# The British Simuliid Group Bulletin

Number 36

July 2011





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<u>Cover Image:</u> Simulium ochraceum Walker. Primary vector of onchocerciasis in Guatemala and Mexico. Drawing by Francisco

onchocerciasis in Guatemala and Mexico. Drawing by Francisco Camino P. taken from the frontispiece of Dalmat, H.T. 1955 "The Black Flies (Diptera, Simuliidae) of Guatemala and their role as Vectors of Onchocerciasis", Smithsonian Misc. Coll., Vol. 125, No. 1, 425 pp.

# From the Editor

This number of the *Bulletin* is unique as it is the first to be written specifically for publication in electronic form on the internet. This follows the discussion about the future of the *Bulletin* once the Natural History Museum had decided to discontinue publication and following the discussion held at the Simuliid Symposium in Turkey. Consequently there have been a few changes to the format. First, is the repositioning of the Contents page to inside the front cover. This allows the reader to see the Contents as soon as the file is downloaded. Second, is the use of colour on the front page. Here I would ask readers to suggest and supply interesting pictures or diagrams for future *Bulletins*. I have also added a new logo which I hope you will like.

A small number of *Bulletins* will be printed out and distributed by post to the usual libraries and to the few members who do not have easy access to the internet. Everyone else will have been notified by e-mail as soon as the *Bulletin* has been added to the *blackfly.org.uk* web site. It is now vitally important that the e-mail list is complete and kept up to date. If you know of anyone who has not received notification, please let me know by e-mail to daviesjb@liv.ac.uk. For those who wish to print their own paper copies to add to their library, some hints and notes on how to do this will also be posted on the web site.

Over the past few years, the layout of the *Bulletin* and printing of the colour pages has been managed by John Day, who spent much time and effort in producing the excellent presentations that we have received. Now that we no longer need to print out over a hundred copies of the *Bulletin* each issue, John has decided to relinquish this task and leave it to your editor. John deserves a big "Thank you" for all his efforts, they are much appreciated.

#### Material for future issues.

The usefulness of the *Bulletin* depends on its content. Please keep articles and correspondence coming in. As Editor, I have noticed a diminution in the quantity of material being offered for publication. May I remind readers that apart from formal scientific papers, other material such as correspondence, requests for information or specimens, photographs, in fact anything of interest to simuliidologists will be considered (see last page). The next number will be published in January 2012, with an acceptance date of 1 January 2012.

#### Downloads.

Since June 2003 *Bulletins* have been regularly posted on the web at <u>http://www.blackfly.org.uk</u> for anyone to read and download. I thought that readers would be interested to know how often these *Bulletins* are accessed, so I have compiled a list of the number of times the *Bulletins* have been read or downloaded during the first 6 months of 2011 (Fig. 1).

**Fig. 1**. Numbers of *Bulletin* files downloaded (zip) or viewed on line (pdf) during the first 6 months of 2011. <u>Note</u>: Newsletters and the Smith compilation were added in May.

BSG Bulletin Download Record.			2	201	1										
					Numb	berof	Succe	ccessful Downloads							
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Index to Bulletins Nos. 21 to 32	1	1	1		1		2		8	1	1		14	2	16
1 (M ay 1992) to (5 June 1995)	9		9		9		35		21	1	9		92	1	93
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11 (June 1998) to 15 (June 2000)	5		11		11		29		23	1	11		90	1	91
16 (Dec 2000) to 20 (June 2003)	17		14		14		22		15	1	14		96	1	97
21 (December 2003) to 24 (July 2005)	10		14	2	14	1	11		21	1	14	1	84	5	89
25 (January 2006)	3		3		3				3	1	3		15	1	16
26 (July 2006)	1		1		1				3	1	1		7	1	8
27 (January 2007)	4		4		4		7		15	1	4		38	1	39
28 (August 2007)	7						10		9	1			26	1	27
29 (February 2008)	4				15		7		5	2	5		36	2	38
30 (July 2008)	8		7		7		2		3	1	7		34	1	35
31 (February 2009)	6		7		7				9	1	7		36	1	37
32 (July 2009)	5	3	1	1	1	1	5		5	1	1	1	18	7	25
33 (February 2010)	1	1		1		1	3		8	1		1	12	5	17
34 (July 2010)	2	1	1	2	1	2	4		9	1	1	2	18	8	26
35 (February 2011)							13		19	4			32	4	36
Novi Sad Abstracts	4		3		3				8	1	3		21	1	22
Newsletter Index									4				4	0	4
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Total	111	9	87	6	102	5	165	0	209	28	92	5	766	53	819
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As a concession to the publisher, *Bulletins* were not posted on the web until at least one month after publication, hence *Bulletin* No. 35 published in February 2011 was not posted until the end of March. Also, the *Newsletters* and Stephen Smith's Compilation were not added to this collection until the beginning of May 2011. The data in the table represents the number of successful downloads to a reader's computer

(the .zip files) and the number of successful displays of the files on screen (the .pdf files). The number of visits and number of failed downloads is not recorded.

