

The New NABA Names Committee: Members and Procedures

by Dick Vane-Wright¹ and
Jeffrey Glassberg²

A revived NABA Names Committee has been formed to work towards a new, *Third Edition* of the *NABA Checklist of North American Butterflies*. The Committee has two subcommittees. The responsibility of the Scientific Names Subcommittee is to determine the scientific names that NABA

will use in communicating information about North American butterflies. The responsibility of the English Names Subcommittee is to determine the English names that NABA will use in communicating information about North American butterflies and also to determine which species have been recorded in the United States and Canada.

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The Members of the new Scientific Names Subcommittee are, in alphabetical order:

Michael Braby (Australia)
Marc Epstein (USA)
Jeff Glassberg (USA; President of NABA, *ex officio*)
Peter W. Hall (Canada)
Yu-Feng Hsu (Taiwan)
Torben Larsen (Denmark)
David Lohman (USA)
Naomi Pierce (USA)
Malcolm Scoble (UK)
John Tennent (UK)
Dick Vane-Wright (UK; Chair/Secretary)
Angel Vilorio (Venezuela)
Shen-Horn Yen (Taiwan)

The Members of the new English Names Subcommittee are, in alphabetical order:

Alana Edwards (USA)
Fred Heath (USA)
Jeffrey Glassberg (USA)
Jim Springer (USA)
Julie West (USA)

Dick Vane-Wright and Jeffrey Glassberg will co-chair the Committee, with Vane-Wright Chair of the Scientific Names Subcommittee and Glassberg Chair of the English Names Subcommittee. Brief statements of interest for all Members of the Names Committee are now available on the NABA website. One or more additional members may be added in the future; if so, they will be noted on the website and in *American Butterflies*.

The new Names Committee includes a majority of members who are engaged in butterfly systematics and is considerably larger and more international than the Committees that produced the First and Second NABA Checklists. None of the Members is primarily or even largely involved in the systematics of North American butterflies. Some work on moths, while others are involved with identification guides or conservation projects, and yet others with major initiatives on electronic access and databases (and thus

have a special appreciation of the value of a stable nomenclature). Reasons for this change in NABA practice include the advantages of being able to put the checklist in a truly international context, and the need to deal with increasing technical sophistication of many taxonomic works. There is also the issue of engagement — those actively involved with Lepidoptera systematics and biology are strongly motivated with respect to the issues involved. Even so, the new Committee will need to be very mindful of the risks posed by self-evaluation, collegial deference and specialization.

General aims

Butterfly names are used for communication. Crucially, communication occurs within the community at large, not at individual or even peer-group level. Language only has meaning when users have a consensus about what words mean. Prior to NABA's formation, each author of a book or paper on North American butterflies used whatever names or authority they preferred, resulting in much confusion and uncertainty.

The first goal of the new Names Committee will be to carry out the research to underpin a new *Third Edition* by considering all cases for addition or deletion of species, or changes in the names of currently listed species, from the *Second Edition* of the NABA checklist, working with essentially the same ground rules and procedures adopted for the second edition (included in the summary below). Thus the starting point will be the *Second Edition* (available online at <http://www.naba.org/pubs/checklst.html>).

The new checklist, when complete, will aim to document all butterfly species that occur or are known to have occurred in North America north of Mexico, and in Hawaii. This will serve, in the same way as the First and Second editions, as a basis for keeping local and other special lists up to date, and to standardize the names of North American butterflies as a major contribution to effective communication about them and their biology.

The First and Second editions

One of NABA's first actions after its establishment was to form an English Names Committee. Its results were published in 1995 as the *First Edition* of the *Checklist and English Names of North American Butterflies*. The Introduction to the *First Edition* provided a discussion of policies regarding the selection of English names. In a remarkably short time it led to much greater agreement on the names used for North American butterflies, and both the vernacular and scientific names used have since been adopted in numerous books and papers.

In preparing the *Second Edition*, the then names committee independently evaluated the status of the scientific names employed, with special reference to species. In doing so the members were guided by two important principles. First, the starting point for all discussion was the *First Edition*. The status of a taxon was not changed (e.g. from subspecies to species or *vice versa*) unless the committee found compelling evidence that the status accorded in the *First Edition* should be altered. Second, in considering information relevant to a possible change in status, only published data were taken into account. The committee endeavoured to locate all publications that contained new data or rational arguments based on existing data that made a case for a status other than the one presented in the *First Edition*, and contacted various forums and specialists requesting notification of such publications.

