

19th International Symposium of Subterranean Biology



Programme



Fremantle, Western Australia
22-26 September 2008

PROGRAM

19th International Symposium of Subterranean Biology
Maritime Museum, Fremantle, Western Australia
22-26 September 2008

SUNDAY 21
SEPTEMBER 2008

1700-2000

Registration, reception & poster hanging

1900-2000

Performance – Wadumbah Dance Group

MONDAY 22 SEPTEMBER 2008

0800-1730		Registration & poster hanging
0845-0940		Opening ceremony
0940-1030	<u>Wilkens</u>	Evolution – Chair: W.F. Humphreys Genes, modules and the evolution of troglobites
1030-1100	refreshments	
		Phylogeography – Chair: S. Taiti
1100-1120	<u>Strecker</u>	Introgression in <i>Astyanax fasciatus</i> cave populations (Teleostei)
1120-1140	<u>Cooper</u> , Guzik, Saint, Austin & Humphreys	Comparative phylogeography of crustacean stygofauna from calcrete aquifers of central Western Australia: are they climate relicts?
1140-1200	<u>Stone</u> , Croom, Howarth & James	Evolution of Hawaiian surface and cave adapted <i>Caconemobius</i> crickets (Insecta, Gryllidae, Nemobiinae)
1200-1220	<u>Finston</u> , Halse & Eberhard	Morphological and molecular diversity of subterranean nocticolid cockroaches of the Pilbara
1220-1240	<u>Abrams</u> , Guzik, Cooper & Austin	Molecular phylogeography and phylogenetics of the Parabathynellidae (Crustacea: Bathynellacea) of the Yilgarn region, Western Australia
1240-1340	lunch	
		Historical Biogeography – Chair: B. Sket
1340-1400	<u>Ledford</u> , Paquin, Griswold & Gillespie	Islands underground: species limits, phylogenetics, and conservation of <i>Neoleptoneta</i> spiders in Texas caves
1400-1420	<u>Allegrucci</u> , Fortunato, Carchini, Cobolli & <u>Sbordoni</u>	Molecular phylogeny and historical biogeography of cave crickets from the southern end of the world
1420-1440	<u>Karanovic</u>	Zoogeography of Australian subterranean copepods (Crustacea) contradicts assumptions of monophyly of large continental blocks
1440-1500	<u>Cho</u> & Humphreys	Bathynellacean biodiversity of groundwater in Western Australia
1500-1520	<u>Harvey</u> , Berry, Edward, Humphreys & Walter	A tale of different origins: Western Australian mesas contain subterranean fauna with contrasting evolutionary histories
1520-1540	refreshments	
		Management – Chair: G. Humphreys
1540-1600	<u>Ozimec</u> & <u>Marković</u>	Red book of cave-dwelling fauna of Croatia
1600-1620	<u>Gibert</u> , Piscart, Marmonier & Simon	Groundwater fauna as indicators of the hydrological exchanges between river and groundwater at the landscape scale
1620-1640	<u>Tomlinson</u>	Using subterranean science in water planning
1640-1700	<u>Goater</u> , Storey, Gardner, Dracup & Knott	How much is enough?
1700-1720	<u>Brad</u> , van Straalen & Røling	Nutrient recycling by protozoan predation can enhance overall bacterial degradation of organic matter in groundwater ecosystems
1800-2000		ISSB-SIBIOS Council meeting (Council members only)

