Peter Malcom Johns M.Sc.

Peter Johns was born in Wanganui in 1935, the second son of Malcom and Hettie Johns. His early education was at Wanganui East Primary School and then at Wanganui Collegiate School. Early experience with a crystal set led him to experiment with the making and use of lead sulphide crystals as radio detectors. A short step further into the world of chemistry took him to the realm of home-made explosives and a fascination with science generally. Included among these interests was astronomy and many evenings were spent at the Wanganui Observatory.

Early childhood was overshadowed by World War II. There were no holidays away from home. However his father, a surveyor with the Ministry of Works, travelled widely, sometimes taking Peter with him and giving him a wider appreciation of the natural world beyond city streets. His mother is believed to have been the first woman to be employed as a research assistant in the Department of Agriculture in 1916.

Wartime created labour shortages in many occupations. Beginning as "pegboy" wih his father's survey gang he moved on to better paid jobs in woolstores, the railways and also to acqire a heavy vehicle driving licence. In those days students with a strong work ethic were able to contribute usefully towards the expense of their tertiary studies.

He was initially attracted to the University of Canterbury by its engineering school but chemistry and zoology quickly became his dominant interests. Between 1953 and 1960 he was a full time student, majoring in both fields, electing to specialise in zoology for his masters degree. For his thesis his specialist field was chitons, leading to two years of challenging but rewarding work, culminating in a first class honours degree. His first real immersion in biological field work came in 1955 with John Dugdale working on a salmon redd survey in Rakaia river streams.

At this time he was drawn into volunteering to work on archaeological "digs" with Canterbury Museum staff on the Wairau Bar, Claverly and Peketa sites. Ethnology has since become one of his continuing major interests. Time was also found for tramping, badminton and caving. Peter's wife Margaret was a student in the Zoology Department and they were married in 1961. Subsequently she took up a position at Lincoln University as a lecturer in biology.

In the 1960's his interest in marine biology developed further with his involvement in adult summer courses at the Kaikoura Marine Biological Station. With Bernard Stonehouse he devised a fulltime course but they were running ahead of their times and funding was not made available to support their forward looking venture. Adult education courses were a regular feature of his lecture programme between 1960 and 1980.

Following the death of Professor Percival in 1959, he was asked to start teaching in the Zoology Department and bore a very heavy workload, which disrupted his personal research programme. In 1964 he was appointed to a permanent position as assistant lecturer and subsequently lecturer. Initially he lectured on marine biology including molluscs and related organisms, morphology, ecology and life histories. Opportunities soon arose to travel to many of New Zealand's offshore islands, from Three Kings in the north to the subantarctic islands in the south and finally Antarctica

in 1985. Taxonomic and distribution issues led him to become directly confronted by the conservation problems facing the whole region.

From 1970 his major research interests have become focussed on terrestrial invertebrates, in particular, weta and cockroaches. This has led him into work on related introduced fauna. These fields have been his focus up to his retirement in 2000 and continue to the present day.

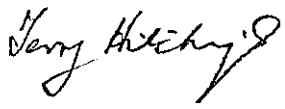
During sabbatical leave he has worked for periods of up to nine months in museums in Stockholm, Lund, Hamburg, London, Paris, Vienna, Munich, Capetown, Brisbane, Sydney and Canberra.

He has published more than 40 research papers, 15 book reviews and peer reviewed many papers by other workers. Since his so-called "retirement" he has been a Research Fellow at this institution and published 8 papers in the Canterbury Museum Records.

In 1970 he was appointed to the Scientific Advisory Committee of the Arthurs Pass National Park Board and also for the Hanmer State Forest. Subsequently he was appointed to the North Canterbury National Parks Board, a post which he held until 1990. Throughout his professional life he has been active in conservation issues some of which have become matters of public debate, such as the Kaitorete sand mining and Port Hills gondola proposals. He is at present a member of two committees of the Department of Conservation concerned with endangered species.