A very large number of subspecies of North American butterflies have been named. In many cases these have little biological meaning or significance. In general the NABA list does not include or address the names of subspecies. Exceptions include those argued persuasively by some to warrant full species status, subspecies of conservation concern, or subspecies that are particularly well-marked or are well-known for other reasons. This policy will continue in the *Third Edition*.

Further principles

Given the rapidly burgeoning interest in butterflies by the public, and the concomitant increase in the use of butterfly names by thousands of individuals, and by environmental and governmental organizations, there is a very strong case that their names should no longer be decided by the predilections or whims of individual authors. Some argue that nomenclature changes inevitably, and that to seek stability, as NABA does, is quixotic, misguided or even downright wrong. But this view creates a straw man – that the NABA Checklist will not change even in the face of fresh knowledge. The NABA Checklist *has* changed and will continue to change in response to welcome, secure increases in our knowledge of the butterflies. However, the NABA Checklist does not change in response to each new taxonomic hypothesis at the time that it is put forward – many of which prove to be non-compelling, transitory or incorrect.

Thus, in completing the *Second Edition*, in some cases it was decided to retain the status of a taxon given in the *First Edition*, even though one or more authors had subsequently treated the taxon differently. In the view of the committee, while most of those articles presented valuable new information, they did not provide conclusive evidence to justify change at that time.

In some cases more evidence may now be available, and all cases are open to re-evaluation for the *Third Edition* – but the basic criterion will remain the same: the Names Committee must deem that evidence for change (based on the reinterpretation of existing data and/or new data) is *compelling*. This is because re-evaluating the status of each taxon based upon a preponderance of the evidence (rather than compelling evidence) leads to nomenclatural instability.

Imagine a pair of taxa for which there is disagreement as to whether they are well-defined subspecies or a single species. There are many such pairs among North American butterflies. Now imagine that one could



Martin Reid



Jeffrey Glassberg



Jan Dauphin



Dave Hanson



Gil Quintanilla



Jeffrey Glassberg



Dave Hanson



Jim Snyder

Species not listed in the NABA Checklist (2nd Edition) and now possibly credibly reported (with photos of a live individual) from the United States with tentative scientific names. **Top left:** *Mimoides phaon*. Oct 23, 2008. Santa Ana NWR, Hidalgo Co., TX. **Top right:** *Itaballia demophile*. Dec. 7, 2004. National Butterfly Center, Hidalgo Co., TX. **2nd row left:** *Pieriballia viardi*. Dec. 6, 2005. Bentsen SP, Hidalgo Co., TX. **2nd row right:** *Melete lycimnia*. **3rd row left:** *Rekoa stagira*. Dec. 28, 2005. National Butterfly Center, Hidalgo, TX. **3rd row right:** *Ziegleria guzanta*. Oct. 21, 2007. Falcon SP, Starr Co., TX. **Bottom row left:** *Ziegleria syllis*. Jan. 4, 2009. Mission, Hidalgo Co., TX. **Bottom right:** *Zizina otis*. March 16, 2008. Oahu, HI.



Dave Hanson



Terry Fuller



Berry Nall



Randy Emmitt



Jan Dauphin



Dave Hanson



Dave Hanson



Jeffrey Glassberg

Species not listed in the NABA Checklist (2nd Edition) and now possibly credibly reported (with photos of a live individual) from the United States with tentative scientific names. **Top left:** *Dynamine postverta*. Dec 3, 2005. National Butterfly Center, Hidalgo Co., TX. **Top right:** *Archaeoprepona demophon*. Nov. 19, 2007. National Butterfly Center, Hidalgo Co., TX. **2nd row left:** *Anaea forreri*. Nov. 17, 2007. Falcon Heights, Starr Co., TX. **2nd row right:** *Greta morgane*. Dec. 8, 2004. National Butterfly Center, Hidalgo Co., TX. **3rd row left:** *Pteronymia cotytto*. Dec. 6, 2005. World Birding Center, Hidalgo, TX. **3rd row right:** *Melinaea lilis*. Dec. 20, 2008. Hidalgo Pumphouse, Hidalgo Co., TX. **Bottom row left:** *Phocides belus*. April 13, 2003. Bentsen SP, Hidalgo Co., TX. **Bottom right:** *Urbanus evona*. Dec. 6, 2003. National Butterfly Center, Hidalgo Co., TX.



