OBITUARY STEVE HOPKIN 18 January 1956 – 19th May 2006

Steve had so many talents that it is difficult to know where to start in writing about him. Accomplished researcher, author, lecturer and supervisor he was also an excellent photographer, especially of invertebrates, and, in addition, was interested in art and music.

Born in Leigh, Lancashire, Steve lived his childhood years in Buckinghamshire and was educated at Dr Challoner's Grammar School before reading Zoology at Bristol University. After graduating he moved to Bangor to undertake research for a PhD on crab physiology before moving back to Bristol for a post doctoral position and then being offered a lectureship at Reading University. By the time he moved to Cornwall he was Senior lecturer.

I first met Steve in Amsterdam in 1984 and for both of us it was our first International Myriapod Congress. The other British delegates were much more distinguished than us and were staying in much more expensive hotels so we found ourselves at the equivalent of Fawlty Towers – a chaotic tall thin Dutch hotel, Steve in the basement and myself in the attic! Along with the Norwegian Åge Simonsen we travelled to the Congress together daily and generally 'got on well'. I have a lot to be thankful to Steve for, as subsequent to that first meeting he gave me lifts to myriapod field meetings, told me about a PhD studentship in Bristol that he was to have supervised (but got his lectureship in Reading as it started) and three years later he was my external examiner for that same PhD. My viva was on Christmas Eve and several of his comments on my thesis (in pencil!) had a decidedly light hearted Christmas theme.

Steve's appearance (casual and always in jeans) gave him an air of approachability, he never seemed remote to beginners and was always willing to help new people at field meetings. Despite this he had clear priorities and resisted the temptation to be drawn into projects that he was not interested in. Perhaps this was one of the reasons that he was so productive – I could never quite understand how he achieved so much in a normal working day. He was also very strict over ensuring his home life was not compromised by work and his family was always a high priority for him.

Many of his scientific publications have broken new ground, contributing greatly to our knowledge of ecotoxicology and biology of invertebrates. His books and identification keys will continue to be essential reading for many years to come. His ability to make these accessible to all, including beginners, by including occasional light hearted touches such as the 'famous five' woodlice I am sure has added to their appeal.

Steve's strong passion for taxonomy and basic natural history re-directed his work in recent years from more applied pollution related studies to lesser-known groups such as Collembola. Through this he was instrumental in encouraging many under graduates to become interested in 'real animals' for example through his spider course. Steve also contributed greatly to zoology by supervising students for higher degrees.

It is particularly sad that just as Steve had started to find a new life in Cornwall and once again was a regular attender at field meetings and had agreed to become Chairman of the British Myriapod and Isopod Group that he should be taken from us.

In reflecting on the times we spent together I am reminded of two incidents in particular that illustrate his sense of fun. First, in a café in Vittorio Veneto (Italy), during a break from the formal

Myriapod conference proceedings, a few of us had gone for a drink. Steve and Wolfgang Dohle from Germany egged each other on until they both ordered gigantic iced coffees complete with more cream and ice cream than you can imagine. Then they sat like a couple of school boys eating them with long spoons and enjoying every minute.

Later during the same conference we had an excursion into the mountains. Over a picnic someone began an impromptu concert of 'National Songs' from the many countries represented. While the British contingent dithered over what our 'National' Song was Steve stepped forward and gave a rendition of 'Side by side' the song about a newly married couple going to bed on their wedding night when the husband discovers that his new wife has ... a wooden leg, a wig, false teeth etc., and ends 'I sat on the chair as there was more of her there!'. We were all astounded as we hadn't realised Steve could sing as well as write books!

In the years that I knew Steve his appearance never changed regardless of the event or situation and he never seemed to age. As we grow older each year Steve will remain in our minds forever young.

I and my colleagues extend our sympathies to Steve's widow, son and parents.