0830-1730		Registration
		Phylogeography— Chair: T. Finston
0900-0920	<u>Page</u> , Humphreys & Hughes	Subterranean homesick blues or: How I learned to stop worrying and love Australian cave shrimps
0920-0940	<u>Fong</u> , Hutchins & Carlini	Three distinct clades of the stygobiotic isopod <i>Antrolana lira</i> (Crustacea, Cirolanidae) in the Shenandoah Valley of the Eastern United States
0940-1000	<u>Guzik</u> , Cooper, Humphreys & Austin	Identifying potential mechanisms of speciation in Australian stygofauna
1000-1020	<u>Bradford</u> , Adams, Humphreys, Austin & Cooper	Comparative mtDNA phylogeography of subterranean amphipod (Chiltoniidae) species from a single Yilgarn calcrete aquifer
1020-1100	refreshments	
		Conservation – Chair: J. Anderson
1100-1120	<u>Humphreys</u>	Subterranean biodiversity in Australian shield regions and arid areas: are there global implications?
1120-1140	<u>Deharveng</u> , Brehier, Bedos, Tian Minggyi, Li Youbang, Zhang Feng & Tan Xuefeng	Mulun karst, a hot-spot of subterranean biodiversity in China
1140-1200	<u>Husana</u> , Kase & Yamamuro	Biodiversity of cavernicolous crabs and conservation of cave habitats in the Philippines
1200-1220	<u>Eberhard</u> , Bell, Moulds, Stevens & Muirhead	Terrestrial subterranean diversity in non-karstic Archaean rock terrains: another Aladdin's Cave opening in the Pilbara region of Western Australia
1220-1240	<u>Halse</u> , Cocking, McRae & Scanlon	Perspectives of troglafauna conservation assessment and short range endemism
1240-1340	lunch	
		Phylogeography – Chair: R. Leijds
1340-1400	<u>Ketmaier</u> , Rampini, Di Russo, Latell, Bernhardt, Tiedemann & Cobolli	Molecular evolutionary divergence and phylogeography among Southern Chinese cave crickets of the genus <i>Diestrammena</i> (Rhaphidophoridae)
1400-1420	Giuliana, Rampini, Todisco & <u>Sbordoni</u>	Molecular biogeography of cave crickets: phylogenetic inference and evolution of the Eastern Mediterranean <i>Dolichopoda</i>
1420-1440	<u>Ribera</u> & López-Pancorbo	Origins and distribution of the family Nesticidae (Arachnida: Araneae) in the Mediterranean basin
1440-1500	<u>Polak</u> & Trontelj	Molecular phylogeny and new systematics of leptodirine subterranean beetles (Coleoptera, Leiodidae = Cholevidae) - first results
1500-1520	<u>Paquin</u> & Hedin	Does bad taxonomy favour conservation purposes? The case of the eyeless <i>Cicurina cueva</i> (Araneae: Dictynidae) from caves in the vicinity of Austin (Travis Co.) Texas
1520-1540	refreshments	
		Biodiversity – Chair: L. Deharveng
1540-1600	<u>Susac</u> & Anderson	Discovery of subterranean 'Hidden Treasures' within the Northern Agricultural Region, Western Australia
1600-1620	<u>R & J Anderson</u>	An overview of subterranean fauna and habitats in the Napier Ranges, Kimberley, Western Australia
1620-1640	<u>Holsinger</u> , Fong, Shafer & Culver	A surprising new stygobiotic species of the amphipod genus <i>Gammarus</i> (Crustacea, Gammaridae) from groundwater habitats in central Pennsylvania, USA
1640-2000		Poster session & Reception

