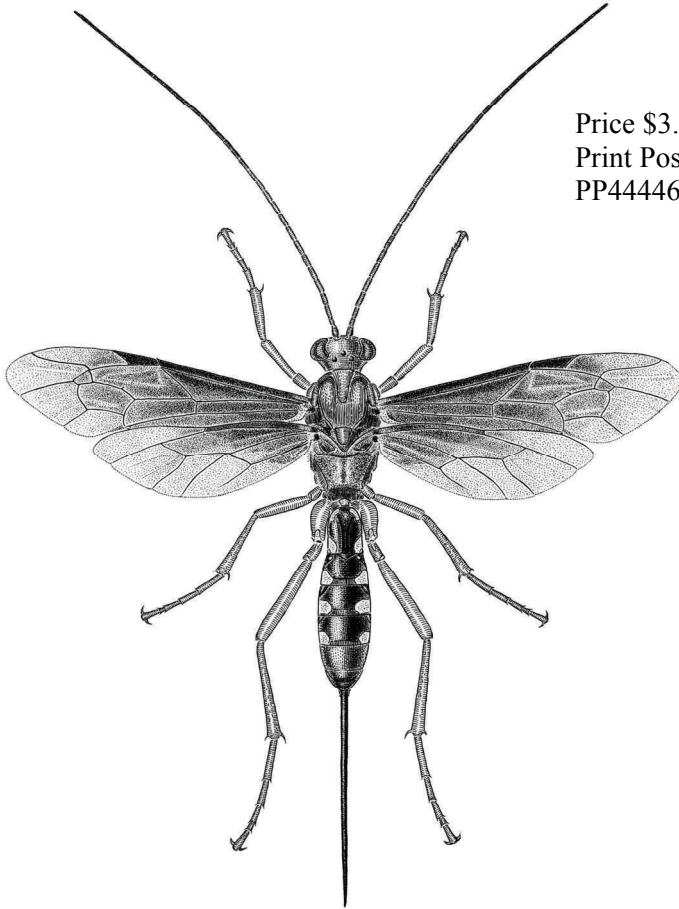


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THE ENTOMOLOGICAL SOCIETY OF QUEENSLAND

Website: www.esq.org.au

Address: PO Box 537, Indooroopilly Qld 4068

President

Dr Simon Lawson
Ph: (07) 3255 4380
Fax: (07) 3844 9716
Email: simon.lawson@daff.qld.gov.au

Senior Vice President

Dr. Bill Palmer
Ph: (07) 3255 4469
Email: bill.palmer@daff.qld.gov.au

Junior Vice President

Geoff Thompson
Ph: (07) 3840 7034
Fax: (07) 3846 1226
Email: geoff.thompson@qm.qld.gov.au

Secretary

Kathy Ebert
Email: k.ebert@uq.edu.au

Treasurer

Dr Brenton Peters
Ph: (07) 3376 4342
Email: petersbc@tpg.com.au

News Bulletin Editor

Chris Moeseneder
Ph: (07) 3833 5946
Email: chris.moeseneder@csiro.au

Permit Information Officer

Dr Christine Lambkin
Ph: (07) 3840 7699
Fax: (07) 3846 1226
Email: christine.lambkin@qm.qld.gov.au

Councillors

Dr Federica Turco
Ph: (07) 3840 7690
Fax: (07) 3846 1226
Email: federica.turco@qm.qld.gov.au

Bradley Brown
Ph: (07) 3833 5695
Email: bradley.brown@csiro.au

Penny Mills
Ph: (07) 3365 1864
Email: penelope.mills@uqconnect.edu.au

Honorary Life Members

R.A.I. Drew
D.L. Hancock
M.J. Harslett
R.P. Kleinschmidt
G. B. Monteith
D.P.A. Sands

THE AUSTRALIAN ENTOMOLOGIST

Editor

Dr David Hancock
PO Box 537
Indooroopilly Qld 4068
Ph: (07) 4053 1574
Email: davidhancock50@bigpond.com

Business Manager

Dr Geoff Monteith
Ph: (07) 3371 2621
Email: geoff.monteith@bigpond.com

Front Cover Illustration: Ink illustration by William Manley of a female *Lissopimpla excelsa* (Costa, 1864) (Hymenoptera: Ichneumonidae: Pimplinae), a parasitic wasp (image copyright Qld Department of Agriculture, Fisheries & Forestry).

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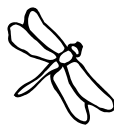


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The **ENTOMOLOGICAL SOCIETY OF QUEENSLAND INC.**, since its inception in 1923, has striven to promote the development of pure and applied entomological research in Australia, particularly in Queensland. The Society promotes liaison among entomologists through regular meetings and the distribution of a *News Bulletin* to members. Meetings are announced in the *News Bulletin*, and are normally held on the second Tuesday of each month (March to June, August to December). Visitors and members are welcome. Membership information can be obtained from the Honorary Secretary, or other office bearers of the Society or from the website www.esq.org.au. Membership is open to anyone interested in Entomology.