His concern about human social issues has found its practical application in the commitment and care he has shown to the many students he has assisted, at some cost to his own professional work. This is still shown today in the support he still gives to the stream of visitors, both local and from overseas who call on him for advice.

I commend Peter to you as worthy of Fellowship of the New Zealand Entomological Society.



Terry Hitchings

18 April 2017

Nomination of Peter Johns as a Fellow of the New Zealand Entomological Society

"I think there is no greater mistake than to suppose that distribution, or indeed any other large biological question, can be studied to good purpose by those who lack either the opportunity or the inclination to go through what they are pleased to term the drudgery of exhaustive anatomical, embryological, and physiological preparation." T H Huxley

Taxonomy

Peter's appreciation of New Zealand terrestrial invertebrates is only marginally narrower than the subject itself. Peter is a leading expert in millipedes, weta, "cave" weta, cockroaches and craneflies. He has made vital contributions to carabid beetles, flatworms and centipedes. He has a formidable grasp of various stoneflies, onychophorans, earwigs and many other groups. And yet Peter was a latecomer to all of these. His initial postgraduate study was in marine biology with his Masters in chitons. He commenced lecturing in zoology at the University of Canterbury in 1959 at the age of 24. In 1964 he was appointed to a permanent position as assistant lecturer and subsequently lecturer. During the same period that he was participating in, and sometimes leading expeditions to subantarctic islands, he was confronted with problems in taxonomy, biogeography and conservation of terrestrial invertebrates. This became his work.

Weta taxonomy in New Zealand got off to a surprisingly slow start partly because not enough attention was paid to types and the fine detail of characters (including searches for new characters). Peter's entry into this field provided an essential foundation in these respects. The family as currently recognised (Anostostomatidae) was formulated and christened by Peter. Peter continues to uncover morphological characters which are likely to prove useful for tackling unresolved relationships within this family (Johns and Hemp 2015). A mark of Peter's broad insights is the extent to which they were able to be applied to the less well-known Australian anostostomatids. A summary of Australian taxa and their habits "would have been impossible to present without the provisional taxonomic framework provided by Peter Johns". Similar comments have been made about his observations of the biology of New Zealand *Hemiandrus* (Gwynne 2004, Gwynne 2005). Similarly his understanding of subtle morphological detail has provided a foundation for recognising species boundaries in the New Zealand Rhaphidophoridae.

Studies of New Zealand millipedes and centipedes have also received a strong footing and a vital boost from Peter. Aside from revisions of two families, Peter's insights into distinctive traits, sometimes crucial ones, have often been shared freely and have appeared in the work of others. Peter recognised that despite similar size, habits, appearance and overlapping distributions, various specimens including a type had a single pair of hairy spiracles. This previously overlooked character, was found to correlate with others, and a new genus was subsequently erected. Bob Mesibov (in litt) credits Peter as first pointing out that the east of Tasmania seemed to have a greater diversity of millipedes as could be expected from its refuges from glaciation. This pattern has subsequently been upheld. There are several examples of contributions like this where the recognition Peter has received is in the Acknowledgements or with patronyms. It is little wonder then that he has an ongoing dialogue with an impressive array of national and international experts who understand how Peter can assist them with their observations.

Peter has amassed what is easily the largest collection of New Zealand tipuloid flies. He has built on the work of others— in particular the prodigious dipterist C. P. Alexander. The value of this collection stems from Peter's care in identifications based on his study of type collections. Thus New Zealand now has

co-ordinate data from across the country for a highly diverse group whose alpha taxonomy is mostly complete.

Peter is skilled at recognising distinctive forms and understands how carefully species need to be examined to elucidate variation. He has recognised many putative new species with the relevant specimens labelled and often furnished with notes and keys. Thus the future guide for species level taxonomy of scarabs, millipedes, craneflies and others is written into Peter's museum collections and should prove useful for a new generation of integrative taxonomists. His many observations of new phenotypic details approach promises to complement molecular taxonomy and phylogeography.