A surprising 819 viewings of the *Bulletins* was recorded over the six month period, 766 on screen and 53 downloaded to a computer. Also remarkable is the popularity of the earlier *Bulletins*. It is not possible to identify individual readers, but we can speculate whether the single downloads of .zip files in May represent a single visitor who has now accumulated a complete set of *Bulletins*.

# FORTHCOMING MEETINGS 2012 Annual Meeting of the North American Black Fly Association (NABFA) Archbold Biological Center in Lake placid, Florida. The tenth annual North American Black Fly Association meeting, to which everyone is invited, will be held February 8-10, 2012 at the Archbold Biological Center in Lake Placid, Florida. For further information please contact Elmer W. Gray, 413 Biological Sciences Building, Dept. of Entomology, University of Georgia, Athens, GA 30602, U.S.A. Phone: (706) 542-1184 Fax: (706) 542 2279 e-mail: ewgray@uga.edu

# **IN MEMORIAM**

**Ross Barney Highton (1923-2011)** We regret to report the death of Barney Highton on 22 February 2011 in his 88th year. His long career was spent mainly as a Field Officer with the Division of Insect-borne Diseases, Kenya Medical Department. In this capacity, in the early 1950s, he assisted J.P. McMahon in the successful programme to eradicate from Kenya the *Simulium neavei* vector of onchocerciasis. The closely related *S. hightoni* was named by D.J. Lewis on McMahon's recommendation.

# **OBITUARIES**

# René Le Berre 1932-2010



Dr. René Le Berre, who died on December 6, 2010, was born in Quimper, Brittany on March 3, 1932. Following his graduation from the University of Rennes, René entered Paul Grenier's laboratory at the Institut Pasteur in Paris. Recruited as an ORSTOM entomologist he was sent first (late 1950s) to Bobo Dioulasso in Burkina Faso (then Upper Volta). Here his work focused on the biology of *Simulium damnosum* s.l. the vector of onchocerciasis in West Africa, and on this research topic he was awarded a science doctorate (Paris-Orsay, 1966) for his thesis "Contribution à l'étude biologique et écologique de *Simulium damnosum* Theobald, 1903 (Diptera, Simuliidae)", O.R.S.T.O.M., Paris 1966, 204pp. In 1965 he succeeded Max Ovazza as head of the Onchocerciasis Section at O.C.C.G.E., Bobo Dioulasso ('Bobo'), afterwards becoming for almost a decade a major player in planning strategy and operational charge of onchocerciasis control programmes, beginning with a scheme which sought to control the vector in an area which included parts of Upper Volta, Ivory Coast and Mali and known as the 'FED Campaign' after its main sponsor the Fonds Européen du Développement".

However, for René this relatively small ground-based insecticidal scheme was not enough given that onchocerciasis was so widespread over West Africa. There was also the problem of the appearance of flies in the centre of the controlled area when breeding could not be found. This sowed the seed in Max Ovazza's and René's minds that flies might be invading the area from distant uncontrolled rivers (a concept that had also been raised earlier by others but was treated with some skepticism), although current research, including René's own, indicated that the flight range of *S. damnosum* was only a few kilometres. This wider view led to the concept of a West African control scheme covering the whole of the Volta River Basin. It was not until many years later after extensive meteorological and entomological field studies carried out as part of the OCP scheme, that reinvasion did take place over several hundred kilometres was confirmed.