Contributions to the *News Bulletin* such as items of news, trip reports, announcements, etc are welcome and should be sent to the News Bulletin Editor.

The Society publishes **THE AUSTRALIAN ENTOMOLOGIST**. This is a refereed, illustrated journal devoted to Entomology in the Australian region, including New Zealand, Papua New Guinea and the islands of the South Western Pacific. The journal is published in four parts annually.

EMBLEM: The Society's emblem, chosen in 1973 on the 50th anniversary of the Society, is the king stag beetle, *Phalacrognathus muelleri* (Macleay), family Lucanidae (Coleoptera). Its magnificent purple and green colouration makes it one of the most attractive beetle species in Australia. It is restricted to the rainforests of northern Queensland.

The issue of this document does **NOT** constitute a formal publication for the purposes of the "International Code of Zoological Nomenclature 4th edition, 1999". Authors alone are responsible for the views expressed.

Minutes of General Meeting

Held in the Library, Ecosciences Precinct, Boggo Rd, Dutton Park, Tuesday, August 13th at 1.00pm.

Attendance: *Members:* Justin Bartlett, Bradley Brown, Kathy Ebert, Alexandra Glauerdt, Andrew Hayes, Simon Lawson, Manon Griffiths, Judy King, James McCarthy, Penny Mills, Chris Moeseneder, Geoff Monteith, Bill Palmer, Brenton Peters, Kathy Thomson, Geoff Thompson, Desley Tree. *Visitors:* Dean Beasley, Amil Raghavendra.

Apologies: Lyn Cook, Julieanne Farrell, Steve Hey, Christine Lambkin, Lance Maddock, John Moss, Federica Turco.

Minutes: The minutes of the June Meeting were circulated in News Bulletin Vol. 41 Issue 4, August 2013.

Moved the minutes be accepted as a true record: Simon Lawson

Seconded: Chris Moeseneder

Carried: Unanimously

Nominations for Membership: No nominations were received this month.

General Business:

1. It was announced that the new Society website was going on line this month.

2. The next BugCatch event is scheduled for Saturday, October 12th. It will be held at the Franke Scrub Reserve near Toowoomba (see elsewhere in this Bulletin for further information).

3. The next meeting will be our special biennial Perkins Memorial Lecture to be given by Dr Ken Walker of the Museum of Victoria and his title will be "My Scientific Digital Evolution and its Consequences".

The meeting will be at 5.00 pm on Tuesday September 10 and will be followed by a BBQ and drinks. See elsewhere in this Bulletin for details.

Main Business :

Dr Doland Nichols "Bell-miner associated dieback of eucalypt forests". Dr. Nichols' talk is printed on page 63 of the Bulletin.

Vote of thanks: Manon Griffiths thanked the speaker on behalf of members.

Meeting closed: 2pm

~

Launch of new society website

Members will be interested to know that we now have a completely redesigned website which you can find at the same address as previously at <http://www.esq.org.au/>. I encourage you all to visit the new site and any feedback on errors or suggestions for improvements you have would be greatly appreciated by Council.

We will keep it updated with information about coming meetings and excursions, and as before, the site also has full information for authors wishing to publish in our journal, *Australian Entomologist*, and contact details for News Bulletin submissions etc.

Many thanks to Chris Moeseneder who has put much effort over more than a year in designing what we think is a very visually appealing and modern new design, and of course in ironing out the bugs (pun intended) always associated with these things.

Simon Lawson
President



Bell Miner Associated Dieback of eucalypts – an ecosystem out of balance

Associate Professor J. Doland Nichols, Forest Research Centre, Southern Cross University, Lismore

Bell miner associated dieback (abbreviated BMAD) is a complex forest phenomenon that, in worst case scenarios, results in a stand of dead trees over a solid patch of lantana (Fig. 1).



Fig. 1. Eucalypt canopy death above lantana due to BMAD syndrome.

As all insect ecologists know, in ecosystems, whether “natural” or artificial, a complex set of bottom-up factors - mainly those influencing the production of suitable edible plant material, and top-down factors – both physical and biological controls on herbivore populations – keep the world mostly green. But sometimes there is a breakdown – there may be too much of a plant resource perfect for a specific herbivore, or too little of the parasites and predators that control that herbivore. This is the case with BMAD (Stone

et al. 2008).

The actual organism that causes dieback and death of trees in this syndrome is a psyllid, usually in the genus *Glycaspis* (Fig 2).