Helen Read



Steve Hopkin at an exhibition of photography during the Ento'03 conference at Reading University Photograph by Amanda Callaghan

CHRONOLOGICAL BIBLIOGRAPHY OF PUBLICATIONS BY STEVE P. HOPKIN

www.stevehopkin.co.uk/publications

- 1979 HOPKIN, S.P. & NOTT, J.A. Some observations on concentrically structured, intracellular granules in the hepatopancreas of the shore crab *Carcinus maenas* (L.). *Journal of the Marine Biological Association of the United Kingdom* **59**: 867-877.
- 1980 HOPKIN, S.P. *The structure and function of the hepatopancreas of the shore crab* Carcinus maenas (L.): *A study by electron microscopy and X-ray microanalysis*. Unpublished PhD Thesis, University College of North Wales.
- 1980 HOPKIN, S.P. & NOTT, J.A. Studies on the digestive cycle of the shore crab *Carcinus maenas* (L.) with special reference to the B cells in the hepatopancreas. *Journal of the Marine Biological Association of the United Kingdom* **60**: 891-907.
- 1982 HOPKIN, S.P. & MARTIN, M.H. The distribution of zinc, cadmium, lead and copper within the hepatopancreas of a woodlouse. *Tissue and Cell* **14**: 703-715.
- 1982 HOPKIN, S.P. & MARTIN, M.H. The distribution of zinc, cadmium, lead and copper within the woodlouse *Oniscus asellus* (Crustacea, Isopoda). *Oecologia* **54**: 227-232.
- 1983 AVERY, R.A., WHITE, A.S., MARTIN, M.H. & HOPKIN, S.P. Concentrations of heavy metals in common lizards (*Lacerta vivipara*) and their food and environment. *Amphibia-Reptilia* **4**: 205-213.
- 1983 HOPKIN, S.P. & MARTIN, M.H. Heavy metals in the centipede *Lithobius variegatus* (Chilopoda). *Environmental Pollution* **6B**: 309-318.
- 1984 HOPKIN, S.P. & MARTIN, M.H. Heavy metals in woodlice. In: *The Biology of Terrestrial Isopods*, S.L. SUTTON & D.M. HOLDICH (Eds.). *Symposia of the Zoological Society of London* 53: 143-166.
- 1984 HOPKIN, S.P. & MARTIN, M.H. The assimilation of zinc, cadmium, lead and copper by the centipede *Lithobius variegatus* (Chilopoda). *Journal of Applied Ecology* **21**: 535-546.
- 1985 HOPKIN, S.P., WATSON, K., MARTIN, M.H. & MOULD, M.L. The assimilation of heavy metals by *Lithobius variegatus* and *Glomeris marginata* (Chilopoda; Diplopoda). Proceedings of the 6th International Congress of Myriapodology, Amsterdam, 12-17 April 1984. *Bijdragen tot de Dierkunde* **55**: 88-94.
- 1985 HOPKIN, S.P. & MARTIN, M.H. Transfer of heavy metals from leaf litter to terrestrial invertebrates. *Journal of the Science of Food and Agriculture* **36**: 538-539.
- 1985 HOPKIN, S.P. & MARTIN, M.H. Assimilation of zinc, cadmium, lead, copper and iron by the spider *Dysdera crocata*, a predator of woodlice. *Bulletin of Environmental Contamination and Toxicology* **34**: 183-187.
- 1985 HOPKIN, S.P., MARTIN, M.H. & MOSS, S.M. Heavy metals in isopods from the supralittoral zone on the southern shore of the Severn Estuary, U.K. *Environmental Pollution* **9B**: 239-254.
- 1986 HOPKIN, S.P. Ecophysiological strategies of terrestrial arthropods for surviving heavy metal pollution. In: H.H.W. VELTHUIS (Ed.) *Proceedings of the Third European Congress of Entomology*, Amsterdam, August 1986. Nederlandse Entomologische Vereniging, pp. 263-266.
- 1986 COLLOFF, M.J. & HOPKIN, S.P. The ecology, morphology and behaviour of *Bakerdania elliptica* (Acari: Prostigmata: Pygmephoridae), a mite associated with terrestrial isopods. *Journal of Zoology* **208A**: 109-123..
- 1986 HOPKIN, S.P., HARDISTY, G. & MARTIN, M.H. The woodlouse *Porcellio scaber* as a 'biological indicator' of zinc, cadmium, lead and copper pollution. *Environmental Pollution* **11B**: 271-290.