Collections

Lacking a university museum, collections brought into the University of Canterbury could perhaps have suffered the fate of other collections brought to universities that lack collections staff. However rather than becoming a collection sink, Peter's efforts turned the University of Canterbury into a collection source. National and international collectors found a ready home for valuable New Zealand material in the unofficial museum of Peter's office. The "Peter Johns Collection" is furnished with many specimens not collected by Peter but with labels written or printed by him. Rather than abandon under documented or unsorted collections, Peter has often taken on the largely thankless task of chasing data from collectors when necessary, furnishing vials and pinned specimens with adequate labels, splitting lots and identifying them. Given the breadth of these collections, an astounding number of specimens have been identified to species level. Even just considering the component of his collection now housed at the Canterbury Museum there are > 10,000 lots representing ca 70,000 specimens that have been identified to species level.

Peter is a serious collector, in the best sense. The purposive nature of collecting trips is in clear view with targets already known from a knowledge of specimens and literature. Weather is only bad if it renders invertebrates inactive. He has made irreplaceable collections from many caves, subantarctic islands and offshore islands. There is also a database of georeferences for most specimens it would have been possible to obtain reliable co-ordinate data for. A gratifyingly large proportion of his collection features pertinent habitat data. And where questions about habitat preferences are critical, such as with threatened carabid beetles, Peter sometimes provides highly detailed habitat data. Nor does he just escape into the few remaining oases of pristine vegetation. His searches for new beetle species from degraded pastures, sometimes in areas recognised as nationally under-collected and under-protected, denote a commitment to a broad range of invertebrates and their conservation.

The breadth of collecting he has undertaken or facilitated could be misinterpreted as collecting for collecting's sake but this would be far from the truth. Quiz Peter about why a certain specimen lot is required in a museum collection and he can supply detailed and sound reasons.

Biogeography

Peter's observational skills and insights have proven useful at a variety of levels.
At the macro/biogeographic level Peter has shared important specimens and observations relevant to addressing fascinating biogeographic questions concerning centipedes. For weta his global view extends even to comparisons of African and New Zealand taxa. Willi Hennig in his 1966 paper on "The Diptera fauna of New Zealand as a problem in systematics and zoogeography" identified several relevant genera of Tipulidae requiring collection and study. Peter took heed and his collection will permit such trans-

Pacific comparisons to occur. His recent arduous searches for fresh stonefly specimens to enable a student to make comparisons with recently uncovered Chinese fossils are emblematic of a drive to address broad questions (and assist others, with no personal gain in sight).

Conservation

Ultimately Peter's efforts are aimed at conservation. Peter has expertise in some of New Zealand's most threatened invertebrates including *Motuweta isolata*, *Hadramphus* and several carabids. Several papers have relied on his skills in identifying fragmentary remains of insects from predatory mammals including stoats and hedgehogs. A potent illustration of how useful and detailed Peter's data can be, and how well he can collaborate, is Fuller et al's (Fuller, Johns et al. 2013) paper on how the New Zealand conservation estate fails to protect many carabid species. Peter provided the 5544 data records for this analysis and it is perhaps a model of work yet to be done for other groups and in other countries. Peter has been acknowledged for his "advocacy work for invertebrates generally through National Park and Conservation Boards".

Conclusion

Peter has an innate appreciation of biodiscovery and inventory as a collaborative, interdisciplinary project distributed between many institutions and across generations. Given his contribution to New Zealand invertebrates for over 55 years Peter Johns should be considered for the honour of being elected as a Fellow of the Entomological Society of New Zealand.

Matthew Shaw
18 April 2017

References Cited

Gwynne, D. T. (2004). "Reproductive behavior of ground weta (Orthoptera: Anostostomatidae): drumming behavior, nuptial feeding, post-copulatory guarding and maternal care." Journal of the Kansas Entomological Society **77**(4): 414-428.