These are sap-sucking insects in which the nymph lives on the leaf surface and shelters beneath a sugary, dome-shaped shelter (the lerp) which is secreted as a by-product of the insect’s liquid diet. The most affected forest type is wet sclerophyll eucalypt forest, particularly those dominated by species like Sydney blue gum, grey ironbark, and grey gum, although many species of eucalypt seem to be susceptible. There are nearly 400 species of psyllids in Australia, most specific



Fig. 2. *Glycaspis* lerps on a eucalypt leaf.

to a small range of eucalypts, but generally numbers are not at outbreak levels. Bell miners (*Manorina melanophrys*) (Fig 3) engage in two types of behaviour that favour the *Glycaspis* psyllids: 1. They “farm” the psyllids, picking off the lerp as food and leaving the nymph, which can then produce another nutritious lerp (Haythorpe and McDonald 2010). This is in contrast to the

behaviour of other birds, for example the noisy miner (*Manorina melanocephala*), which feed on both the insect itself and the lerp. 2. Bell miners are very territorial, nesting in low vegetation, particularly *Lantana camara*, of which there are some four million hectares in NSW and Queensland. They aggressively drive away other bird species, the ones that normally function as consumers of psyllids.



Fig. 3. Bell miners feeds on lerps in the tree canopy and nest in protective lantana shrub layer.

The bottom-up story is less clear. Some foresters believe that “unnatural” fire regimes, in which frequent low-intensity ground fires are suppressed, can lead to high nitrogen levels in the foliage of eucalypt crowns. This means that psyllid populations can expand rapidly and cause leaf loss, canopy dieback and eventually tree death. The importance of leaf quality has not been established. One of the challenges for researchers is in finding ways to isolate foliar nutrition as a variable, and separating it from many other variables, such as topographic position, soil moisture holding capacity, understorey structure and so on. Sampling foliage in 30 meter tall trees is time-consuming and expensive.

Understorey structure, especially a dominant layer of lantana, heavily favours the development of BMAD. I think we can say that most people who have studied this issue would agree that if lantana were to disappear

tomorrow, the BMAD problem would be greatly diminished. A wide variety of insects have been introduced to attempt bio-control of lantana but none so far have been effective. The “splatter gun” approach to herbicide application has proven a reasonably efficient means for controlling lantana, while repeated treatments are often necessary and need to be coordinated with either good seed fall from native forest or with tree planting. In 2004 an aerial survey of the region north of Kyogle found approximately 20,000 hectares of BMAD-affected forest, 8,000 ha of it severely. This was on land fairly evenly divided among State Forests, National Parks, and private ownerships. Certainly the problem has expanded in the intervening years and now extends from the south coast of NSW through to the Blue Mountains (bell miners can be heard from several of the famous tourist spots there) and well up into Queensland.

BMAD has now appeared in eucalypt plantations, including those of *E. dunnii* and *E. resinifera* (red mahogany). In one case farm foresters found it necessary to inject their red mahogany stands with systemic insecticide, as well as control understories of lantana and other weeds, to save their plantations. The National Parks service has also found it necessary to insert plugs of systemic insecticides into some BMAD-susceptible trees in campgrounds – not a solution that can be applied across wide areas.

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Field Guide to the damselflies of New Guinea

Brachytron



NEW BOOK

Field Guide to the damselflies of New Guinea

by V.J. Kalkman & A.G. Orr

This attractive, newly-released book on New Guinea damselflies has been produced as a 128-page supplementary volume of *Brachytron* which is the journal of the Dutch Society for Dragonfly Studies. It is available from them for €15 and details can be obtained from the following website: <http://www.brachytron.nl/Brachytron/Brachytron16supinoud.html> It is also featured on the website of the Papuan Insects Foundation at <http://www.papua-insects.nl/>

With this book in hand the reader can identify all genera and most species of damselflies occurring in New Guinea. It is designed to stimulate New Guinea people to

explore their local streams and standing waters and to appreciate the wonderful diversity of damselflies and dragonflies to be found there. Over 500 copies are being donated to universities throughout New Guinea. As well as introducing students and researchers to the beauty of damselflies, the guide provides a basis to study them and use them in biodiversity studies supporting the conservation of freshwater habitats.

The guide contains nearly 300 colour drawings and over 250 line drawings by Albert Orr and twenty-two colour photographs taken in the field by Stephen Richards. Both are subscribers of the Entomological Society of Queensland. Many genera and most species included have never been depicted in colour before.

Vincent Kalkman has had an interest in the damselflies and dragonflies of New Guinea since 2005. In 2006 and 2008 he conducted fieldwork with the Kelempok Entomologi Papua in the Indonesian part of the island and in 2009 he joined the expedition by Conservation International to the Muller Range in Papua New Guinea.

Albert Orr's interest in the insect fauna of New Guinea dates back to undergraduate days when he made two lengthy excursions in 1971 and 1973/4, collecting butterflies and dragonflies. He has authored and illustrated several identification guides to Asian dragonflies and damselflies (2003, 2005 and 2007), and the butterflies of Australia (2010).

Co-author Dr A.G.Orr has given five free copies to the ESQ for distribution to serious odonate enthusiasts among our members. If you would like one please send an email to the Honorary Secretary at k.ebert@uq.edu.au If there are more than 5 expressions of interest we will draw lots at the next Council meeting.