Although the concept of the project was solid, it was necessary to mobilize the means for its implementation. This became an involved political process, driven by Dr. N. Ansari of WHO, starting with the seminal Tunis meeting of July 1968 at which René and a large international assembly of experts endorsed a Volta River Basin scheme, and culminating in 1972 in a visit to Upper Volta by Robert McNamara, then President of the World Bank. René was a very ebullient character and during his time in Bobo he had become well known in many villages and was looked on as a great supporter by the community leaders. His deep knowledge of the situation in the field and his sympathy for the local people proved of great value when he was tasked with briefing McNamara and escorting him into the field. In this expedition René showed him a village on the banks of the White Volta river where more than three quarters of the population were affected by the disease and more than 12% of the villagers were blind. This dramatic health picture was complemented by the sight of abandoned villages in fertile valleys at a time of severe drought in sub-Saharan Africa. René played a very important, if not decisive, role in persuading McNamara to back the OCP. It is believed that René was also responsible for first using the phrase "villages at the end of the road" to express the isolation and lack of support for these communities.

Following several years of field investigations into means and its possible economic impact (The PAG Mission), the WHO Onchocerciasis Control

Programme in the Volta River Basin (OCP) was set up in the mid 1970s as a revolutionary air-based larviciding campaign covering parts of seven countries. It would have been impossible to cover the area from the ground. In all the technique development and testing René was ever present organising and facilitating. In the first three years of OCP he was Chief of the Vector Control Unit (VCU) which was responsible for all the control activities and for its evaluation. As Chief VCU, his extrovert, vibrant personality was invaluable in welding together a large multinational team and making everyone from vector collector upwards feel part of a significant enterprise. This was invaluable in achieving a very high degree of conscientiousness in teams with very low levels of supervision.

Once during a tour of inspection of fly catching sites, he arrived at one bridge and there was a chap sitting on the bank smoking a cigarette and holding a fishing rod. René went purple, exploded, and ranted at the chap for a minute or two finishing by shouting "You're fired!" At this the chap pointed down river and said "your fly collector is down there under that bush, I'm a fisherman". René immediately changed colour, let out a bellow of laughter, slapped the fisherman on the back, and went off chortling. On another occasion René arrived unannounced at a Sub Sector office, and found the building open but no-one was in. René took away the office type-writer and then accused the staff of allowing a burglary. This caused great consternation, before René relented, told the staff what had actually happened and gave them a mild ticking off.

His outstanding contribution to this Progranme was recognized by the Royal Entomological Society of London, which in 1981 elected him the first recipient of its new Medal for Major Achievement in Applied Entomology.

René's personnality was complex and rich and anecdotes about him are diverse and numerous. He liked paradoxy and hoaxes (*canulars* in French) ; in the field of blackfly control, among other fanciful strategies he invented the strategies of "upstreamiciding" (use of insecticide formulations which could have been easily applied downstream and would have progressed upstream along rivers and tributaries into the headwaters) river freezing (freezing the African rivers in order to prevent blackfly breeding); he also envisaged displaying large bed nets over all breeding sites in the OCP areas. He made these proposals with convincing seriousness to tiresome or ecologically extremist visitors. To the latter he would also recommend wearing the Cousteau diving suit as an alternative to larviciding and a protection against blackfly bites. In 1977, with OCP firmly established, Le Berre joined the World Health Organization in Geneva, where he became responsible for filariasis and the creation of medical entomological training centres. He stood down from WHO in 1992, moving in retirement to the village of l'Aiguillon-sur-Mer on the Pertuis Breton inlet of the mid-west coast of France. He died there on 6 December 2010. He was always a fervent Breton, and did not let anyone forget it. For example when Jacques Hamon, his friend and elder in ORSTOM left Bobo Dioulasso and joined WHO in Geneva, he began to send telexes to René in English. René responded but in the Breton language. It took some time to get a translation in WHO HQ. A born humorist, he always had a ready joke for his friends and work colleagues. Once when prospecting a river in northern Ghana, René scraped his hand over a rock surface and brought it up covered in black simuliid larvae. "Voilà!" he said "Caviar de simulies!"

He is survived by his wife, Eliane and a son, François.

**John Davies**, Editor. With considerable help from Roger Crosskey, Marc Karam, Bernard Philippon, and Frank Walsh.

# Björn Malmqvist: Naturalist and Scientist Extraordinaire (1946-2010)

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Björn Malmqvist, a professor in the Department of Ecology & Environmental Sciences at Umeå University, Sweden, passed away on 22 October 2010 at the age of 64. He was raised in Helsingborg in southern Sweden. He studied at the University of Lund and later joined the Department of Animal Ecology to conduct doctoral research, under the supervision of Professors Per Brinck and Staffan Ulfstrand, on lampreys, the subject of his 1982 doctoral thesis, "The feeding, breeding and population ecology of the brook lamprey (*Lampetra planeri*)."

