

DAVID A. GRIMALDI
CURATOR AND PROFESSOR
DIVISION OF INVERTEBRATE ZOOLOGY

HIGHEST DEGREE EARNED

Ph.D.

AREA OF SPECIALIZATION

Systematics, paleontology, evolution of insects; amber fossils; structure of biological communities

EDUCATIONAL EXPERIENCE

B. Sc. University of Connecticut, 1979

M.Sc. in Evolutionary Biology, State University of New York, Binghamton 1983

Ph.D. in Entomology, Cornell University, 1986

PREVIOUS EXPERIENCE IN DOCTORAL EDUCATION

TEACHING

Adjunct Professor, City University of New York (Graduate Program in Ecology and Evolutionary Biology), 1988-present

Adjunct Professor, Cornell University (Department of Entomology), 1994-present

Adjunct Professor, Columbia University (Department of Ecology, Evolution, and Environmental Biology), 1995-present

CLASSES

City University of New York (CUNY), *Evolution and Systematics of Insects and Arachnids* (1991, 1995, 2004)

Cornell University, *Insect Systematics* (1993)

Columbia University, *Insect Diversity* (1998, 2000, 2001, 2003, 2005, 2007)

DOCTORAL ADVISEES

Carly Tribull, Richard Gilder Graduate School, co-advisor (present)

Phil Barden, Richard Gilder Graduate School (present)

Isabelle Veal, Richard Gilder Graduate School (present)

Craig Gibbs, CUNY (present)

Torsten Dikow, Cornell (2007)

Sara Lubkin, Cornell (2006)

DOCTORAL DISSERTATION COMMITTEES

Ansel Payne, Richard Gilder Graduate School (present)

Craig Gibbs, CUNY (present)

Torsten Dikow, Cornell (2007)

Sara Lubkin, Cornell (2006)

Caroline Chaboo, Cornell (2005)

Djunijanti Peggie, Cornell (2001)
Valerie Schawaroch, CUNY (2000)
Celeste Durando, CUNY (2000)

RESEARCH

RESEARCH INTERESTS

Diversity, fossil record, and evolution of insects; fossilization in amber; systematics of Drosophilidae and other Diptera; the evolution of biological communities, particularly tropical forests; extinction and environmental deterioration.

COLLECTION STEWARDSHIP

Development of world's largest collection of amber fossils, through acquisitions and fieldwork, including 8,000 specimens of amber fossils from the Miocene of the Dominican Republic and Oligocene of Mexico; 3,000 specimens of Eocene amber from Baltic region and India; and 7,000 specimens from the Cretaceous of New Jersey, Lebanon, Burma (Myanmar).

Curation and research on 3,000 specimens of fossil insects from the Lower Cretaceous Santana Formation of Brazil, donated by Herbert Axelrod.

Databasing (text and image) of amber and Santana Formation collections.

Development of largest and most diverse collection of Drosophilidae (Diptera) in the world, c. 400,000 specimens and 2,000 species, through field work and acquisitions.

TRAVEL

AFRICA:

Tanzania, 1995, biodiversity survey of Tarangire National Park.

Republic of South Africa, 2005: Kruger National Park; Pretoria (work at National Botanical Inst.)

ASIA:

Vietnam, 1998-2000, biodiversity surveys of protected forests (sponsored by NSF).

India, 2008-10, excavations of Paleo-Eocene amber from Gujarat, western India.

EUROPE:

Austria, 1996: Vienna, Salzburg

Denmark, 1998, work at Zoological Museum, Univ. Copenhagen.

England, 1990, 1995, 1999, 2000, 2002, work at Natural History Museum, London; Oxford U.

Germany, 1994; 1996, 2009, 2010, 2011: work at Stuttgart Museum; Humboldt Museum, Berlin.

Greece, 2007: Athens, Crete

Hungary, 1996, 2011: Budapest (work at Hungarian Natural History Museum).

Italy, 1995-2000: work at museums in Florence, Milan, Turin, Venice.

Poland: Pongracz, Cracow, Warsaw.

Russia, 1995, St. Petersburg, work at Zool. Instit., Ekaterininsky Palace; Moscow (Paleo. Inst.) 2002.

Slovakia, 1992, Bratislava: meetings.

The Netherlands, 1995: work at Leiden museum.

PACIFIC:

Hawaii, 1993: fieldwork on all the large islands

Fiji Islands, 2008: fieldwork on Vanua Levu and Viti Levu.

New Caledonia, 2008: fieldwork.

NORTH AMERICA:

Alaska, 1998, 2001: prospecting Cretaceous on peninsula, Kodiak Is., arctic tundra

Arizona, 1990-2000: field work on Diptera in southeastern Arizona.