LUDWIG LEICHHARDT TURNS 200!

Geoff Monteith

Queensland Museum

Every Queensland schoolkid of my vintage had to learn the routes of our great explorers and be able to draw them on a map. The greatest was Friedrich Wilhelm Ludwig Leichhardt, the German (Prussian) natural scientist and adventurer who led three of the first major expeditions into Queensland's interior in the 1840s. He is probably best remembered for his final foray in 1847 when his entire party of 7 men, 7 horses, 20 mules and 50 bullocks disappeared without trace after heading west from the Darling Downs. But his triumph was certainly his earlier expedition in 1844-45 when his party walked and rode 4800 km over 14 months from the Darling Downs to Port Essington on the Cobourg Peninsula in NT, making comprehensive observations on the geology and biology *en route*.

The 200th anniversary of Leichhardt's birthday falls on October 23 this year and there are some important events happening in Queensland. On October 23-24, the University of Queensland is hosting a major symposium entitled "The Leichhardt Symposium on Biodiversity and Conservation" This is supported by the Alexander-von-Humboldt Foundation and the Australian Embassy in Berlin, and will follow the first general colloquium of the Humboldt Foundation in Australia in Sydney on October

17. The Brisbane symposium will feature distinguished speakers from both Germany and Australia and will initiate a series of conferences on biodiversity themes that will alternate between Australia and Germany and be complemented by future workshops and field trips. Two German entomologists visiting Brisbane for the symposium are Roland Gerstmeier from the Technical University of Munich, who works on Cleridae, and Alexander Riedel, from the Natural History Museum in Karlsruhe, who works on Curculionidae. Full details of the Brisbane event, including free registration, are at <http://www.biology.uq.edu.au/Leichhardt-symposium>.

Whilst on this expedition, we observed a great number of grasshoppers, of a bright brick colour dotted with blue: the posterior part of the corselet, and the wings were blue; it was two inches long, and its antennæ three quarters of an inch.

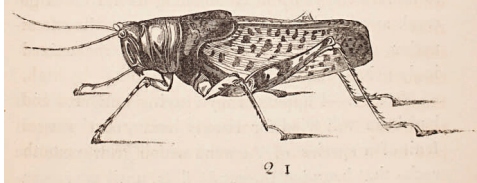


Fig 1. Illustration and text about *Petasida ephippigera* from Leichhardt's 1847 journal.

The Queensland Museum is publishing two volumes of its Memoirs to commemorate Ludwig Leichhardt. The 540 pp first volume is just out and has edited transcripts of Leichhardt's voluminous diaries covering his time in Australia (1842-44) before his expedi-

tions began (Darragh & Fensham, 2013). All of his numerous annotated sketches are included. The second volume is a collection of taxonomic papers by QM and other scientists who dedicate their work to Leichhardt. The papers cover spiders, fish, dung beetles, clerids, carabids, millipedes, snails, leafhoppers, crabs, nematodes, pseudoscorpions and mites, all of them naming species after Leichhardt. Barbara Baehr is coordinating the volume and it will be launched by the Queensland Museum's new Director, Dr Suzanne Miller, at the symposium in October. Be there....or be square!

Leichhardt was a trained scientist and his main interests were geology, botany and landscape interpretation. However he was an inveterate observer and recorder of ALL that he saw, and his journal includes many references to insects. His most famous collection was of a spectacular grasshopper now known as Leichhardt's Grasshopper (*Petasida ephippigera*). In the closing days of his epic journey to Port Essington in 1845, as the starving, sick and exhausted men crossed the forbidding rock wasteland of the Arnhemland Plateau he took the trouble to collect some striking grasshoppers, of which his log records they saw "a great many". He carried specimens to Port Essington where the medical officer "Dr Tilston drew and coloured one". However his published journal contains only a wood-cut (Fig 1). The species was described in 1845 from specimens in the British Museum taken at an unspecified locality during a survey voyage by "HMS Beagle" which had returned to Australia in 1837 following Charles Darwin's famous round-the-world voyage in the same vessel in 1831-36. Following that era this spectacularly coloured grasshopper was never seen again for more than 120 years until it was recollected by CSIRO personnel during Ranger Uranium environmental surveys in the 1970s, within 50 km of where Leichhardt had found it (Calaby & Key, 1973). It remains rare and endangered. The only specimens in Queensland collections are three in the Queensland Museum collected by the late Ross Storey in the same general area (Fig 2).



Fig 2. A modern specimen of Leichhardt's Grasshopper (Photo: G. Thompson).