- 1987 COLLOFF, M.J. & HOPKIN, S.P. On the male of *Bakerdania elliptica* (Krczal, 1959) with a redescription of the female (Acari: Pygmephoridae). *Acarologia* **28**: 323-330.
- 1989 HOPKIN, S.P. *Ecophysiology of Metals in Terrestrial Invertebrates*. Elsevier Applied Science, 366pp.
- 1989 HOPKIN, S.P., HAMES, C.A.C. & DRAY, A. X-ray microanalytical mapping of the intracellular distribution of pollutant metals. *Microscopy and Analysis* 14: 23-27.
- 1989 HAMES, C.A.C. & HOPKIN, S.P. The structure and function of the digestive system of terrestrial isopods. *Journal of Zoology* **217**: 599-627.
- 1989 HOPKIN, S.P., HAMES, C.A.C. & BRAGG, Terrestrial isopods as biological indicators of zinc pollution in the Reading area, south-east England. Proceedings of the Second International Symposium on the Biology of Terrestrial Isopods, Urbino, Italy, September 1986. *Monitore Zoologico Italiano (New Series), Monografia* **4**: 477-488.
- 1990 HOPKIN, S.P. Critical concentrations, pathways of detoxification and cellular ecotoxicology of metals in terrestrial arthropods. *Functional Ecology* **4**: 321-327.
- 1990 HOPKIN, S.P. Species-specific differences in the net assimilation of zinc, cadmium, lead, copper and iron by the terrestrial isopods *Oniscus asellus* and *Porcellio scaber*. *Journal of Applied Ecology* **27**: 460-474.
- 1990 HOPKIN, S.P., GAYWOOD, M.J., VINCENT, J.F.V. & MAYES-HARRIS, E.L.V. Defensive secretion of proteinaceous glues by *Henia (Chaetechelyne) vesuviana* (Chilopoda, Geophilomorpha). In: A. MINELLI (Ed.), *Proceedings of the 7th International Congress of Myriapodology*, Vittorio Veneto, Italy, July 1987. E.J. Brill, Leiden, pp. 175-181.
- 1991 HOPKIN, S.P. *A Key to the Woodlice of Britain and Ireland*. AIDGAP (Aids to the Identification of Difficult Groups of Animals and Plants) Field Studies Council Publication No. 204. 52pp. + 16 colour plates (reprinted from *Field Studies* 7: 1-52).
- 1991 HAMES, C.A.C. & HOPKIN, S.P. A daily cycle of apocrine secretion by the B cells of the hepatopancreas of terrestrial isopods. *Canadian Journal of Zoology* **69**:1931-1937.
- 1991 HAMES, C.A.C. & HOPKIN, S.P. Assimilation and loss of ¹⁰⁹Cd and ⁶⁵Zn by the terrestrial isopods *Oniscus asellus* and *Porcellio scaber*. *Bulletin of Environmental Contamination and Toxicology* **47**: 440-447.
- 1991 JONES, D.T. & HOPKIN, S.P. Biological monitoring of metal pollution in terrestrial ecosystems. In: O. RAVERA (Ed.), *Terrestrial and Aquatic Ecosystems: Perturbation and Recovery*. Ellis Horwood, Chichester, pp. 148-152.
- 1992 HOPKIN, S.P. & READ, H.J. The Biology of Millipedes. Oxford University Press, 223pp.
- 1992 HOPKIN, S.P. & ANGER, H.S. On the structure and function of the glue-secreting glands of *Henia vesuviana* (Newport 1845) (CHILOPODA: GEOPHILOMORPHA). In: E. MEYER, K. THALER & W. SCHEDL (Eds.) Proceedings of the 8th International Congress of Myriapodology, Innsbruck, Austria, July 1990. *Berichte des Naturwissenschaftenlich Medizinischen Vereins in Innsbruck, Supplementum* 10: 71-79.
- 1993 HOPKIN, S.P., JONES, D.T. & DIETRICH, D. The isopod *Porcellio scaber* as a monitor of the bioavailability of metals in terrestrial ecosystems: towards a global 'woodlouse watch' scheme. *Science of the Total Environment* **1993S**: 357-365.
- 1993 HOPKIN, S.P. Ecological implications of '95% protection levels' for metals in soil. *Oikos* 66: 137-141.
- 1993 HOPKIN, S.P. Deficiency and excess of copper in terrestrial isopods. In: R. DALLINGER & P.S. RAINBOW (Eds.) *Ecotoxicology of Metals in Invertebrates*. Lewis, Boca Raton, pp. 359-382.