While at Lund, Björn became an integral part of the Rheo Group, a collaboration of postgraduate researchers in the department, all under the same supervision. The Rheo Group carried out a project on the distribution of lake-outlet black flies in 1975—Björn's first research



Figure 1. Björn Malmqvist in his office at Umeå University, 8 December 1998.

project on these insects. It developed work previously carried out by Ulfstrand on the Tjulån and Vindel rivers, and members of the group travelled to Swedish Lapland for two weeks at a time to stay at a rented house in Ammarnäs. The work was published in two papers in Oikos and was a powerful example of a truly collaborative effort; that was the spirit of the Rheo Group. Björn returned to black fly research in 1991 while visiting Roger Wotton in London, still with lake outlets, but on a much smaller scale: feeding by larvae in a pond outlet in a park near Keston. This work led to a collaboration that lasted more than 10 years, with students in both Sweden and the UK. In 1989, Björn joined the faculty of the Department of Animal Ecology at Umeå University, where he worked for the remainder of his career.

Björn recognized early on that simuliids were, in his words, "of great significance, surely as prey to predators, maybe also in the dynamics of particulate material" (*in litt.* to PHA, 30 December 1993). Yet, he also realized that the simuliid fauna of northern Sweden was still "poorly known" and that its taxonomic resolution could provide insights into the



**Figure 2.** Björn Malmqvist in the boreal taiga at the northern frontier zone between Finland and Russian Karelia, 19 June 2005.

ecology of streams and rivers. In 1993, Björn contacted Peter Adler, writing "I have been considering, for a while now, to write to you about my recent excitement for blackflies." Björn's letter prompted a collaboration on the ecology and taxonomy of simuliids that would span the next 16 years.

Björn was a driving force in freshwater ecology, and his mastery of natural history, modern ecological thought, and evolutionary theory led to new understanding of the Simuliidae during the three decades that he was a member of the international community of simuliid workers. Björn was a prolific scientist not only because he had a remarkably sharp mind, but also because he loved the natural world. His research focused on biological processes in streams and rivers and the influence of abiotic and biotic factors on life in running water. Yet, he was equally comfortable and enthusiastic about aquatic insects in the terrestrial environment and realized their reciprocal influences, whether studying the host-blood meals of black flies or the factors associated with egg production. He enjoyed driving along the rivers of northern Sweden, with his selfdesigned simuliid trap mounted atop his white car, an enterprise that ultimately produced a series of five publications on black flies.

Björn's scholarship is reflected in his more than 100 publications. His first, on nematodes in the brook lamprey, appeared in 1977, and his last, on flight stratification of black flies, appeared posthumously in 2011. Fiftythree of his publications dealt entirely or partly with the Simuliidae. Biörn's work was characterized by rigorous hypothesis testing. He was adept at working from the level of the organism to the ecosystem and could zoom instantly along this scale, from an understanding of the finer properties of a labral fan or a fecal pellet, for example, to the role of each in the aquatic and terrestrial environments. Björn made important advances in our understanding of many aspects of simuliid biology, such as predator-prey dynamics, ecosystem engineering through particulate production, environmental effects on phenotypic expression of labral fans, influence of river regulation on community structure, and blood-host associations. His most-cited paper involving simuliids is "Aquatic invertebrates in riverine landscapes," published in Freshwater Biology (2002). At least four of his non-simuliid papers have been cited well over 100 times each.

His bookshelves were packed with volumes of natural history and science, including many about ornithology, one of his passions. He was as skilled in field identification of birds in deciduous forests of eastern North America, or any other part of the world that he visited, as he was in the forests of northern Sweden where he knew every song and call note of every species. Björn had an inexorable drive to be a part of the outdoors, to experience the natural history that filled his bookshelves. Within less than 9 months of having had open-heart surgery in 2005, he was back in the field for a week-long simuliid expedition, climbing hills, navigating steep ravines, and wading streams, with sampling gear and instruments in hand.

Björn and his wife Anita and sons Kalle and Erik often opened their home to simuliid researchers from around the world. In the winter of 1998, for instance, he hosted a number of colleagues during the Black Fly Workshop that he organized and led at Kronlund, a field station of Umeå University in northern Sweden, where participants agreed that some of the finest food ever eaten was served. One of the outcomes of the meeting was a big-picture view of the keystone role of black flies in the boreal environment, published by Björn and several of his colleagues in the journal Écoscience in 2004.