Many of Leichhardt's comments about insects refer to the biting ones that plagued the men and their livestock, and there is frequent reference to "green-eyed horse-flies". Their worst experience was in central Queensland during an attempt to retrace part of the route from his 1844-45 expedition. After weeks of battling torrential rain, sticky black soil plains, illness, lost livestock, rotting dried meat, insubordinate men and insect plagues, he was forced to turn back. Some entomological aspects of his torment follow. On 11 February, 125 km

NW of Taroom, his log reports:

"My poncho, for instance, has a piece of opossum cloak around the slit. This was blown [maggot infested] , and as it commenced to rain and I put my head through the slit, thousands came into the hair of my head and beard, and I was teeming with maggots all over my

body which, worse than lice, tried my substance, boring most eagerly into my skin. I washed, I combed, I brushed, and with the latter I tolerably succeeded in cleaning myself, most terribly disgusted with the filthy things." (Leichhardt, 1847b)

A couple of days later Leichhardt's party ran into an outbreak of what was obviously *Austrosimulium pestilens*, the evil, blood-sucking, simuliid fly which emerges in phenomenal swarms soon after the first summer flows come down the dry beds of Queensland's inland rivers. Today we call it the "Dawson River Sandfly", after the river

named by Leichhardt on that same journey. When Ian and Josephine Mackerras gave the fly its scientific name “*pestilens*” just over a century later, they perhaps drew upon knowledge of how Leichhardt’s party had suffered from its attacks. Leichhardt’s biographer, Colin Roderick, summarises their trials with this pestilential fly as they followed the Comet River, near Rolleston:

“...it was a relief to bathe in the running stream, but the sandflies were so prevalent that they covered every part of the body out of the water. They attacked the animals so viciously that the horses dispersed whenever a thicket came into sight, and the pack mules raced after them, tearing off their packs in their rush through the timber. They blackened hands and faces, flew into nostrils, eyes and ears, or went down into the windpipe with the breath. Their stings were so fierce and their numbers so great that men and beasts were mad with the itch that followed. Crush dozens, and dozens more took their place. The only way to be rid of them was to stop and light fires and throw on green foliage to create a smoke in which men and beasts took shelter.” (Roderick, 1988)

Today, “southerners” often complain of the heat and insects of Queensland summers, but few do it as tough as Ludwig Leichhardt did in the 1840s....before the invention of “Aerogard”!

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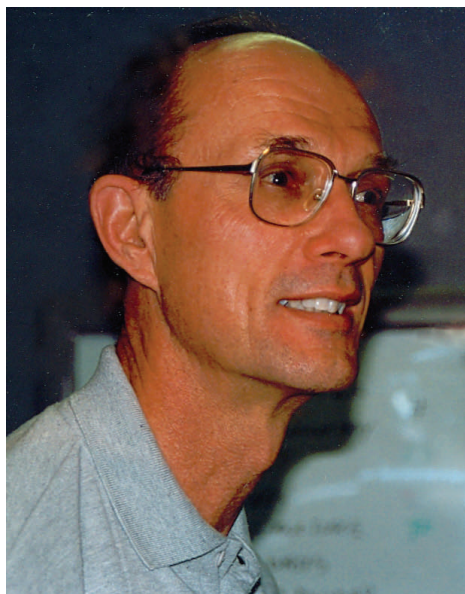


Fig 3. The explorer Ludwig Leichhardt. 2013 is the 200th anniversary of his birth.

OBITUARY

Robert (Bob) Wilfred SUTHERST (22 March 1943-27 June 2013)

by Gunter Maywald, CSIRO retd.



Bob was born on 22 March 1943 in Nairobi in Kenya. His parents were pioneering farmers at Limuru near Nairobi during the period of Kenya's turbulent struggle for independence. From the age of four until the completion of his secondary education, he attended the boys-only Prince of Wales school in Nairobi as a boarder. It was during these years in Kenya, surrounded by the wonderful animals of his homeland, that his interest in natural history germinated. As he would later say, he started with shooting game animals, but this then developed into a love for these animals that fuelled his later passion for conservation issues. He left Kenya to continue his education at Edinburgh University in the United Kingdom, where he graduated in 1966 with a first class Honours degree in Ecology.

In 1967, Bob was awarded an Australian Meat Research Scholarship to fund a PhD on aspects of cattle tick ecology in Australia. Before making his way to Australia to take up the scholarship, he visited South Africa, where he met Anna, the love of his life. Before he continued on to Australia four weeks later, they were engaged. Later in the year, Bob returned to South Africa where they married and then travelled to Australia together to settle in Brisbane. There Bob worked towards a PhD on "Aspects of the population dynamics of ticks infesting cattle in Queensland" at the University of Queensland Parasitology Department, under the supervision of Dr. D.E. Moorhouse, completing it in 1970. In the late 1960s the Officer-in-Charge of the new CSIRO laboratories at Long Pocket, Dr. Harry Wharton, was asked to put together a team of researchers to look at the Australian cattle tick problem that was becoming critical due to the rapid development of acaricide resistance. Bob was recruited to provide the ecological foundation for this research. One of his main tasks was the development of a simulation model that integrated all the factors in the tick's lifecycle with management.