- 1993 HOPKIN, S.P. *In situ* biological monitoring of pollution in terrestrial and aquatic ecosystems. Chapter 20 in P. CALOW (Ed.) *Handbook of Ecotoxicology*, Volume 1. Blackwell Scientific, Oxford, pp. 397-427.
- 1994 DROBNE, D. & HOPKIN, S.P. An ecotoxicological laboratory test for assessing the effects of chemicals on terrestrial isopods. *Bulletin of Environmental Contamination and Toxicology* **53**: 390-397.
- 1994 JONES, D.T. & HOPKIN, S.P. Monitoring the accumulation of cadmium released from industrial sources. In: B. WIDIANARKO, K. VINK & N.M. VAN STRAALEN (Eds.). *Environmental Toxicology in South East Asia*. Free University Press, Amsterdam, pp. 315-321.
- 1994 JONES, D.T. & HOPKIN, S.P. Effects of metals on the size of terrestrial isopods in an industrially polluted area. In: B. WIDIANARKO, K. VINK & N.M. VAN STRAALEN (Eds.). *Environmental Toxicology in South East Asia*. Free University Press, Amsterdam, pp. 191-197.
- 1994 SPURGEON, D.J., HOPKIN, S.P. & JONES, D.T. Effects of cadmium, copper, lead and zinc on growth, reproduction and survival of the earthworm *Eisenia fetida* (Savigny) : assessing the environmental impact of point-source metal contamination in terrestrial ecosystems. *Environmental Pollution* **84**: 123-130.
- 1994 HOPKIN, S.P. Effects of metal pollutants on decomposition processes in terrestrial ecosystems with special reference to fungivorous soil arthropods. In: S.M. ROSS (Ed.) *Toxic Metals in Soil-Plant Systems*. John Wiley, Chichester, 303-326.
- 1994 HOPKIN, S.P. & HAMES, C.A.C. Zinc, among a 'cocktail' of metal pollutants, is responsible for the absence of the terrestrial isopod *Porcellio scaber* from the vicinity of a primary smelting works. *Ecotoxicology* **2**: 68-78.
- 1995 DEPLEDGE, M.H. & HOPKIN, S.P. Methods to assess effects on brackish, estuarine, and near-coastal water organisms. In: R.A. LINTHURST, P. BOURDEAU & R.G. TARDIFF (Eds.) *Methods to Assess the Effects of Chemicals on Ecosystems*. John Wiley, London. pp. 125-149.
- 1995 DROBNE, D. & HOPKIN, S.P. The toxicity of zinc to terrestrial isopods in a standard laboratory test. *Ecotoxicology and Environmental Safety* **31**: 1-6.
- 1995 SPURGEON, D.J. & HOPKIN, S.P. Extrapolation of the laboratory-based OECD earthworm toxicity test to metal-contaminated field sites. *Ecotoxicology* **4**: 190-205.
- 1995 HOPKIN, S.P. Deficiency and excess of essential and non-essential metals in terrestrial insects. In: R. HARRINGTON & N.E. STORK (Eds.) *Insects in a Changing Environment. Symposia of the Royal Entomological Society of London* **17**: 251-270.
- 1996 JONES, D.T. & HOPKIN, S.P. Reproductive allocation in the terrestrial isopods *Porcellio scaber* and *Oniscus asellus* in a metal polluted environment. *Functional Ecology* **10**: 741-750.
- 1996 SANDIFER, R.D. & HOPKIN, S.P. Effects of pH on the toxicity of cadmium, copper, lead and zinc to *Folsomia candida* Willem, 1902 (Collembola) in a standard laboratory test system. *Chemosphere* **33**: 2475-2486.
- 1996 SPURGEON, D.J. & HOPKIN, S.P. Effects of metal-contaminated soils on the growth, sexual development and early cocoon production of the earthworm *Eisenia fetida* with particular reference to zinc. *Ecotoxicology and Environmental Safety* **35**: 86-95.
- 1996 SPURGEON, D.J. & HOPKIN, S.P. The effects of metal contamination on earthworm populations around a smelting works: quantifying species effects. *Applied Soil Ecology* **4**: 147-160.
- 1996 LASKOWSKI, R. & HOPKIN, S.P. Effects of Zn, Cu, Pb and Cd on fitness in snails (*Helix aspersa*). *Ecotoxicology and Environmental Safety* **34**: 59-69.
- 1996 SPURGEON, D.J., SANDIFER, R.D. & HOPKIN, S.P. The use of macro-invertebrates for population and community monitoring of metal contamination : Indicator taxa, effect parameters and the need for a Soil Invertebrate Prediction and Classification Scheme (SIVPACS). In: VAN