Gwynne, D. T. (2005). "The secondary copulatory organ in female ground weta (*Hemiandrus pallitarsis*, Orthoptera: Anostostomatidae): a sexually selected device in females?" Biological Journal of the Linnean Society **85**(4): 463-469.

Bibliography of Peter Johns (likely to be incomplete)

1. Johns, P. M. (1962). "Introduction to the endemic and introduced millipedes of New Zealand." New Zealand Entomologist **3**(1): 38-46.
2. Johns , P. M. (1964). "The Sphaerotrichopidae (Diplopoda) of New Zealand. 1. Introduction, revision of some known species and description of new species." Records of the Canterbury Museum **8**(1): 1-49.

3. Johns, P. M. (1964). "The occurrence of *Australiphion peregrinus* (Smith) (Hymenoptera) on Auckland Islands." New Zealand Entomologist **3**(3): 38-38.
4. Johns, P. M. (1964). "Insects of Campbell Island. Chilopoda, Diplopoda (preliminary note on the Myriapoda of the New Zealand subantarctic islands)." Pacific Insects Monograph **7**: 170-172.
5. Johns, P. M. (1966). "A note on the introduced millipedes of New Zealand." New Zealand Entomologist **3**(5): 60-62.
6. Johns, P. M. (1966). "The cockroaches of New Zealand." Records of the Canterbury Museum **8**: 93-136.
7. Prunescu, C.-C. and P. M. Johns (1969). "An embryonic gonad in adult males of *Anopsobius neozelandicus* Silvestri (Chilopoda)." Revue Roumaine de Biologie (Zoologie) **14**(6): 407-409.
8. Johns, P. (1970). "New genera of New Zealand Dalodesmidae (Diplopoda)." Transactions of the Royal Society of New Zealand, Biological Sciences **12**(20): 217-237.
9. Johns, P. M. (1970). "Knowledge of Orthoptera, Blattaria and Dermaptera of New Zealand." New Zealand Entomologist **4**(3): 66-69.
10. Johns, P. M. (1974). "Arthropoda of the subantarctic islands of New Zealand (1) Coleoptera: Carabidae. Southern New Zealand, Patagonia, and Falkland Islands, insular Carabidae." Journal of the Royal Society of New Zealand **4**: 288-302.
11. Johns, P. M. (1975). "Trichoceridae of the southern islands of New Zealand (Diptera: Nematocera)." Journal of the Royal Society of New Zealand **5**(4): 493-497.
12. Warham, J. and P. M. Johns (1975). "The University of Canterbury Antipodes Island expedition 1969." Journal of the Royal Society of New Zealand **5**(2): 103-131.
13. Johns, P. M. (1976). "The Myriapoda of the Kermadec Islands." New Zealand Entomologist **6**(2): 157-159.
14. Johns, P. M. (1977). The biology of the terrestrial fauna. Cass. C. J. Burrows. Christchurch, N.Z., Department of Botany, University of Canterbury**:** 311-328.
15. Johns , P. M. (1979). Speciation in New Zealand Diplopoda. Myriapod Biology. C. M. London, Academic Press**:** 49-57.
16. Johns, P. M. (1986). Arthropods of Banks Peninsula Reserves. Christchurch, Report to the Commissioner of Crown Lands, Christchurch**:** 114 pages.
17. Johns, P. M. (1991). "Distribution of cave species of northwest Nelson, Westland and Canterbury." The Weta **14**: 11-21.
18. Boag, B., K. A. Evans, G. W. Yeates, P. M. Johns and R. Neilson (1995). "Assessment of the global potential distribution of the predatory land planarian *Artioposthia triangulata* (Dendy) (Tricladida: Terricola) from ecoclimatic data." New Zealand Journal of Zoology **22**(3): 311-318.
19. Grant-Mackie, J. A., J. S. Buckeridge and P. M. Johns (1996). "Two new Upper Jurassic arthropods from New Zealand." Alcheringa: An Australasian Journal of Palaeontology **20**(1): 31-39.
20. Johns, P. (1997). "The Gondwanaland weta: family Anostostomatidae (formerly in Stenopelmatidae, Henicidae or Mimnermidae): nomenclatural problems, world checklist, new genera and species." Journal of Orthoptera Research **6**: 125-138.
21. Yeates, G. W., B. Boag and P. M. Johns (1997). "Observations on feeding and population-structure of five New Zealand terrestrial planarians which prey on lumbricid earthworms." Annals Of Applied Biology **131**(2): 351-358
22. Boag, B., H. D. Jones, E. K.A., R. Neilson, G. W. Yeates and J. P.M. (1998). "The application of GIS techniques to estimate the establishment and potential spread of *Artioposthia triangulata* in Scotland." Pedobiologia **42**(5-6): 504-510.