WEDNESDAY 24 SEPTEMBER 2008

Excursion to Yanchep National Park. Leader: S. Goater

700

Assemble at Maritime Museum, front stairs

730

Bus departure

0900-0940

Welcome at Yanchep National Park

0945-1315

Tours and presentations

1320-1400

Lunch

1410-1545

Tours and presentations

1600

Assemble for departure

1630

Departure

1800

Expected return to Maritime Museum

THURSDAY 25 SEPTEMBER 2008

0830-1730		Registration
0900- 935	<u>Hoch</u> , Howarth, Stone & Wessel	Evolution and Adaptation – Chair: S. Cooper Cavernicolous planthoppers (Insecta: Hemiptera: Cixiidae) from Hawai'i and Australia: model systems for evolutionary biology and speleogenomics?
0940-1000	<u>Oromí</u> , Contreras, Moya, Ribera & Juan	Geological age and troglobiomorphism in volcanic islands: is there a correlation?
1000-1020		Conference photograph
1030-1100	refreshments	
1100-1120	<u>Parzefall</u> & Plath	Evolution and Adaptation – Chair: O. Moldovan Evolutionary ecology of the Mexican cave fish <i>Poecilia mexicana</i> (Poeciliidae) compared to epigeal relatives
1120-1140	<u>Trontelj</u>	Adaptive radiation under ground
1140-1200	<u>Trajano</u>	Ecological scenarios in the evolution of troglobites
1200-1220	<u>Taiti</u> & Humphreys	Subterranean terrestrial isopods (Crustacea, Oniscidea) from Western Australia
1220-1240	<u>Geoffroy</u>	The cave-dwelling millipede fauna of Vanuatu (Espirito Santo Island): preliminary results and perspectives on diplopod biodiversity, with comments on the millipede families Pyrgodesmidae, Haplodesmidae and Doratodesmidae (Diplopoda: Polydesmida)
1240-1340	lunch	
		Ecology – Chair: E. Trajano
1340-1400	<u>Reid</u>	Methane subsidy and stonefly migration in an alluvial aquifer ecosystem
1400-1420	<u>Zagmajster</u> & Sket	Patterns of troglotrophic beetle (Coleoptera) biodiversity compared to sampling intensity and recent environmental correlates in the Western Balkans
1420-1440	<u>Martinez</u> , Brito, Núñez & Worsaae	Distribution patterns of the interstitial Nerillidae (Annelida: Polychaeta) in La Corona lava tunnel (Lanzarote, Canary Islands), with some remarks on the recent colonization processes of the meiobenthic communities of the cave
1440-1500	<u>Torres-Talamante</u> & Escobar-Briones	<i>Speleonectes</i> sp. (Crustacea: Remipedia): habitat, abundance and trophic relations in “Crustacea” anchialine system, Quintana Roo, Mexico
1500-1520	<u>Culver</u> & Pipan	New insights into subterranean life: superficial subterranean habitats
1520-1540	refreshments	
		Ecology – Chair: A. Boulton
1540-1600	<u>Hancock</u>	The dynamics of groundwater invertebrate communities in alluvial aquifers during and following drought
1600-1620	<u>Taylor</u> , Krejca & Hackley	Urban and rural cave invertebrate communities: Isotopic evaluation of trophic structure ($\delta^{13}\text{C}$, $\delta^{15}\text{N}$) & the relationship between taxa richness and cover types in central Texas, USA
1620-1640	<u>Moldovan</u> , Levei, Miclean, Abraham, Meleg, Brad & Iepure	Interstitial fauna as indicator for heavy metal pollution
1640-1700	Korbel, <u>Hose</u> , Hancock & Serov	Stygofauna in northern New South Wales - unpredictable but interestingly diverse?
1700-1720	<u>Fenwick</u> , Drake & Hartland	Groundwater ecosystem functioning along a contamination gradient
1720-1800		Break
1800-2000		Subterranean Biology editorial meeting (Editorial Board members only)
2000-2200		Films (if offered, see conference organisers)