Björn provided the classic example of how natural history and modern science can complement one another and how the greatest insights into understanding our world come from one who stands with a foot in each. Björn's gentle persona, his compassion for others, and his love for the natural world are a model for all.

Publications of Björn Malmqvist, containing information on the Simuliidae: (In chronological order).

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# NOTES, VIEWS AND CORRESPONDENCE

## Simulium noelleri attends funeral

In the obituary of the late Paul Freeman published in *Antenna* (Lane *et al.* 2011) it is reported that a blackfly was guilty of man-biting during the funeral and that the culprit has been identified as *Simulium noelleri.* The circumstances of the bite have a touch of the ironic; the fly not only had the temerity to bite an entomologist (albeit a lepidopterist) but had chosen appropriately: Dr Freeman had been the Natural History Museum's longtime simuliid specialist! Incidentals not recorded in the obituary but notable are that the bite occurred on the host's hand and inside the Memorial Chapel (Dick Vane-Wright in litt. to RWC) The specimen is now in the British simuliid collection. Its complete label data are:

LONDON: Beckenham, 200m S of Birkbeck station, 9.viii.2010 (P.Hammond, K.Sattler & R.Vane-Wright)/ caught biting man in Beckenham Crematorium (at funeral of Paul Freeman)/ Q.S.grid ref. TQ355688/ R.W.Crosskey 2011 det.

The record is interesting as it adds one more to the small but growing list of known cases of anthropophily in *S. noelleri*. The species is found all over Britain, its aquatic stages often occurring at its favoured lake-outfall habitats in astronomic numbers, but despite such abundance adult flies are rarely seen; there are apparently no instances of biting and bloodsucking in Britain before the mid-1990s. Since then there has been a trickle of records verified by identification of captured culprit specimens. In date order the records, summarised, are:

1995 (28.viii, Leicestershire, near Whitwick)

1997 (ix, Suffolk, near Ipswich)

- 2001 (4.vii, West Midlands, Hall Green)
- 2002 (I.viii, London, Buckingham Palace Garden)
- 2003 (20.xi, Berkshire, Wellington College)
- 2004 (23.v, London, Dulwich)
- 2004 (4 and 6.vii, Luton)

2005 (5.vii, Essex, Southend-on-Sea area, Great Wakern)

2005 (9.vii, London Wetlands Centre)

2006 (30.vii, London Wetlands Centre

2010 (9.viii, London, Beckenham Crematorium)

The non-existence until recently of biting reports for *S. noelleri* led to the longstanding supposition that this species might be autogenous in Britain. It now appears likely that, as in northern Germany where there are five annual generations (Schütte, 1990), the first generation is autogenous but that some part of the population of later generations is anautogenous. Most of the anthropophily records just listed are of relatively late summer-autumn captures (July to November), only the Dulwich record being in late spring.

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Submitted by R.W.Crosskey

# **BOOK NOTICE** Taxonomy of *Simulium (Trichodagmia)*

**Hernández Triana, Luis Miguel.** 2011. Systematics of the blackfly subgenus *Trichodagmia* Enderlein (Diptera: Simuliidae: *Simulium*) in the New World. ix + 536 pp. Doctoral thesis, Wageningen University, Wageningen, Netherlands.

This book constitutes formal publication (ISBN 976-90-8585-865-2) of the author's doctoral thesis and deals primarily with the morphotaxonomy of *Tricho-dagmia* in a redefined sense based on cladistic analysis of some sixty species. Comprehensive descriptions are provided for most species in larval, pupal and adult life stages, with extensive use of colour illustration. An effect of the author's reclassification of particular interest to workers in Europe is that the subgenus *Obuchovia* (hitherto solely Palaearctic) is now subsumed into *Tricho-dagmia* and becomes its junior synonym.

[Available from the author or the University of Wageningen]

# WHO WAS ...?

# Honorific names: more mini-biographies

In this number of the *Bulletin* I have included, in the style used previously, a short batch of mini-biographies that relate to honorific names. Again these have been prepared by Roger Crosskey. The entries all. refer to persons now deceased and to simuliid species from the Afrotropical region. Nationalities represented are varied, including Austrian, British, German, Portuguese and South African. References are limited to a single most easily accessed source per person, an obituary if a useful one has been found. RWC thanks Dr F.C. de Moor for providing the Barnard obituary reference.