Arkansas, 1992: field work on Diptera; excavations of Eocene amber (Claiborne Form.)

Florida, 1995-2000: field work on Diptera, principally in Everglades.

New Jersey, 1992-1998: excavations of Cretaceous amber.

South Dakota, 2010: Field work in Hell Creek Formation, Harding County.

Virginia: 1998-present: excavations of Triassic insects from the Cow Branch Formation.

Wyoming, 1997-1999: prospecting and excavations of K/T amber.

Washington state, 1994: Excavations of Eocene amber from Renton Formation.

Washington, D.C., 1985-present: yearly work at Smithsonian Institution.

Eastern United States, 1990- present: prospecting and excavations for Cretaceous amber outcrops.

SOUTH AND CENTRAL AMERICA, CARIBBEAN:

Costa Rica, 1989, 1991, 1993, 1995, 1999: Field work on Diptera.

Brazil, 2000: Field work on Diptera, plenary lecture at Int. Congr. Ent.

Dominican Republic, 1990, 1991, 1992, 1995: Biodiversity surveys of modern insect fauna and stratigraphic work on Miocene amber deposits.

French Guiana, 1997: Field work on Diptera.

Panama, 1985, 1988, 1999: Field work on Diptera.

Peru, 1984: Field work on Diptera.

Venezuela, 1989, 1991, 1993: Biodiversity surveys of tepuis; field work in Andes.

Virgin Islands (British and U.S.), 1990, 1992, 1993: Biodiversity surveys. Museum, Honolulu.

RESEARCH GRANT SUPPORT

NON-FEDERAL FUNDING

Private Donations from Mr. Robert G. Goelet, Dr. Herbert Axelrod, and others

National Geographic Society

Niarchos Award (AMNH)

FEDERAL GRANTS

5 National Science Foundation grants, from 1998 to present.

RECENT PUBLICATIONS (2006-2011)

Engel, M. S., H. Singh, P. C. Nascimbene, and D. Grimaldi. 2011. Termites (Insecta: Isoptera) in Early Eocene amber from western India, including the oldest higher termites, family Termitidae. *Zootaxa*, in press (Festschrift volume)

Engel, M. S., H. Singh, P.C. Nascimbene, and D. Grimaldi. 2011. Webspinners (Insecta: Embiodea) in Early Eocene amber from western India. *Zootaxa*, in press (Festschrift volume).

- Heinrichs, J., M.E. Reiner-Drehwald, K. Feldberg, D. A. Grimaldi, P. C. Nascimbene, M. von Konrat, and A. R. Schmidt. 2011. *Kaolakia borealis* no. gen. et sp. (Porellales, Jungermanniopsida): a leafy liverwort from the Cretaceous of Alaska. *Review of Palaeobotany and Palynology* 165: 235-240.
- Wegeriek, P. and D. A. Grimaldi. 2010. A new subfamily of aphids (Hemiptera, Aphidomorpha) from the Early Cretaceous Lebanese amber, with a description of the oldest apterous morphs. *Acta Geologica Sinica* 84(4): 665-672 [English edition of Proceedings volume].
- Grimaldi, D. and H. Singh. 2011. The extinct genus *Pareuthychaeta* in Paleogene ambers (Diptera: Diastatidae). *The Canadian Entomologist*, in press.
- Bisulca, C., P. C. Nascimbene, L. Elkin, and D. Grimaldi. 2010. Variation in the deterioration of fossil resins and implications for the conservation of fossils in amber. *American Museum Novitates*, in press.
- Endara, L. and D. Grimaldi. 2010. Lord of the Flies: Pollination of *Dracula* orchids. *Lankesteriana* 10: 1-11.
- Pohl, H., B. Wipfler, D. Grimaldi, F. Beckman, and R. G. Beutel. 2010. Reconstructing the anatomy of the 42 million-year-old fossil *Mengea tertiaria* (Insecta, Strepsiptera). *Naturwissenschaften* 97(9): 855-859.
- Ware, J. and D. Grimaldi. 2010. Two new species of *Neotermes* (Isoptera: Kalotermitidae) from Fiji. *Entomologica Americana*, in press.
- Ware, J., D. Grimaldi, and M. S. Engel. 2010. The effects of fossil placement and calibration on divergence times and rates: An example from the termites (Insecta: Isoptera). *Arthropod Structure and Development* 39: 204-219.
- Grimaldi, D. 2010. 400 million years on six legs: On the origins and early evolution of the Hexapoda. *Arthropod Structure and Development* 39: 191-203.
- Grimaldi, D. and M. S. Engel (eds.), 2010. (Introduction to special issue) Arthropod fossils and phylogeny. *Arthropod Structure and Development*, vol. 39, issues 2-3.
- Azar, D., M. S. Engel, and D. Grimaldi. 2010. A new genus and species of Sphaeropsocidae in Early Cretaceous amber from Lebanon. *Annals de la Société Entomologique de France* 46, in press.
- Peñalver, E. and D. Grimaldi. 2010. Latest occurrences of the Mesozoic family Elcanidae (Orthoptera) in Cretaceous amber from Myanmar and Spain. *Annals de la Société Entomologique de France* 46, in press.
- Ouvrard, D., D. Burckhardt, D. Azar, and D. Grimaldi. 2010. Non-jumping plant-lice in Cretaceous amber (Hemiptera: Sternorrhyncha: Psylloidea). *Systematic Entomology* 35: 172-180.
- Chatzimanolis, S., M. S. Engel, A. F. Newton, and D. A. Grimaldi. 2010. New ant-like stone beetles in mid-Cretaceous amber from Myanmar (Coleoptera: Staphylinidae: Scydmaenidae). *Cretaceous Research* 31: 77-84.
- Knight, T., P. S. Bingham, D. A. Grimaldi, K. Anderson, R. D. Lewis, and C. E. Savrda. 2010. A new Upper Cretaceous (Santonian) amber deposit from the Eutaw Formation of eastern Alabama, USA. *Cretaceous Research* 31: 85-93.
- Grimaldi, D. 2009. The *Asteioinea* of Fiji (Insecta: Diptera: Periscelididae, Asteiidae, Xenasteiidae). *American Museum Novitates* 3671: 59 pp
- . Grimaldi, D. 2009. Pushing back amber production. *Science* 326: 51-52.