FRIDAY 26 SEPTEMBER 2008

0830-1730		Registration
		Development and Genomics – Chair: D. Culver
0900- 0930	Wu, Wood & <u>Friedrich</u>	Sensory receptor gene family evolution in cryptozoic insects: first insights from the red flour beetle <i>Tribolium castaneum</i>
0930-1000	<u>Borowsky</u>	Are cave populations evolutionary dead ends?
1000-1030	<u>Jeffery</u>	Developmental relationships between eye regression and constructive traits in <i>Astyanax</i> cavefish
1030-1100	refreshments	
		Genetics – Chair: S. Halse
1100-1130	<u>Protas & Patel</u>	The genetic basis of morphological change in the cave isopod, <i>Asellus aquaticus</i>
1130-1150	<u>Leijs</u>	Does subterranean fauna have altered rates of molecular evolution?
1150-1210	<u>Merritt & Aotani</u>	Bioluminescence in cave glow-worms: signs of altered circadian rhythmicity
1210-1230	<u>Colson, Hervant, Morales & Douady</u>	Identification and expression of the first inducible Hsp70 gene from a subterranean crustacean, <i>Niphargus rhenorhodanensis</i>
1230-1340	lunch	
		Biodiversity – Chair: M. Harvey
1340-1400	<u>Clarke</u>	The subterranean biodiversity of China: some recent examples
1400-1420	<u>Bichuette, de Pinna & Trajano</u>	<i>Glaphyropoma</i> sp. n. (Siluriformes: Trichomycteridae): the first subterranean copionodontine catfish in Brazil with distribution and ecological data
1420-1440	Sidorov, <u>Holsinger</u> & Takhteev	Biogeographic significance of the recent discovery of a new species of <i>Stygobromus</i> (Amphipoda, Crangonyctidae) from groundwaters in eastern Siberia near Lake Baikal
1440-1500	<u>Karanovic</u>	From “terra incognita” to the center of biodiversity: The story of Australian Candoninae (Crustacea, Ostracoda)
1520-1540	refreshments	
1540-1800		General Assembly ISSB-SIBIOS
1800-2300		Conference dinner

POSTERS

	E Aden	Ontogenetic and phylogenetic aspects of regression processes in cave fish: immunohistochemical studies on the blind fish <i>Phreatichthys andruzzii</i> Vinciguerra, 1924
TUESDAY 23 SEPTEMBER, 1640-2000	GL Bennison & PJ Hancock	Ord River Irrigation Area Stage 2 Expansion Groundwater Fauna Survey
	ME Bichuette, M Maestre, E Trajano & R Borowsky	Relationship among cave catfish populations, genus <i>Rhamdiopsis</i> (Ostariophysi: Siluriformes: Heptapteridae), from a karst area of northeastern Brazil
	MC Brito, A Martínez & J Núñez	Changes in the stygobiont polychaetes communities due to the bioturbative activity of <i>Bonellia viridis</i> in the lagoon cave of Jameos del Agua, Lanzarote
	J-L Cho & J-W Yum	Justification of <i>Kimberleybathynella</i> Cho et al, 2005 based on morpho-phylogenetic analysis
	A Clarke	Defining cave micro-habitats: a Tasmanian perspective with new species examples
	C Colson, C Douady, D Renault, A Gravot & F Hervant	Is cold tolerance a general ecophysiological response in the subterranean crustacean <i>Niphargus rhenorhodanensis</i> ?
	E Dumnicka	Comparison of oligochaete fauna inhabiting surface and cave water bodies in the sandstone mountain region of Poland
	S Eberhard & PM Giachino	New species of cave and forest litter dwelling Trechinae (Coleoptera Carabidae): emerging patterns in morphology, distribution and evolution of Tasmanian cave beetles
	K Fabio, B Jalžić & S Gottstein	Subterranean amphipods in karst and flysh zone of Istria, Croatia
	MT Filippelli, M Baratti & S Taiti	Phylogeny and convergence in the two cavernicolous genera <i>Spelaeonethes</i> and <i>Titanethes</i> (Crustacea, Isopoda, Oniscidea)