Bob spent the rest of his research career with CSIRO. Until cattle tick funding from the AMRC ceased in the early 1980s, by which time the introduction of tick resistant cattle had considerably reduced the tick problem, Bob and his team, including Klaus Utech, Anne Bourne and Ian Sutherland, had collected data on the lifecycle characteristics of the tick, as well as resistance responses by cattle to nutrition and other factors. This was the foundation for a detailed management model, initially in conjunction with Dr. Mike Dallwitz in Canberra and then with my involvement after I joined the team as a programmer in late 1975. Bob was a lateral thinker and his ideas did not always coincide with those of Harry Wharton, and some heated discussions between the two could often be heard

in the Long Pocket corridors.

In the early 1980s, the focus of the group changed to another cattle pest, the biting fly *Haematobia irritans* (buffalo fly). During the three years that this project was funded, Bob and his team, including Dr. Gus Macqueen and Ian Sutherland, carried out a large multi-year experiment that investi-

he would always regard as his fondest creation. One year he received a phone call shortly before Christmas about some horses that had been brought in to Bunbury in Western Australia and were found to be carrying ticks. Should quarantine measures be instituted immediately or was the climate in the region unsuitable for the survival of the species? Several days spent laboriously



Bob Sutherst (right) after bushpig hunt on Edinburgh University student trip to Kenya in the 1960's.

gated the ecology of the fly and its associated predators at four locations in Northern Australia. A large amount of data was collected but the funding for the project was terminated on short notice before much analysis had been carried out. This was a considerable disappointment to Bob and it is greatly to his credit that after retirement he started to process this data for publication in cooperation with Gus, considering that too much money had been spent on it to waste this large amount of information. It was after the buffalo fly project that Bob embarked on the project that would in many ways define his scientific career and which

checking and comparing climate charts and pest distributions convinced Bob that there must be a better way to answer the question. His response to the problem was characteristic, and a short while later CLIMEX was born. CLIMEX provided a quick way to parameterize a species' response to climate and estimate the climatic suitability of places where it did not yet occur. The program proved very successful and by 1986 a commercial version was available and sold throughout the world. It has been applied to hundreds of insects, plants and other species in the years since.

In 1993, Bob and his team were seconded to the newly-established Cooperative Research Centre for Tropical Pest Management (CTPM) at the University of Queensland. Here he continued the development of the CLIMEX program, while leading a major new project to develop a generic modelling system that could be used to build population models incorporating management without the need to write computer code. This system, named DYMEX and co-developed initially with Myron Zalucki and later with Darren Kriticos, became a commercial product in 1998. This period proved a challenging and sometimes traumatic one for Bob, with Anna suffering from an almost fatal illness that cost her the sight in one eye. The CLIMEX and DYMEX team became the winner of the 2005 Information Industry Awards in the fields of agriculture and community and also received a merit award at the 2006 Annual Asia Pacific ICT awards. The development of these generic ecological modelling tools reflected Bob's passionate desire to make techniques long familiar to modellers available to a much broader audience of biologists. It also involved him in many collaborative projects outside the field of livestock pests with other groups in biological control, quarantine and biosecurity.

Bob recognised early on the challenges that would be brought by global climate change. He applied the tools he had developed to projecting the effects on a number of pests and diseases and thereby helped to develop strategies and adaptations to counter these threats.

Bob retired from CSIRO in 2006 and was appointed as an Honorary Reader in the Centre of Excellence for Environmental Decisions of the University of Queensland, working with Professor Hugh Possingham. He continued to write up some past research and started on what he considered to be the major projects of his retirement, synthesising his work on ticks and ecological tools,

as well as his experiences of his early life in Kenya, into books. At this time he also developed an interest in Australia's system of stock routes and their role in biodiversity conservation. He helped to lead the Stock Route Coalition of NGOs, whose aim is to have the stock route networks in Queensland and NSW given protected status as biodiversity corridors to facilitate adaptation to climate change. Bob was also finally able to invest time in one of the passions of his youth and equipped himself to spend time in the bush photographing native birds. This is what provided him with his greatest joy, and it was with justified pride that he saw one of his photographs published in Africa Geographic magazine in the past year.

Bob's public roles were many. These included a series of 6-year terms as consultant to the FAO-DANIDA Africa Regional tick and tick-borne disease program; membership of the Governing Council of the ICIPE; and seat on the Scientific Steering Committee of the IGBP Global Change and Terrestrial Ecosystems program. He also served many years on the NSW Cattle Tick Advisory Committee. His publication record consists of more than 130 refereed papers and book chapters, many in highly recognised journals including in *Nature* (in 1982) and very recently in *Science* (2013). Bob's work over the years has been recognised with a number of honours. He was the second recipient of the Mackerras Medal of the Australian Entomological Society and inaugural recipient of the Bancroft-Mackerras Medal of the Australian Society for Parasitology. He served on Council of the Entomological Society of Queensland for three years and was President in 1983.