Dan Hardy



Phil Kelly



Dave Hanson



Jeffrey Glassberg

Species not listed in the NABA Checklist (2nd Edition) and now possibly credibly reported (with photos of a live individual) from the U.S. with tentative scientific names. **Top left:** *Achalarus tehuana*. Aug. 2, 2010. Hidalgo Co., TX. **Top right:** *Anastrus semipternus*. Nov. 26, 2004. World Birding Center, Hidalgo Co., TX. **Bottom row left:** *Achlyodes pallida/selva*. Oct. 24, 2003. Hidalgo Co., TX. **Bottom right:** *Heliopetes sublinea*. Oct. 21, 2007. Falcon SP, Starr Co., TX.

objectively quantify the published evidence (one cannot) regarding the species-subspecies question for these taxa and that at the time of the *First Edition* the evidence was ambiguous but, on balance, slightly favored the hypothesis that the two taxa were subspecies; that at the time of considering information for the *Second Edition* the evidence was still ambiguous but, on balance, slightly favored the hypothesis that the two taxa were species; and that at the time of considering information for the *Third Edition*, the evidence is still ambiguous but, on balance, slightly favors the hypothesis that the two taxa are subspecies. Many, perhaps most, taxonomists would treat the two taxa as subspecies on the first list, as species on the second, and as subspecies again on the third.

The major purpose of names, whether they are English or scientific, is to allow people to communicate with each other. The NABA checklist is based on the strong belief that this purpose is best served by being conservative in name changes. So, in the imaginary case just presented, the two taxa would be treated as subspecies in all three lists (but with a

note that some believed them to be separate species). In this example the two modes of evaluation eventually lead to the same result, but making changes based only on compelling evidence results in more stability along the way.

The Committee also works on the basis that the practice of publishing taxonomic changes in formats such as books and checklists based on private or unpublished data is unscientific. Unfortunately, this is the approach that has been taken by a number of authors of butterfly guides. Unpublished data, if they exist at all, cannot be evaluated by the scientific community at large to determine if the data lead to the conclusion(s) that the author(s) reached, or if the data are reproducible. In addition, because the same data may be interpreted in different ways, the important component of a scientific publication is the presentation of actual data (or citation of published sources of the data invoked), not the conclusions that the authors may draw from those data. Unfortunately, many publications on butterflies present or cite little or no data, offering instead the writer's

conclusions as authoritarian ‘fact’.

The overriding intention of the NABA checklist program has been and will remain the same: to give the large number of people interested in North American butterflies a single set of names to enable them to tag data, create sources, and communicate about the insects as reliably as possible. Only those changes that are well-founded on published data and seem irrefutable at the time of issuing a revision will be implemented.

Protocol

Any individual, including a Member of the Names Committee, may submit a suggested change for consideration. Proposed changes will generally fall into one of three categories: *change of scientific name* due to homonymy, misidentification etc., to a species currently recognized on the list; *addition of a species* due to a change in status such as resurrection from synonymy, promotion of a subspecies to full species, new discovery, range extension into North America, etc.; or *deletion of a species* due to synonymy, demotion to subspecies rank, false record, misidentification etc. Well documented extinctions will also be noted if drawn to the attention of the Committee, but the species concerned will remain on the list.

In considering changes to the Checklist, only proposals for a change first published not less than five years prior to the date of submission to the Names Committee will normally be processed. This is considered a minimum period of time necessary for the scientific community to have assessed the proposal, and for further publications in support or rejection of it to have appeared. However, more recent proposals for change should also be notified to the Committee, for future action after the five year minimum period has elapsed. In rare circumstances this five-year restriction may be relaxed with the agreement of both Chairs.

On a regular basis, NABA will announce (via the website, and short announcements in *American Butterflies*) those cases under active

consideration. This will include (appended to the website) a list of the published articles pertaining to the case(s). Anyone aware of one or more relevant publications not listed is requested to forward notice of them to the Names Committee. In addition, anyone aware of information, published or not, that argues for the current name or status of the species on the NABA list, is also requested to forward that information to the Committee.

A Collator (A Chair or other agreed Member of the Names Committee, on a case by case basis) will then gather together all available information about each given case, and engage in correspondence with specialists and specialist groups.

The Collator will then write up the case, with at least two alternative recommendations for action with respect to the draft *Third Edition*.

Subject to editorial control by the Names Committee, the case will then be made available as a downloadable pdf advertised and made available through the NABA website. All Committee Members will be circulated with the document directly at this time. Anyone, including Committee Members, can then send comments for consideration within a three month period.

After three months all comments will be reviewed by the appropriate Names Committee Chair. If in the Chair’s opinion a major re-think is necessary, the original document will be modified and the whole process repeated. But if the comments are not sufficient to require a major re-think but are pertinent, they will be collated by the Chair and appended to the case, which is then re-circulated direct to Committee Members.

After a further eight weeks, Names Committee Members will be called upon to vote for one of the alternative recommendations. Failure to cast a vote within the eight weeks allotted will be regarded as an abstention.