23. Boag, B., G. W. Yeates and J. P.M. (1998). "Limitations to the distribution and spread of terrestrial flatworms with special reference to the New-Zealand flatworm (*Artioposthia triangulata*)." Pedobiologia **42**(5-6): 495-503
24. Johns, P. M. (1998). "The New Zealand terrestrial flatworms, a 1997-98 perspective." Pedobiologia **42**((5-6)): 464-468
25. Johns, P. M., B. Boag and G. W. Yeates (1998). "Observations on the geographic distribution of flatworms (Turbellaria, Rhynchodemidae, Bipaliidae, Geoplanidae) in New Zealand." Pedobiologia **42**(5-6): 469-476.
26. Jones, H. D., P. M. Johns and L. Winsor (1998). "The proposed synonymy of *Parakontikia ventrolineata* (Dendy, 1892) and *Kontikia mexicana* (Hyman, 1939): What is a penis papilla?" Hydrobiologia **383**: 91.
27. Macfarlane, R. P. and P. M. Johns (1998). "Travis Marsh: invertebrate inventory and analysis."
28. Nicholls, D., E. M. Urquhart, J. B. Ward and P. M. Johns (1998). "A list of insect primary types held in Canterbury Museum, Christchurch, New Zealand." Records of the Canterbury Museum **12**(2): 1-43.
29. V., A. D., B. Boag, P. M. Johns and G. W. Yeates (1998). "Report on the OECD Workshop on Terrestrial Flatworms held at the Zoology Department, University of Canterbury, Christchurch, New-Zealand, 16-20 February 1998." Pedobiologia **42**(5-6): 385-388.
30. Warburg, M. R., M. Rosenberg and P. M. Johns (1998). "Ovarian structure in a millipede, *Eumastigonus* sp. (Diplopoda; Cambalidae), from New Zealand." New Zealand Journal of Zoology **25**(3): 301-306.
31. Winsor, L., P. M. Johns and G. W. Yeates (1998). "Introduction, and ecological and systematic background, to the Terricola (Tricladida)." Pedobiologia **42**(5-6): 389-404.
32. Yeates, G. W., B. Boag and P. M. Johns (1998). "Field and laboratory observations on terrestrial planarians from modified habitats in New Zealand." Pedobiologia **42**(5): 554-562.
33. Ward, J., R. MacFarlane, P. Quinn, S. Morris, T. Hitchings, E. Green, J. Early, R. Emberson, G. Fenwick, I. Henderson, R. Henderson, P. M. Johns, M.-C. Larivière, J. Marris, L. Matile, I. McLellan, B. Patrick, C. Smithers, M. Stufkens, C. Vink and H. Wilson (1999). "Insects and other arthropods of Hinewai Reserve, Banks Peninsula, New Zealand." Records of the Canterbury Museum **13**: 97-121.
34. Derraik, J. G., B. I. Barratt, P. Sirvid, R. P. Macfarlane, B. H. Patrick, J. Early, A. C. Eyles, P. M. Johns, P. M. Fraser and G. M. Barker (2001). "Invertebrate survey of a modified native shrubland, Brookdale Covenant, Rock and Pillar Range, Otago, New Zealand." New Zealand Journal of Zoology **28**(3): 273-290.
35. Johns , P. M. (2001). "Distribution and conservation status of ground weta, *Hemiandrus* species (Orthoptera: Anostostomatidae)." Science for Conservation **180**: 25 pages.
36. Johns, P. M. and S. Pollard (2002). "Canterbury Museum invertebrate types other than arachnid, insect and molluscan." Records of the Canterbury Museum **16**: 83-93.
37. Johns, P. M. (2003). "New species of *Holcaspis* and others of conservation interest, and a species guide (Coleoptera: Carabidae)." Records of the Canterbury Museum **17**: 7–16.
38. Johns, P. M. and B. Boag (2003). "The spread and distribution of terrestrial planarians (Turbellaria: Tricladida: Geoplanidae) within New Zealand." New Zealand Journal of Ecology **27**(2): 201-206.
39. Bowie, M. H., J. W. M. Marris, R. M. Emberson, I. G. Andrew, J. A. Berry, C. J. Vink, E. G. White, M. A. W. Stufkins, E. H. A. Oliver, J. W. Early, J. Klimaszewski, P. M. Johns, S. D. Wratten, K. Mahlfeld, B. Brown, A. C. Eyles, S. M. Pawson and R. P. Macfarlane (2004). "A terrestrial invertebrate inventory of Quail Island (Otamahua): towards the restoration of the invertebrate community." New Zealand Natural Sciences **28**: 81-109.