Bob was always a fit man and bicycled from his home in Chelmer to the University of Queensland. It was therefore a great shock to himself and all who knew him when he was diagnosed with mesothelioma in late 2011. Bob had renovated his home

during the 1970s and put the genesis of his cancer down to asbestos exposure during that period. His response to this tragic news was typical of the man. He knew that the time left to him was short and his many retirement dreams would not come to pass, yet his first concern was to put his affairs in order to facilitate the transition for Anna, his son Michael and daughter Helen. He also invited colleagues and friends to visit him at any time while easing the burden for us with his cheerful demeanour and insisting that he had had a good life. In his last few months Bob suffered from considerable pain and found long periods at his computer very uncomfortable, yet he kept on working as much as he could to complete a manuscript, which was accepted for publication just weeks before his death. Bob suffered a stroke on 26 June 2013 and died the next day in hospital in the presence of his family.

I worked as part of Bob's team from October 1975 until my retirement from CSIRO in August 2004. As a supervisor, he was wonderfully caring, providing strong guidance, yet always elucidating and listening to ideas from his staff. I was a very poor speaker when I started with CSIRO and Bob gently encouraged me to join Toastmasters, something that made all the difference. Even though I was hired to develop the group's software, Bob made sure that I was involved in much of the fieldwork and I ended up spending many hours counting ticks on animals and sorting dung for insects, thus gaining a much better appreciation of what the numbers that I was dealing with on the computer actually meant. In fact, Bob was deeply committed to lifelong professional and personal development for all his staff and we would frequently be encouraged to partake in all sorts of these courses. A particular favourite of his was Stephen Covey's "Seven Habits of Highly Effective People", principles that he not only believed in but lived by.

Bob is survived by his beloved wife Anna, their two adult children Michael and Helen and granddaughter Anna. We who knew him and worked with him will miss this wonderful scientist and man, someone who was a true gentleman and cared deeply not only about the people that he knew but the world around him.

FRANKE SCRUB BUGCATCH

Saturday 12th October, 2013

The next BugCatch field trip will be held at Franke Scrub, which is a small rainforest remnant on red soil, 15 km NW of Toowoomba, on the outskirts of Highfields. It is being organised by our coordinators Christine Lambkin (Qld Museum) and Kathy Ebert (UQ) in conjunction with some local community bush care groups. Kathy will be bringing a group of UQ entomology students and Christine will be running a QM Backyard Explorer Community Event for local participants.

Toowoomba is about an hour and a half drive from Brisbane and activity at the site will start from about 9.30am on Saturday, October 12. Members can do their own thing or there will be opportunity to mix with the student and community group activities. There will be light trapping in the evening. You will need to bring all your food and water for the day, though there are some takeaway outlets nearby. Full details are available on the Society website at http://www.esq.org.au/esq_bug_catch.htm. Please read this closely if you are interested in attending. If you wish to go you MUST register with Kathy Ebert at k.ebert@uq.edu.au and she will then send you instruction on how to get to the area.

Upcoming conferences and events

2-5 September 2013

Sofia, Bulgaria
XIII International Symposium on Scale
Insect Studies
<http://issis-bg.com/>

29 September – 2 October 2013

Adelaide, South Australia
Australian Entomological Society 44th
AGM and Scientific Conference
Theme: Invertebrates in Extreme Environ-
ments
<http://www.aes2013.org/>

8-12 November 2013

Kuching, Malaysia
2nd Global Conference on Entomology
<http://www.gce2013.com/>



10-13 November 2013

Austin, Texas
Entomology 2013
(Entomology Society of America)
<http://www.entsoc.org/entomology2013>

October 23-24 2013

University of Queensland, Brisbane
Leichhardt Symposium on Biodiversity and
Conservation
A combined German-Australian symposium
to celebrate the 200th anniversary of the
birth of explorer Ludwig Leichhardt. Free
attendance. Details and registration at:
<http://www.biology.uq.edu.au/leichhardt-symposium>

1-6 December 2013

Sydney, New South Wales
Joint Society of Australian Systematic Bi-
ologists, Invertebrate Biodiversity & Con-
servation, and the Australasian Systematic
Botany Society
Theme: Systematics without Borders 2013
<http://www.systematics2013.org/>

18-23 March 2014

Montpellier, France
4th International Conference on Weeds and
Invasive Plants
More information at: <http://www.ansespro.fr/invasiveplants2014/>

24-26 March 2015

Salt Lake City, Utah, USA
8th International Integrated Pest Manage-
ment Symposium
More information available from E. E.
Wolf at Wolff1@illinois.edu

NOTICE OF NEXT MEETING

Perkins Memorial Lecture

Frederick Athol Perkins (1897-1976)



This biennial lecture celebrates the memory of Frederick Athol Perkins, a founder of the Entomological Society of Queensland, first lecturer in entomology at the University of Queensland (1926), and first Head of the Department of Entomology (1952). Athol Perkins influenced entomology in Queensland for half a century in a way that no other entomologist has yet emulated.