In considering changes to the Checklist, the Committee will be conservative, adding or deleting species or changing nomenclature

only when it becomes clear that the treatment of a particular taxon on the current NABA Checklist is incorrect and there has developed a clear consensus among the scientific community that this is so. This reflects the principle of *compelling evidence* rather than preponderance of evidence.

Decisions will be based on a simple majority; if there is a tie, the vote of the President will be deemed to be a casting vote.

The decision will then be announced on the NABA website, and any resultant change entered into the draft checklist.

Each case will be given a code number incorporating year and name: e.g. NABA-NC 2012-01 *Melete lycimnia*. At some time yet to be decided, the revised and updated Second Edition draft checklist will be published as the *Third Edition*. However, it is anticipated that the work of the Names Committee will continue indefinitely, updating the draft list and publishing subsequent editions when deemed appropriate.

Members of the Names Committee can tender their resignation at any time, but it is hoped that all Members will serve for a minimum of two years, and the Chairs for a minimum of three. The size of the Committee is not fixed, and the President in collaboration with the Chair of the Scientific Names Subcommittee, will consider from time to time, as needs dictate, seeking additional or replacement Members. No time limit for membership is currently contemplated, but the Chairs should be elected or re-elected from the Committee, by a vote held by current Members, every three years (sooner if necessary), starting not later than 1st January 2015.

Photographs and brief biographies of the Committee members are presented on the following pages



Michael Braby is an entomologist and invertebrate conservation biologist with the Biodiversity Conservation Division of the Northern Territory Government of Australia. He is also a Visiting Fellow in the School of Biological Sciences, Division of Evolution, Ecology and Genetics, College of Medicine, Biology and Environment, at the Australian National University. His broad research interests include the systematics, taxonomy, biogeography, conservation biology, and ecology of diurnal Lepidoptera (butterflies, day-flying moths, sun moths etc), as well as the origin and evolution of the Australian fauna. He has collected and studied butterflies for 30 years and is a leading authority on the Australian fauna. Major publications include several award winning books: *The Butterflies of Australia: their Identification, Biology and Distribution* (2000); *the Complete Field Guide to the Butterflies of Australia* (2004); and *A Flutter of Butterflies* (2011, with P. Olsen). He has also published a provisional list and influential discussion paper on the use of use of common names for Australian butterflies (1997 *Australian Journal of Entomology* 36: 197–212), as well as a seminal checklist of the Australian butterfly fauna that emphasizes the importance of taxonomy and stable nomenclature in biodiversity conservation (2010 *Zootaxa* (2707): 1–76; (3128): 67–68).



Alana Edwards' passion for butterflies began in the mid-90's in her parents butterfly garden. In 1995, Alana co-founded the first NABA chapter in Florida, in West Palm Beach. Her passion for butterflies prompted her to quit her job as a Spanish teacher and return to school. In 2001, she earned a Masters in Environmental Science from Florida Atlantic University where her research focused on the effect of prescribed fire on the butterflies in pine flatwoods. In 2003-2004, she was the lead coordinator for the United States Fish and Wildlife Service sponsored survey of rare and endangered South Florida butterflies conducted by NABA. Since 1998, she has worked as an environmental educator for Florida Atlantic University's Center for Environmental Studies. Alana is also an active member of the Imperiled Butterflies Working Group (IBWG), a group working to determine the best way to manage for south Florida's most rare butterfly species. Recently, she returned to school as a part-time Ph.D. student in the Department of Geosciences at Florida Atlantic University, where she plans to focus on the distribution of pineland croton (caterpillar foodplant for Bartram's Scrub-hairstreak and Florida Leafwing) in the pine rocklands of Dade County for her research.



Marc Epstein is Senior Insect Biosystematist for Lepidoptera at the California Department of Food and Agriculture and Research Associate at the National Museum of Natural History (NMNH), Smithsonian Institution. He researches and writes on evolution and classification of moths and their biodiversity, while developing interactive identification tools for moths of potential threat to U.S. agriculture. At the NMNH he was a postdoctoral fellow (1988–1991) and worked at the Department of Entomology (1992–2003). He has collected and reared Lepidoptera extensively, particularly in the Neotropical region. His research on caterpillars, including images and videos, is currently featured in the NMNH exhibit *More than Meets the Eye* and has been a guest on NPR's *Fresh Air* about his work on the book *Night Visions: the Secret Design of Moths*. Dr. Epstein's published work includes a Smithsonian monograph on limacodid moths, butterfly phenology in his native Colorado, and a biography of entomologist H.G. Dyar with Smithsonian Historian Pamela M. Henson. He is currently working on two book projects: the Limacodidae of Costa Rica with Dan Janzen and a biography on Dyar. He received a B.S. in Entomology and Zoology from Colorado State University, and a M.S. and Ph.D. in Entomology from the University of Minnesota.