TUESDAY 23 SEPTEMBER, 1640-2000

C Fišer, A Bogdan, M Gal, M Horvat, R Keber, V Kereži, Ž Kovačec, R Luštrik, A Moškrič, S Novak, E Ogorevc, A Palandančič, V Petkovska, M Pustovrh, T Sečen, D Slana, M Škrget, M Turjak, H Potočnik & B Sket	Teaching speleobiology for understanding biology: an ecology case study (interaction of surface and subterranean amphipods in springs)
MA Gowarty, R Borowsky & B Borowsky	The eyeless cave amphipod crustacean <i>Niphargus ictus</i> Karaman 1985 responds to light
NR Gunawardene, EJ Thomas, VS Campagna, SJ Gregory, FE Taukulis, JM Puglisi, RZ De Lange & KA Moiler	Analysis of taxonomic diversity of stygofauna of the Pilbara Region, Western Australia
MJ Lategan & GC Hose	Quantifying the heterogeneity of microbial activity and diversity in aquifers
H López, AJ Pérez & P Oromí	Preliminary data on the prospection of the mesovoid shallow substratum (MSS) on Gran Canaria (Canary Islands, Spain)
GJ Magniez	From 1896 to 2008, a sight of the stygobitic family Stenasellidae (Crustacea, Isopoda, Asellota)
P Marcia & A Casale	Recent investigations on subterranean animal species in Sardinia, and on their conservation
A Martínez, MC Brito, TM Iliffe, S Koenemann, K Worsaae & J Núñez	Anchialine fauna from the Canary Islands: a checklist of recorded taxa for the La Corona lava tunnel (Lanzarote)
I Meleg, T Brad, S Iepure & O Moldovan	Aquatic fauna in the unsaturated area in caves of Pădurea Craiului Mountains (northwest Romania)
S Montagud, A Sendra, S Teruel, VM Ortuño & A Moreno	Biodiversity on caves of the Valencia Community
J Muriel-Cunha, M CC de Pinna & J AS Zuanon	The first vertebrate from the hyporheic: a new species of <i>Phreatobius</i> Goeldi, 1905 (Siluriformes, Incertae Sedis) from northern Amazon, Brazil
J Muriel-Cunha & M CC de Pinna	Using DNA to resolve the phylogenetic placement of a morphologically aberrant taxon, the stygal catfish <i>Phreatobius</i> (Goeldi, 1905) (Ostariophysi: Siluriformes)

TUESDAY 23 SEPTEMBER, 1640-2000

J Núñez, A Martínez & MC Brito	A new species of genus <i>Sphaerosyllis</i> (Polychaeta: Syllidae: Exogoninae) from the Atlantida Tunnel, Lanzarote, Canary Islands
AJ Pérez, H López & P Oromí	The cave-dwelling fauna of Gran Canaria (Canary Islands, Spain): the importance of artificial caves
B Roudnew & R Leijs	Biodiversity of stygofauna and stygomicrobes of aquifers in South Australia in relation to environmental factors
K Salin, Y Voituren, C Colson & F Hervant	To colonize subterranean environment without starvation tolerance capacity: the case of fish <i>Astyanax fasciatus mexicanus</i>
B Sambugar, U Ferrarese, E Martínez-Ansemil, F Stoch & A Zullini	The aquatic fauna of the karstic cave system 'Piani Eterni' (Dolomiti Bellunesi National Park, Southern Limestone Alps, Italy)
D Sansone & Trajano	Food web in a cave from northeastern Brazil
I Schön, K Martens & S Halse	Phylogeography of two putative ancient asexual ostracod species (Darwinulidae, Ostracoda, Crustacea) from above and below ground
A Sendra, VM Ortuño, S Teruel & S Montagud	A new hotspot of subterranean biodiversity in the Iberian Peninsula. The beasts in the caverns of the "Middle Earth" where "Gollum"- <i>japyx</i> dwells
F Stone, N Lo & J Walker	Current status of the family Nocticolidae (Insecta, Blattaria); a tropical Old World and Australian group rich in cave adapted species
E Trajano, S Secutti, ALF Guil, V Felice & ME Bichuette	Population ecology of <i>Rhamdia enfulnada</i> , troglobitic catfish from northeastern Brazil (Siluriformes: Heptapteridae)
K von Rintelen, TJ Page, Y Cai, D Wowor, TM Iliffe & T von Rintelen	Evolutionary biology of cave shrimps (Crustacea, Decapoda, Atyidae) from the Indonesian island Sulawesi
Z Yrneh, T Ulloa, J A Faría S, MM Castillo & M Gamboa	Distribution of benthic macroinvertebrates in two streams of the Alfredo Jahn Cave, Venezuela