40. Winsor, L., P. M. Johns and G. M. Barker (2004). Terrestrial planarians (Platyhelminthes: Tricladida: Terricola) predaceous on terrestrial gastropods. Natural enemies of terrestrial molluscs. G. M. Barker, CABI**:** 227-278.
41. Johns, P. M. (2005). Field guide to South Island carabid beetles of conservation interest (Coleoptera: Carabidae). Christchurch, Department of Conservation.
42. Johns, P. M. and L. Jenner (2006). "The crane-fly genus *Discobola* (Diptera: Tipulidae: Limoniinae) in New Zealand." Records of the Canterbury Museum **20**: 35-53.
43. Ward, J. B., G. M. Ward, P. M. Johns, L. Jenner, P. Quinn, E. H. Green, J. M. Clark, T. R. Hitchings, R. Macfarlane and S. Pollard (2007). "A survey of the Arthropods of Kennedys Bush Reserve." Records of the Canterbury Museum **21**: 57-68.
44. Michel, P., H. White, K. J. Dickinson, B. I. Barratt, B. M. Fitzgerald, P. M. Johns, J. Nunn, A. C. Eyles and I. G. Andrew (2008). "Invertebrate survey of coastal habitats and podocarp forest on Ulva Island, Rakiura National Park, New Zealand." New Zealand Journal of Zoology **35**(4): 335-349.
45. Affeld, K., S. Worner, R. K. Didham, J. Sullivan, R. Henderson, J. M. Olarte, S. Thorpe, L. Clunie, J. Early, R. Emberson, P. Johns , J. Dugdale , L. Mound , C. Smithers , P. S. and J. Ward (2009). "The invertebrate fauna of epiphyte mats in the canopy of northern rata (Myrtaceae: *Metrosideros robusta* A. Cunn.) on the West Coast of the South Island, New Zealand." New Zealand Journal of Zoology **36**(2): 177-202.
46. Korsos, Z. and P. M. Johns (2009). "Introduction to the taxonomy of Iulomorphidae of New Zealand, with descriptions of two new species of *Eumastigonus* Chamberlin, 1920 (Diplopoda: Spirostreptida: Epinannolenidea)." Zootaxa **2065**(1): 1-24.
47. Cook, L. D., S. A. Trewick, M. Morgan-Richards and P. M. Johns (2010). "Status of the New Zealand cave weta (Rhaphidophoridae) genera *Pachyrhamma*, *Gymnoplectron* and *Turbottoplectron*." Invertebrate Systematics **24**(2): 131-138.
48. Johns, P. M. (2010). "Migadopini (Coleoptera: Carabidae: Migadopinae) of New Zealand." Records of the Canterbury Museum **24**: 39-63.
49. Bowie, M. H., C. Mountier, B. Fox, S. Boyer, R. Gamlen-Greene, S. Brown, J. J. Sullivan, R. Hoare and P. Johns (2011). "An invertebrate survey of reserves, covenants and significant remnants of eastern Banks Peninsula in 2010-2011." Lincoln University Wildlife Management Report No. 25.