Jeffrey Glassberg is a director and president of NABA. Jeff has followed butterflies since he was five years old living on Long Island, New York. He detoured to take an undergraduate degree in civil engineering at Tufts University and a Ph.D. in molecular genetics at Rice University, then worked in the Biochemistry Department at Stanford University Medical School and at Rockefeller University. In 1981 he invented DNA fingerprinting and cofounded a biotechnology company (Lifecodes) that commercialized this technique. Jeff is a past-president of Xerces Society, the author of numerous books, including the *Butterflies through Binoculars* field guide series (East, West, Florida and Boston-New York-Washington) (Oxford University Press), *Butterflies of North America* (Sterling Publishing) and *A Swift Guide to the Butterflies of Mexico and Central America* (Sunstreak Books). He is also a co-author of *Birds of North America* (Sterling Publishing) and the editor of the *through Binoculars* series (including *Caterpillars, Dragonflies and Wildflowers* field guides)(Oxford University Press). He is a member of the CONABIO committee creating Spanish language names of the 1750 species of Mexican butterflies for the Mexican government. He is an Adjunct Professor in the Department of Ecology and Evolutionary Biology at Rice University. He was graduated from the Columbia University School of Law in 1993 and is a member of the New York bar.



Peter W. Hall recently retired as Senior Advisor Biodiversity with the Canadian National Collection of Insects in Ottawa, one of the largest insect collections in the world. He was then made an Honorary Research Associate, curating the extensive worldwide Lepidoptera collection. He is a specialist in butterflies and their conservation, and publications include co-authorship of *The Butterflies of Canada* (1998, University of Toronto Press) and author of *Sentinels on the Wing: the Status and Conservation of Butterflies in Canada* (2009, NatureServe Canada). His latest project is a Field Guide to the Butterflies of Ontario to be published by the Royal Ontario Museum in Toronto. During his career, he worked in a variety of executive positions with the Canadian government and national and international biodiversity organizations in the fields of management, communications and research. From 2004–2006, he was on assignment as Director for Biodiversity Information Services at the United Nations Environment Programme-World Conservation Monitoring Centre in Cambridge, UK. Since 2006 he has been Chair, Publications Committee for the international Biodiversity: Journal of Life on Earth. In 2009 he was made a member of the Expert Panel on the State and Trends of Biodiversity Sciences of the Council of Canadian Academies.



Fred Heath is currently a NABA director and Southeast Arizona Butterfly Association (SEABA, a NABA Chapter) Field Trip co-coordinator with his wife Mary in Tucson. He is a native of New York City where he took up birding as a teenager, continuing in this avocation in California 35 years ago, eventually becoming the president of the Los Angeles Audubon Society. 20 years ago while visiting with his old birding buddies in NYC, he found that they were watching butterflies instead of birds. Upon learning that he would never have to study shorebird tertiars again, he immediately embraced butterflying and never looked back. After moving recently to Arizona, he is enjoying a whole new butterfly fauna. Helping to interest others in the world of butterflies, he has led field trips, written articles, and lectured for various organizations. He is the co-author of National Audubon Society Field Guide to California and author of *An Introduction to Southern California Butterflies*.



Yu-Feng ('Frank') Hsu is a lepidopterist who currently serves as a professor at the National Taiwan Normal University in Taipei. He spent seven years in California as a graduate student studying moths and butterflies, mainly in the desert areas of the south-western states and in Baja California. Major publications on butterflies include a three volume series of books on the early-stage biology of Taiwanese butterflies (1999, 2002, 2006), co-authored evaluations of skipper taxa established by pioneer Asian entomologists, notably Shonen Matsumura and Jinhaku Sonan (2006, 2009), co-authored systematic works on the Broad-tailed Swallowtail (2009, 2011), co-authored articles on range expansion by a cycad blue (2008, 2010), and taxonomic notes on skippers and Theclini. His current focus of research is on the taxonomy, systematics, biology, and biogeography of butterflies, especially Lycaenidae and Hesperiiidae. He is greatly interested in butterfly taxa that have disjunct distributions in North America and Asia. In 2008 he received the Hayashi Award from the Butterfly Society of Japan for his contributions on the butterflies of Taiwan and surrounding regions. Collaborators include researchers in the US, Europe, mainland China, and Japan. In 2011 he was elected a vice president of the Butterfly Society of Japan (Teinopalpus).