- Grimaldi, D. 2009. Review of: *Voyages of Discovery, A Visual Celebration of Ten of the Greatest Natural History Expeditions*, by T. Rice. Buffalo, NY: Firefly. *Quarterly Review of Biology* 84: 279-281.
- Grimaldi, D. 2009: Did Disease Indeed Destroy the Dinosaurs? Review of: *What Bugged the Dinosaurs? Death and Disease in the Cretaceous*, by G. O. Poinar Jr. and R. Poinar. Princeton Univ. Press (2008). *Bioscience* 59: 446-447.
- Krishna, K. and D. Grimaldi. 2009. Diverse Rhinotermitidae and Termitidae (Isoptera) in Dominican amber. *American Museum Novitates* 3640: 48 pp.
- Engel, M.S., D. Grimaldi, and K. Krishna. 2009. Termites: their phylogeny and rise to ecological dominance. *American Museum Novitates* 3650: 27 pp.
- Grimaldi, D.A., J. Cumming, and A. Arillo. 2009. The Chimeromyiidae, a new family of Eremoneura Diptera in amber from the Early Cretaceous. *Zootaxa* 2078: 34-54.
- Engel, M. S. and D. A. Grimaldi. 2009. Diversity and phylogeny of the Mesozoic wasp family Stigmaphronidae (Hymenoptera: Ceraphronoidea). *Denisia* 26: 53-68 [special issue on amber].
- Marshall, S. A., M. Buck, J. H. Skevington, and D. Grimaldi. 2009. A revision of the family Syringogastridae (Diptera: Diopsoidea). *Zootaxa* 1996: 1-80.
- Engel, M.S. and D. A. Grimaldi. 2008. A jugular-horned beetle in Cretaceous amber from Myanmar (Coleoptera: Prostomidae). *Alavesia* 2: 215-218.
- Engel, M. S. and D. A. Grimaldi. 2008. Diverse Neuropterida in Cretaceous amber, with particular reference to the paleofauna of Myanmar (Insecta). *Nova Supplementa Entomologica, Keltern (Deutsches Entomologisches Institut)* 20: 1-86.
- Grimaldi, D. A., M. S. Engel, and K. Krishna. 2008. The species of termites (Insecta: Isoptera) from the Early Cretaceous Crato Formation: A revision. *American Museum Novitates* 3626: 30 pp.
- Cognato, A. I. and D. A. Grimaldi. 2009. 100 million years of morphological stasis in bark beetles (Coleoptera: Curculionidae: Scolytinae). *Systematic Entomology* 34: 93-100.
- Grimaldi, D. A. and A. Arillo. 2008. The Tethepomyiidae, a new family of enigmatic Cretaceous Diptera. *Alavesia* 2: 259-265.
- Grimaldi, D. and D. Triplehorn. 2008. Insects from the Late Miocene Grubstake Formation of Alaska. *American Museum Novitates* 3612: pp.
- Grimaldi, D. A. and M. S. Engel. 2008. A termite bug in Early Miocene amber of the Dominican Republic (Heteroptera: Termitaphididae). *American Museum Novitates* 3619: 10 pp.
- Grimaldi, D. and D. Triplehorn. 2008. Insects from the Upper Miocene Grubstake Formation of Alaska. *American Museum Novitates* 3612: 19 pp.
- Grimaldi, D. A. 2008. A stalk-eyed ephydroid fly from the Eocene. *Proceedings of the Entomological Society of Washington* 110: pp
- Grimaldi, D. A. and M. S. Engel. 2008. An unusual, primitive piesmatid (Insecta: Heteroptera) in Cretaceous amber. *American Museum Novitates* 3611: 17 pp..
- Willkommen, J. and D. A. Grimaldi. 2007. Diptera: true flies, gnats, and crane flies. pp. 369-387, In: *ibid.*