#### John Davies (editor)

**barnardi** Gibbins (1938), **leberrei** Grenier, Germain & Mouchet (1966) **machadoi** Luna de Carvalho (1962) , **starmuhlneri** Grenier & Grjebine (1964) **taylori** Gibbins (1938) **weyeri** Garms & Haüsermann (1968).

#### barnardi Gibbins (1938) - Paracnephia

Named (explicit) for Keppel Harcourt Barnard (1887-1964) South African marine biologist, born in London, Following early education in Britain and Germany he attended Cambridge University, receiving his BA. degree (1908) and later an MA. (1913) Soon after graduation he was called to the Bar (Middle Temple) but luckily science proved more important to him than the law and in 1911 he took a position as marine biologist at the South African Museum in Cape Town. Here he enjoyed a research career for over forty years, becoming Museum director in 1946 and formally retiring ten years later - receiving then an honorary doctorate from Stellenbosch University and the accolade of honorary fellow of the Royal Society of South Africa. Although primarily recognized for his outstanding works as a marine biologist, such as his monograph (1922-1927) on marine fishes of South African waters and his D.Sc. thesis (Cape Town University, 1924) on South African Crustacea, Barnard could also claim to be a freshwater entomologist. He published (1932) an account of South African mayflies and in the early 1930s investigated the stream fauna of the Western Cape, incidentally forming a significant simuliid collection. Some material from this - including the original specimens of Simulium (now Paracnephia) barnardi - went to E.G. Gibbins, the only specialist active on the Afrotropical blackfly fauna at that time. Reference: The Cape Times, 23 September 1964.

#### leberrei Grenier, Germain & Mouchet (1966) - Simulium

Named (explicit) for René Le Berre (1932-2010) See obitury in this volume, pp. 4-7.

#### machadoi Luna de Carvalho (1962) - Simulium

Named (explicit) for António de Barros Machado (1912-2002), Portuguese biologist, born at Vila Nova de Famalicão near Porto. He entered Porto University in 1930 to study biology but political persecution obliged him to seek refuge in Spain and it was not until 1936, after a return to Porto, that he obtained his degree in biological sciences. Despite the support of eminent professors the research door was closed to him by the political regime and (for several years from 1937) he was a high school teacher. In 1946 Barros Machado was invited to make a biological survey for 'Diamang' (the Diamond Company of Angola) and afterwards to direct their new Biological Research Laboratory at Dundo, a position which led to him spending his next 25 years at this base, studying many aspects of the fauna of Angola and more widely of Africa. He published on diverse topics. Early on he investigated the cave fauna in Portugal, acquiring a lifelong interest in spiders, but of most concern to medical entomologists is his work on tsetse flies, especially the monograph on systematics of the Glossina palpalis group published in 1954. **Reference**: Acta Entomológica Ibérica e Macaronésica 1: 75-89 (2003).

#### starmuhlneri Grenier & Grjebine (1964) - Simulium

Named (explicit) for Ferdinand Starmühlner (1927-2006), Austrian hydrobiologist, born in Vienna. His path to eminence in malacology was marked out from boyhood when (in 1930) he received an aquarium as a Christmas present! Starmühlner's enthusiasm for freshwater organisms was born there and then and not surprisingly the doctorate awarded to him by Vienna University (1949) was on Austrian water-snails. In 1961 he was appointed a university assistant and in 1964 was accorded Habilitation status (qualification to lecture) . From the 1970s until retirement (1992) he was professor in the University Institute of Zoology, part of this time heading a special Department of Malacology. For many years he was the leading light of the Austrian Hydrobiological Missions, 13 in all between 1949 and 1985, devoted to investigating the freshwater fauna in underworked areas of the world, especially the tropical islands. Of most note for simuliids was the 1974 Mission to the Indian Ocean islands. A feature of all the expeditions was the diversity of species described by the specialists volunteering to examine material for Mission reports. Over two dozen species, ranging from algae to arachnids, crustaceans and seven orders of insects bear the epithet starmuhlneri.