Torben Larsen is a Danish economist who worked with the planning and evaluation of family planning programmes worldwide most of his life. His entomological interests began at a boarding school in South India, where his field notes on butterfly migration in the Nilgiri Mountains at the age of 13 to 14 years became the basis of one of his first scientific papers (under gentle pressure by C. B. Williams). He has published numerous (400+) books, papers, and notes on butterfly faunistics, biogeography, behaviour, and conservation in the Middle East, Arabia, Asia, and especially Africa, as well as describing some 150 new taxa. His books and major papers on the butterflies of Lebanon, Egypt, Jordan, Oman, Yemen, the Arabian Peninsula, Kenya, Bangladesh, and West Africa are still the standard works. He is particularly pleased that his two-volume book *Butterflies of West Africa* (2005) has helped generate so much new information that it almost needs rewriting. He is currently battling more than full-time with an in-depth revision of the 600 or so African Hesperiiidae. He always believed that vernacular names increase the interest and understanding of butterflies amongst non-specialists and has "invented" many for the African fauna.



David J. Lohman is an Assistant Professor at the City College of New York, and a member of the doctoral faculty of the City University of New York. He is also a research associate at the Museum of Comparative Zoology (Harvard University) and at the National Museum of the Philippines, and a visiting scientist at the American Museum of Natural History. After graduating with a B.S. in biology from Bradley University, he was a Fulbright Scholar in Australia, where he studied lycaenid butterfly ecology with Roger Kitching. Upon earning his Ph.D. at Harvard University under the guidance of Naomi Pierce, he completed postdoctoral research at Harvard and the National University of Singapore before accepting his current position. He has studied chemical signaling between lycaenid butterfly caterpillars and ants, the phylogeography of widespread butterfly species in the Indo-Australian Archipelago, and the evolutionary ecology of lepidopteran herbivores in Southeast Asian rain forests. He has recently published a review on the biogeography of the Indo-Australian Archipelago and served as English language editor of the 2nd edition of Pisuth Ek-Amnuay's *Butterflies of Thailand*. Research in his lab is currently focused on the systematics and biogeography of several Old World butterfly genera.



Naomi E. Pierce is Hessel Professor of Biology at Harvard University's Department of Organismic and Evolutionary Biology, and Curator of Lepidoptera at the Museum of Comparative Zoology. She received her B.S. in biology from Yale University and her Ph.D. from Harvard, and has held appointments at Christ Church, Oxford University, and at Princeton. Her early work focused on insect behavioral ecology, and particularly the costs and benefits of symbioses between lycaenid butterflies and ants. Since then, she has contributed widely to the fields of ecology and evolutionary biology, with research on host defense/ pathogen virulence, conservation, speciation and diversification, and insect/ plant coevolution. She has also been involved in reconstructing the evolutionary 'Tree of life' of insects, and together with her co-authors, published the first detailed molecular phylogenies of both the butterflies (2005) and the ants (2006). The author of 98 papers and an edited book, Dr. Pierce has mentored 36 graduate students, 30 postdoctoral fellows. She is a member of National Geographic's Committee for Research and Exploration, and has served on the editorial boards of Behavioral Ecology and Biology Letters. She was elected fellow of the Entomological Society of America (2011), fellow of the American Association for the Advancement of Science (2009), and has received awards such as a Fulbright and a John D. and Catherine T. MacArthur Fellowship.