50. Macfarlane, R. P., P. A. Maddison, I. Andrew, J. A. Berr, P. M. Johns, R. J. Hoare, M.-C. Larivière, P. Greenslade, R. C. Henderson, C. N. Smithers, R. L. Palma, J. B. Ward, R. L. C. Pilgrim, R. A. B. Leschen, D. R. Towns, I. McLellan, D. A. J. Teulon, J. F. Lawrence, G. Kuschel, Q. Wang, T. R. Hitchings, V. F. Eastop, N. A. Martin, M. J. Fletcher, M. A. W. Stufkens, P. J. Dale and D. Burckhardt (2011). Phylum Arthropoda. Subphylum Hexapoda. Protura, springtails, Diplura, and insects. New Zealand Inventory of Biodiversity. Volume Two, Kingdom animalia: Chaetognatha, Ecdysozoa, ichnofossils. D. P. Gordon. Christchurch, Canterbury University Press**:** 233-467.
51. Andrew, I. G., R. P. Macfarlane, P. M. Johns, R. A. Hitchmough and I. A. N. Stringer (2012). "The conservation status of New Zealand Diptera." New Zealand Entomologist **35**(2): 99-102.
52. Buckley, T. R., R. L. Palma, P. M. Johns, D. M. Gleeson, A. C. G. Heath, R. A. Hitchmough and I. A. N. Stringer (2012). "The conservation status of small or less well known groups of New Zealand terrestrial invertebrates." New Zealand Entomologist **35**(2): 137-143.
53. Trewick, S. A., S. J. Morris, P. M. Johns, R. A. Hitchmough and I. A. N. Stringer (2012). "The conservation status of New Zealand Orthoptera." New Zealand Entomologist **35**(2): 131-136.
54. Fuller, L., P. M. Johns and R. M. Ewers (2013). "Assessment of protected area coverage of threatened ground beetles (Coleoptera: Carabidae): a new analysis for New Zealand." New Zealand Journal of Ecology **37**(2): 184-192.

55. Johns, P. M. and L. Cook, D. (2014). "*Maotoweta virescens* new genus and new species; hidden in a moss forest (Orthoptera: Rhaphidophoridae)." Records of the Canterbury Museum **27**(2013): 11-17.
56. Hemp, C. and P. M. Johns (2015). "*Libanasa kilomeni*, a new species of East African Lutosinae (Orthoptera: Anostostomatidae)." Zootaxa **4032**(4): 435–443.
57. Iles, J., M. Bowie, P. Johns and W. Chinn (2015). Conservation and biology of the rediscovered nationally endangered Canterbury knobbled weevil, *Hadramphus tuberculatus*. Lincoln University Wildlife Management Report 51, Faculty of Agriculture and Life Sciences, Department of Ecology, Lincoln University.
58. Johns, P. M. and C. Hemp (2015). "Redescription of *Libanasa brachyura* Karny, 1928.(Orthoptera: Anostostomatidae:? Lutosinae) from Tanzania and problems at the subfamily level." Zootaxa **3946**(1): 113-124.