikara* (D. Rakotondravony *et al.*, eds.). Field Museum Natural History, p. 108-109. +
- Burney, D.A., 1995. Animal extinctions in Madagascar: a real-life whodunnit. *Environmental Review* 2(12): 7-15. Interview, conducted by D. Taylor. §
- Burney, D.A., 1994. The consequences of human arrival in Madagascar, Puerto Rico, and the Hawaiian Islands. Proceedings of the Society for American Archaeologists, pp. 29-30. +
- Burney, D.A., and R.E. Dewar, 1994. The Giant Red Brick: changing views of human impact on Madagascar's environment. Proceedings of the American Anthropological Association. +

- Burney, D.A., D.W. Steadman, D.M. McCloskey, and L.P. Burney, 1994. Stratigraphy and paleoecology of the Otisville Mastodon Site. Proceedings of the New York Natural History Conference III. +
- Burney, D.A., 1993. Recent animal extinctions: recipes for disaster. *American Scientist* 81:530-541. §
 Reprinted in, Slatkin, M., ed., 1995. *Exploring Evolutionary Biology*, Sinauer Associates, Sunderland, Mass.
 Also reprinted in, *Current Issues in Geology: Selected Readings*, 1995 Edition.
- Burney, D.A., L.P. Burney, J.-G. Rafamantanantsoa, R.D. D'Arrigo, and G.C. Jacoby, 1993. Laminated sediment cores, tree-ring records, and laminated speleothems from Madagascar. *Eos* 4/20:93. +
- Burney, D.A., and L.P. Burney, 1992. Interpreting paleoecological records from cave sites: experimental results from New York State. Proceedings of the New York Natural History Conference II:30. +
- Burney, D.A., L.P. Burney, R. DeCandido, F. Kostel-Hughes, N. Reyes, and K. Matsumoto, 1992. Palynological indicators of human impacts on oceanic islands: examples from Madagascar, Hawaii, and Puerto Rico. *Bulletin of the Ecological Society of America* 73(2):129. +
- Burney, D.A., J.-G. Rafamantanantsoa, and T. Rakotondrazafy, 1990. Processes of environmental change and causes of extinction in Madagascar. Proceedings of the International Conference of Systematic and Evolutionary Biologists IV. +
- Burney, D.A., 1989. The piece of East Africa that slipped away. *Swara* 12(4):8-13. §
- Burney, D.A., and R.D.E. MacPhee, 1988. Mysterious island: What killed Madagascar's large native animals? *Natural History* 97(7): 46-55. §
- Burney, D.A., R.D.E. MacPhee, G. Rafamantanantsoa, T. Rakotondrazafy, and G.W. Kling, 1988. The roles of natural factors and human activities in the environmental changes and faunal extinctions of late Holocene Madagascar. Proceedings of the symposium *Early Man in Island Environments*, Oliena, Sardinia, p. 127. +
- MacPhee, R.D.E., and D.A. Burney, 1988. Recent extinctions in Madagascar and the West Indies: a comparison. Proceedings of the symposium *Early Man in Island Environments*, Oliena, Sardinia, p. 132. +
- Bliley, D.J., and D.A. Burney, 1987. Climatic factors in the genesis of a Carolina bay. American Society of Agronomy abstract #55-82. +
- Burney, D.A., and R.D.E. MacPhee, 1987. Holocene extinctions and environmental change in Madagascar and the West Indies. AAAS Pacific Division Symposium, p. 21. +

- Burney, D.A., R.D.E. MacPhee, R.E. Dewar, N.A. Wells, J.E. Andriamanantena, and M. Vuillaume-Randriamanantena, 1987. L'environnement au cours de l'Holocène et la disparition de la mégafaune à Madagascar: Quel rapport avec la conservation de la nature? In, *Priorités en Matière de Conservation des Espèces à Madagascar*. R. Mittermeier, et al., eds. IUCN, Gland, pp. 137-143. §
- Livingstone, D.A., J. Maley, M.A. Sowunmi, D. Burney, P. Bailey, L. Burney, A. Tucker, and J.M. Maitima, 1987. New pollen diagrams from tropical Africa. *INQUA XII*:214. +
- Burney, D.A., 1986. *Late Quaternary Environmental Dynamics of Madagascar*. Ph.D. dissertation, Duke University. Pub. No. 87-06,828, Univ. Microfilms International, Ann Arbor, MI. t
- Burney, D.A., R.D.E. MacPhee, R.E. Dewar, and N.A. Wells, 1986. Cause, effect, and megafaunal extinction in Holocene Madagascar: pollen and charcoal influx at Lake Kavitaha. *American Journal of Physical Anthropology* 69:182-183. +
- Livingstone, D.A., L.P. Burney, P. Bailey, D.A. Burney, and A.E. Tucker, 1986. Late Quaternary pollen diagrams from eastern tropical Africa. In, *The Longest Record*, Berkeley, CA. +
- Wells, N.A., D.A. Burney, R.D.E. MacPhee, R.E. Dewar, and H.F.S. Rakotovololona, 1986. Temporal change in production and erosion of Madagascar's lateritic regolith. *International Sedimentological Congress Abstracts* 12:327. +
- Wells, N.A., H.F.S. Rakotovololona, R.E. Dewar, R.D.E. MacPhee, and D.A. Burney, 1986. Stonelines demonstrate perpetually immature landscapes on lateritized metamorphic terrain in Madagascar. *Geological Society of America Annual Meeting*. +
- MacPhee, R.D.E., D.A. Burney, and N.A. Wells, 1985. Holocene environment and megafaunal adaptation in Madagascar. *American Journal of Physical Anthropology* 66:199-200. +
- Wells, N.A., R.D.E. MacPhee, D.A. Burney, E.L. Simons, P.J. Chatrath, R.E. Dewar, and M. Vuillaume-Randriamanantena, 1985. Geology of several Holocene fossil sites in Madagascar. NE section, *Geological Society of America* 17(1):69. +
- Wells, N.A., R.D.E. MacPhee, D.A. Burney, E.L. Simons, P.J. Chatrath, R. Dewar, and M. Vuillaume-Randriamanantena, 1984. Sedimentology of Ampasambazimba Marsh, one of Madagascar's best Holocene fossil deposits. *SEPM Technical Program*. +
- Burney, D.A., 1983. Tourismus in Ostafrika: Dauer-streß für Geparde? *Das Tier* (1):24-29. §

Livingstone, D.A., D.A. Burney, and 21 others, 1983. Potential sites for a long core in the East African Rift. *Bull. Centres Rech. Explor.-Prod. Elf-Aquitaine* 7(1):443-448. +

Burney, D.A., 1982. Life on the cheetah circuit. *Natural History* 91(5):50-59. §

Syndicated releases: *Scope* (South Africa)

Copel 21 (Japanese translation)

Burda (German translation)

Manchete (Brazil, Portuguese translation)

Burney, D.A., 1982. How to see more game. *Swara* 5(2):24-26. §

Burney, D.A., 1981. Man and the Mara cheetahs. *Wildlife News* 16(1):8-11. §

Burney, D.A., 1980. *The Effects of Human Activities on Cheetahs (Acinonyx jubatus Schr.) in the Mara Region of Kenya*. M.Sc. thesis, Univ. of Nairobi, 311 pp. t

Burney D.A., and L.P. Burney, 1979. Cheetah and man. *Swara* 2(2):24-29. §

Burney, D.A., and L.P. Burney, 1979. Cheetah and man, part II. *Swara* 2(3):28-32. §

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