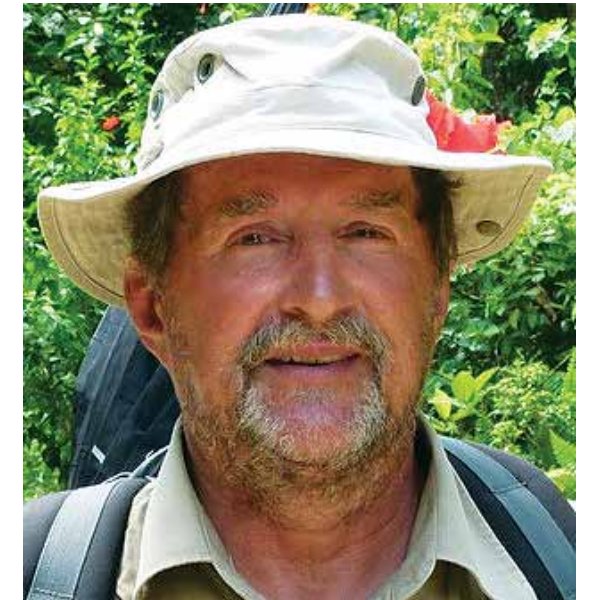


Malcolm Scoble retired recently as Keeper (Department Head) of Entomology at the Natural History Museum, London. His links with the museum continue as a Scientific Associate of the Entomology Department and as a member of the Advisory Board of the Centre for Arts and Humanities Research. During his career he also held positions at the Transvaal Museum, Pretoria, and the University Museum of Natural History at Oxford. He holds a Ph.D. from Rhodes University, South Africa, and a D.Sc. from the University of London. He has been Zoological Secretary of the Linnean Society of London since 2009. He has authored or co-authored many publications on Lepidoptera taxonomy and, more recently, online taxonomy. Among these was a book entitled *Form, Function and Diversity of the Lepidoptera* (1992) and (as editor and initiator) a two volume catalogue of the names of Geometridae moths (1999). He proposed (1986) that a group of Lepidoptera (Hedylidae), misplaced in the Geometridae, were moth-like butterflies, and co-authored (2001), with Martin Honey, a study on the names of Linnaeus's butterflies. He believes that a stable taxonomic nomenclature is essential for the accurate communication of biological information and that a co-ordinated, online approach is essential for taxonomy.

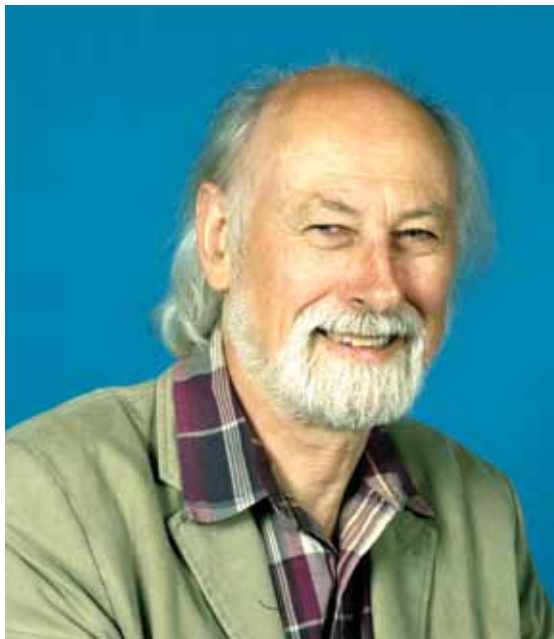


Jim Springer is a director and vice-president of NABA who is also responsible for the NABA and National Butterfly Center websites as well as the NABA Butterfly Count and Butterflies I've Seen databases. He is a past-president of the NABA North Jersey chapter and currently edits the chapter's yearly compilation of butterfly sightings — *The Pearly-eye*.

He has been interested in many aspects of natural history ever since growing up on the Patuxent Research Refuge in Maryland. Following earning a Ph.D. in physical chemistry from Iowa State University, where he studied the 3-D structures of various naturally occurring toxins including saxitoxin, one of the principal components responsible for paralytic shellfish poisoning, Jim spent a career as a research chemist in the pharmaceutical industry. While he chased all kinds of insects as a kid, a more serious interest in butterflies was rekindled about 20 years ago. He spends as much time as he can in the warmer months either studying and photographing butterflies in New Jersey, other areas of the United States and elsewhere, or developing a backyard butterfly habitat along with his wife, Nancy. In the winter, his emphasis switches to NABA's computer related projects.



John ('JT') Tennent spent most of his working life with the British Army overseas. In 1985 he was a member of the Royal Entomological Society's Project Wallace expedition to Sulawesi, Indonesia. Since retiring in 1991 he has become something of a hobo, regularly choosing to visit out of the way places in preference to the comforts of home. Always interested in natural history, he has carried out butterfly research in many parts of the world, most recently amongst the more remote islands of the Solomon Islands, Vanuatu and eastern Papua New Guinea. Current projects include the systematics and biogeography of southwest Pacific butterflies, the history of natural history research in the region, and insects in poetry. His numerous publications include several books, notably *Butterflies of Morocco, Algeria and Tunisia* (1996), *Butterflies of the Solomon Islands* (2002), and a field guide for Vanuatu butterflies (2009). In 2006 he published a comprehensive checklist of the butterflies of Melanesia, Micronesia and Polynesia (*Zootaxa* (1178): 1–209). He has been awarded an MSc by the University of Kent, and the H H Bloomer prize by the Linnean Society of London as "an amateur naturalist who has made an important contribution to biological knowledge".