- Grimaldi, D. A. 2007. Mantodea: praying mantises (pp. 234-238) In: D. M. Martill, G. Bechly, R. F. Loveridge (eds.), *The Crato Fossil Beds of Brazil, Window into an Ancient World*. Cambridge Univ. Press. xvi + 625 pp.
- Engel, M.S., D. Grimaldi, and K. Krishna. 2007. Synopsis of Baltic amber termites (Isoptera). *Stuttgarter Beiträge zur Naturkunde (B)* 372: 20 pp.
- Engel, M.S., D. Grimaldi, and K. Krishna. 2007. Primitive termites from the Early Cretaceous of Asia. *Stuttgarter Beiträge zur Naturkunde (B)*, 371: 32 pp.
- Grimaldi, D. A. and M. S. Engel. 2007. Why descriptive science still matters. *Bioscience* 57: 646-647.
- Engel, M.S. and D. A. Grimaldi. 2007. The neuropterid fauna of Dominican and Mexican amber (Neuropterida: Megaloptera, Neuroptera). *American Museum Novitates* 3587: 58 pp.
- Engel, M. S. and D. A. Grimaldi. 2007. New false fairy wasps in Cretaceous amber from New Jersey and Myanmar (Hymenoptera: Mymarommatoidea). *Transactions of the Kansas Academy of Science* 110: 159-168.
- Liu, Z., M. S. Engel, and D. Grimaldi. 2007. Phylogeny and geological history of the cynipoid wasps (Hymenoptera: Cynipoidea). *American Museum Novitates* 3583: 48 pp.
- Grimaldi, D. A. and M. S. Engel. 2007. Why descriptive science still matters. *BioScience* 57: 646-647.
- Lo, N., M. S. Engel, S. Cameron, C. A. Nalepa, G. Tokuda, D. Grimaldi, O. Kitade, K. Krishna, K.-D. Klass, K. Mackawa, T. Miura, G. J. Thomspon. 2007. Save Isoptera: A comment on Inward et al. *Biology Letters* 3: 562-563.
- Blagoderov, V., D.A. Grimaldi, and N. Fraser. 2007. How time flies for flies: Diverse Diptera (Insecta) from the Late Triassic of eastern North America. *American Museum Novitates* X: 1-39.
- Engel, M.S. and D.A. Grimaldi. 2007. Cretaceous Scolebythidae and phylogeny of the family (Hymenoptera: Chrysidoidea). *American Museum Novitates* 3568: 1-16.
- Amorim, D. S. and D. Grimaldi. 2006. Valeseguyidae, a new family of Diptera in the Scatopsoidea, with a new genus in Cretaceous amber from Myanmar. *Systematic Entomology* 29: 1-9.
- Engel, M.S., and D.A. Grimaldi. 2006. A diminutive peleciniid wasp in Cretaceous amber from New Jersey (Hymenoptera: Peleciniidae). *Northeastern Naturalist* 13: 291-297.
- Engel, M.S., and D.A. Grimaldi. 2006. The first Cretaceous spider wasp (Hymenoptera: Pompilidae). *Journal of the Kansas Entomological Society* 79: 359-368.
- Grimaldi, D.A., and M.S. Engel. 2006. Extralimital fossils of the Gondwanan family Sphaeropsocidae (Psocodea). *American Museum Novitates* 3523: 1-18.
- Peñalver, E., and D.A. Grimaldi. 2006. New data on Miocene butterflies in Dominican amber (Lepidoptera: Riodinidae and Nymphalidae) with the description of a new nymphalid. *American Museum Novitates*. 3519: 1-17.
- Peñalver, E., D.A. Grimaldi, and X. Delclòs. 2006. Early Cretaceous spider web with its prey. *Science* 312: 1761.
- Peñalver, E., M.S. Engel, and D.A. Grimaldi. 2006. Fig wasps (Hymenoptera: Agaonidae) in Miocene amber from the Dominican Republic. *American Museum Novitates* 3541: 1-16.

SPECIAL RECOGNITION/AWARDS

2007: Thomas Say Award, Entomological Society of America, for "distinguished contributions to insect systematics"..