**Reference:** Verhandlungen der Zoologisch-Botanischen Gesellschaft in Österreich **143**: 141-154, bibliography, portrait (2006)

#### taylori Gibbins (1938) - Simulium

Named (implicit) for Thomas Hugh Colebrook Taylor (1901-1972), British entomologist, born at Ipswich, England. His lifelong expertise lay in applied entomology, particularly biological control, a field which began for him in Fiji where he went immediately upon his graduation from London University. Subsequently his work took him to many parts of the tropics, including the West Indies, as he established himself as a pioneer in biological control. From 1935 to 1944 he was Government Entomologist in Uganda. At the end of this period he returned to England and was appointed Assistant Director of the Commonwealth Institute (then Imperial Bureau) of Entomology based in South Kensington. In 1953 he transferred to the nearby Anti-Locust Research Centre as its Deputy Director, becoming Director in 1959. He travelled extensively, providing guidance on their locust control problems to newly independent countries of Africa and the Middle East. Reflecting his interest and experience in biological control Taylor was for many years a leading light in the Association of Applied Biologists. Reference: Indian Journal of Entomology 34: 187-188, portrait (1973)

#### weyeri Garms & Häusermann (1968) - Simulium

Named (explicit) for Fritz Weyer (1904-1997), German entomologist, born at Czarnków near Posen (then in Prussia, now Poland). Weyer studied biology for a while at Königsberg (now Kaliningrad), before (1926) settling for several years at the Zoologischen Institut in Tübingen where he obtained a doctorate (1928). Participation in a German expedition to the Dutch East Indies appears to have stimulated his interest in the Isoptera and he published important researches on reproductive systems, caste differentiation and colony foundation in termites. Other insects on which he wrote include lice and malarial mosquitoes. In 1942 Weyer became director of the Entomology Department of the Bernhard-Nocht Institut für Schiffs- und Tropenkrankheiten, Hamburg, retiring after long service with this Institut in 1969. **Reference**: *Entomologische Mitteilungen aus dem Zoologischen Museum Hamburg* **12**: 171-176, portrait (1997).

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#### THE BRITISH SIMULIID GROUP

The British Simuliid Group (BSG) is an informal gathering of scientists of any discipline, from many countries, who have an interest in the Simuliidae. The group's members include entomologists, parasitologists, environmentalists, ecologists and medics, with interests in ecology, bionomics, taxonomy, cytotaxonomy, disease transmission, freshwater biology etc. Our aim is to assemble as diverse a group as possible in order to encourage a wide interchange of ideas and information.

At present the BSG has about 130 members in the UK, Europe, Africa, Australia, New Zealand and the Americas. Membership is FREE - if you are not already a member of the BSG all you have to do is give us your name and postal and e-mail addresses. Annual meetings have been held at different locations in the UK since 1978. Abstracts of papers presented are published in our Bulletin which is sent to all members of the group.

The Group also runs an electronic news list with the name "Simuliidae" which is now on JISCmail. To join "Simuliidae" send the following command as one line of text in an e-mail message without subject heading- join Simuliidae your-firstname lastname to: jiscmail@jiscmail.ac.uk. Membership of "Simuliidae" does not automatically make you a member of the BSG. You have to join each separately. The Simuliidae list owner is the Editor of the Bulletin. Recent back numbers of the Bulletin can be viewed on the World Wide Web at URL:

#### http://www.blackfly.org.uk.

Inquiries about the Group and its activities should be made to John Davies: address inside front cover and e-mail daviesjb@liverpool.ac.uk

#### **Notes for Contributors**

To avoid copy-typing, the editor (address above) would prefer to receive contributions on disc or by e-mail, or typewritten. Details as follows:-

1. Via conventional mail on CDRom or IBM PC formatted 720Kb or 1.4Mb 3.5 inch diskettes, as unmodified word processor files (most common DOS or Windows word processor formats are acceptable) or as RTF, PDF, ASCII or DOS text files (We usually have to change pagination and heading format, anyway). Mark the disc with the format, word processor name and file name(s). Complicated tables and figures can be accepted as separate graphics files (not OLE embedded, please!) but we may ask for a hard copy as a check that all detail has been retained. Remember that figures should have legends and small detail drawn large enough to be visible when reduced to 100mm by 70mm. Diskettes will be returned on request.

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Content covers papers presented at the Group's Annual Meeting, which is usually held in September, short research notes, notices and accounts of meetings, and articles of anecdotal or general interest that would not normally be found in international journals. Geographical cover is world-wide, and is not restricted to the British Isles. Reports of research carried out by graduates, young scientists and newcomers to the subject are particularly encouraged. It is an ideal medium for offering new ideas and stimulating discussion because of the very short interval between acceptance and publication.

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