Richard I. ('Dick') Vane-Wright spent his professional life at London's Natural History Museum. From 1967–1984 he was in charge of curation and research on the Museum's famous butterfly collection. Five months collecting Lepidoptera in south-western Africa in 1972 was followed by three long trips to collect and study butterflies in South East Asia, during 1980, 1981 and 1985. Major publications on butterflies included co-authorship of *Milkweed Butterflies* (Cornell UP 1984, with P.R. Ackery), co-editorship of *The Biology of Butterflies* (Academic Press 1984, with P.R. Ackery), and co-authored a revision of African kite swallowtails (2001, with C.R. Smith). During 1975–1977 he worked on the Museum's award-winning Hall of Human Biology. After retiring as Head of the Museum's Entomology Department in 2004, he held a three-year UK 'NESTA' Fellowship to pursue ideas on relationships between worldviews, culture, and attitudes to nature. Currently Honorary Professor of Taxonomy at DICE, University of Kent, he continues to work on a wide variety of projects related to entomology, biodiversity and conservation, including research on the taxonomy, faunistics and biology of butterflies, notably tropical Papilionidae, Pieridae and Nymphalidae. Numerous collaborative projects include the butterflies of Mt Kilimanjaro and the Moluccas, and a general book on butterfly biology.



Ángel L. Viloría worked as lecturer, and later associate professor of zoology and entomology at the Universidad del Zulia (Maracaibo, Venezuela), 1992–2000. During this time he studied in London for three years, completing his Ph.D. on montane satyrid butterflies of South America in 1998. Invited in 2000 by the Venezuelan Institute for Scientific Research (IVIC) to help establish their Organismal Biology Laboratory, he became its head in 2004. Since 1988 he has researched various aspects of butterfly biology, notably systematics and distribution, and has coauthored numerous papers on Andean Satyrinae. With interests including historical biogeography, butterfly conservation and the role of butterflies in human history, he has undertaken fieldwork in several South American countries, and co-authored the major Catalogue of the Hostplants of the Neotropical Butterflies (Beccaloni et al., 2008). Vice President of the Lepidopterists' Society (2003–2004), he has also served on the Council of the Systematic and Evolutionary Biogeographical Association (2006–2010), and is a Research Associate of the McGuire Center for Lepidoptera and Biodiversity (2008). Dr Viloría recently stepped down as Director of IVIC (2008–2011) and Head of the Venezuelan Antarctic Program (2009–2011), and is happy to be able to return to biological research.



Julie West is a charter members of the NABA-North Bay (California) chapter and has served as president of the chapter. She is currently President of California Garden Clubs, Inc., a member of National Garden Clubs, Inc. Her interest in gardening for butterflies began in 1993 when she was invited to join a committee to apply for a grant. The project was to create a butterfly garden within Sonoma State University's Native Plant Garden, and Santa Rosa Garden Club (that she joined in 1991) was successful in obtaining the grant. Today, over twenty-two species of butterflies can be observed as well as all phases of the butterfly's life cycle. Julie received her B.S. in Business Administration from Marquette University in Milwaukee, Wisconsin and pursued a career in the insurance industry for twenty-five years. In addition, she took advantage of the educational programs offered by National Garden Clubs, Inc. and holds certificates of completion as a Gardening Consultant, Flower Show Judge, an Environmental Consultant and a Landscape Design Consultant. In 1995, Julie and her husband, Dave, joined NABA to learn more about butterflies and now have their own successful butterfly habitat certified by both NABA and the National Wildlife Federation. Both have attended NABA Biennial Members meetings in Bend, Oregon; Mission, Texas and Kernville, California.



Shen-Horn Yen is an Associate Professor at the National Sun Yat-Sen University, Taiwan, where he specialises on the systematics, phylogenetics and evolutionary ecology of the Lepidoptera, evolutionary dynamics and behavioural ecology relevant to mimicry, camouflage and aposematism, colonization and diversification of phytophagous insects on plants, and biodiversity and natural history collection databases. Supervised by Donald Quicke and the late Gaden Robinson, Yen completed his Ph.D. in London in 2004, on the phylogenetics of the Chalcosiinae (Zygaenidae). The same year he received the 5th R.J.H. Hintelmann Wissenschaftspreis für Zoologische Systematik for an earlier thesis on the phylogenetics of the Nymphulinae and Musotiminae (Pyrallidae), awarded at the Zoologische Staatssammlung in Munich. His publications include two papers co-authored with his London supervisors, one on the phylogenetic relationships of Chalcosiinae, the other on the phylogeny, systematics and evolution of mimetic wing patterns of Eterusia moths (Chalcosiinae). In 2001, in collaboration with Ping-Shih Yang, he published the Illustrated identification guide to insects protected by the CITES and wildlife conservation law of Taiwan, and in 2007 he co-authored a paper on the Cimelioidea, a new superfamily name for the gold moths. His major database initiative is the Digital Archive Project for the Type Specimens and Literature of Taiwan Macrolepidoptera. 