Tuesday 10th September 2013

LECTURE at 5PM - followed by BBQ

Seminar Room 1, Ground Floor
Ecosciences Precinct, Boggo Rd, Dutton Park

No need to sign-in at front desk.

BBQ

Cost \$5

Drinks available for purchase.

RSVP to Bradley Brown by Friday 6th September
Bradley.Brown@csiro.au

Visit www.esq.org.au/meetings.html for maps of venue

THE 2013 PERKINS LECTURE

My Digital Evolution and its Consequences



Speaker:

Dr Ken Walker, Museum of Victoria

Abstract. One great privilege of being a museum curator is managing part of Australia's biodiversity footprint – millions of specimen records in fact! What to do with this resource has been a perennial curatorial question. The internet was an obvious answer but it came with its own set of unique questions and dilemmas. Then, along came the “user-pay” society which demanded that public collections contribute more to society's social and conservation related policy decisions. A disconnect had occurred between scientific and public worlds. Perhaps Citizen Science can help to bridge that gap.

About the lecturer. I was born in Brisbane and completed a B.Agr.Sci. degree at the University of Queensland in the late 1970s. I then had the good fortune to do a taxonomic M.Sc. degree on native Australian bees (Halictidae) under the supervision of Dr Elizabeth Exley – a wonderful lady. I then migrated south to secure an entomological curatorial position at Museum of Victoria which I have held for 32 years completing a systematics PhD at LaTrobe University in the mid 1990s under Professor Tim New. Much curatorial work involves a public interface. I have developed Museum exhibitions (European Wasps, Skydancers – Butterflies of the World and Bugs Alive!). I have also built several significant public web-sites: Bioinformatics – Museum Specimen data; PaDIL – Biosecurity; and BowerBird – Citizen Science. I still publish taxonomic papers but I am now heavily involved with Bug/Bio Blitzes and developing an Australian Citizen Science presence.

DIARY DATES 2013

Nine general meetings held per year on the 2nd Tuesday of the respective month

MAR—Tuesday 12th	Geoff Thompson	AGM and President's Address
APR—Tuesday 9th	Michael Ramsden	<i>Sirex</i> wood wasps in Queensland
MAY—Tuesday 14th	Dr Mike Furlong	Plant responses to herbivory: complex interactions between parasitoids, predators and prey
JUN—Tuesday 11th	Notes & Exhibits / Student Award Presentation	
AUG—Tuesday 13th	Dr. Doland Nichols	Bell Miner associated dieback of eucalypt forests
SEP—Tuesday 10th	Dr. Ken Walker	Perkins Memorial Lecture "My Digital Evolution and its Consequences"
OCT—Tuesday 8th		
NOV—Tuesday 12th	Prof. Helen Wallace	Promiscuous plants and strange bee behaviour: reproduction in Australian plants
DEC—Tuesday 10th	Notes & Exhibits and Xmas BBQ	

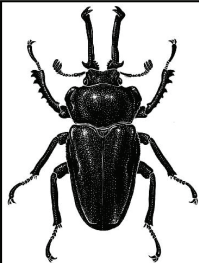
SOCIETY SUBSCRIPTION RATES

GENERAL:	Person who has full membership privileges	\$30pa
JOINT:	Residents in the same household who share a copy of the <i>News Bulletin</i> , but each otherwise have full membership privileges.	\$36pa
STUDENT:	Students and others at the discretion of the Society Council. Student membership conveys full membership privileges at a reduced rate.	\$18pa

THE AUSTRALIAN ENTOMOLOGIST SUBSCRIPTION RATES

AUSTRALIA:	Individuals	AU\$33pa
	Institutions	AU\$37pa
ASIA/PACIFIC:	Individuals	AU\$40pa
	Institutions	AU\$45pa
ELSEWHERE:	Individuals	AU\$45pa
	Institutions	AU\$50pa

Subscriptions should be sent to the Business Manager,
The Australian Entomologist PO Box 537, Indooroopilly QLD 4068.



THE ENTOMOLOGICAL SOCIETY OF QUEENSLAND



NOTICE OF NEXT MEETING

Tuesday 10th September 2013, 1pm

~

Dr. Ken Walker

*My Digital Evolution
and its Consequences*

~

Seminar Room 1
Ground Floor, Ecosciences Precinct
Boggo Road, DUTTON PARK

More venue details available at
<http://www.esq.org.au/meetings.html>

ALL WELCOME

NEXT NEWS BULLETIN

Volume 41, Issue 6 (September 2013)

CONTRIBUTIONS WELCOME

DEADLINE - Wednesday September 18th, 2013

Send your news/stories/notices to
geoff.monteith@bigpond.com