STRAALEN, N.M. & KRIVOLUTSKY, D.A. (Eds.) *Bioindicator Systems for Soil Pollution*. Kluwer Academic, Dordrecht. pp. 95-110.

- 1996 SPURGEON, D.J. & HOPKIN, S.P. Risk assessment of the threat of secondary poisoning by metals to predators of earthworms in the vicinity of a primary smelting works. *Science of the Total Environment* **187**: 167-183.
- 1996 LASKOWSKI, R. & HOPKIN, S.P. Accumulation of Zn, Cu, Pb and Cd in the garden snail (*Helix aspersa*): implications for predators. *Environmental Pollution* **91**: 289-297.
- 1996 SPURGEON, D.J. & HOPKIN, S.P. Effects of variation of the organic matter content and pH of soils on the availability and toxicity of zinc to the earthworm *Eisenia fetida*. *Pedobiologia* **40**: 80-96.
- 1996 HOPKIN, S.P. Myriapodology before and after Martin Lister's 'Journey to Paris in the Year 1698'. In: J.J. GEOFFROY, J.P. MAURIÈS & M. NGUYEN DUY-JACQUEMIN (Eds.) Acta Myriapodologica (Proceedings of the 9th International Congress of Myriapodology, Paris, July 1993). Mémoires du Muséum National d'Histoire Naturelle 169: 25-34.
- 1997 HOPKIN, S.P. *Biology of the Springtails (Insecta : Collembola).* Oxford University Press. 330pp.
- 1997 SANDIFER, R.D. & HOPKIN, S.P. Effects of temperature on the relative toxicities of cadmium, copper, lead and zinc to *Folsomia candida* Willem, 1902 (Collembola) in a standard laboratory test system. *Ecotoxicology and Environmental Safety* **37**: 125-130.
- 1997 HOPKIN, S.P. Ecotoxicology, biodiversity and the species concept with special reference to springtails (Insecta : Collembola). In: VAN STRAALEN, N.M. & LOKKE, H. (Eds.) *Ecological Principles for Risk Assessment of Contaminants in Soil*. Chapman & Hall, London & New York. pp. 73-83.
- 1997 SPURGEON, D.J., TOMLIN, M.A. & HOPKIN, S.P. Influence of temperature on the toxicity of zinc to the earthworm *Eisenia fetida*. *Bulletin of Environmental Contamination and Toxicology* **58**: 283-290.
- 1998 WEEKS, J.M., HOPKIN, S.P., WRIGHT, J.F., BLACK, H., EVERSHAM, B.C., ROY, D. & SVENDSEN, C. A Demonstration of the Feasibility of SOILPACS. Report for Environment Agency, London, 186pp.
- 1998 HOPKIN, S.P. Collembola: the most abundant insects on earth. Antenna 22: 117-121.
- 1998 SCOTT-FORDSMAND, J.J., WEEKS, J.M. & HOPKIN, S.P. Toxicity of nickel to the earthworm and the applicability of the neutral red retention assay. *Ecotoxicology* 7: 291-295.
- 1998 HOPKIN, S.P. Laboratory to field extrapolation of 'standard' ecotoxicological tests for soil animals. *Cuadernos de Investigación Biológica (Bilbao)* **20**: 33-36.
- 1998 JONES, D.T. & HOPKIN, S.P. Reduced survival and body size in the terrestrial isopod *Porcellio scaber* from a metal-polluted environment. *Environmental Pollution* **99**: 215-223.
- 1999 SPURGEON, D.J. & HOPKIN, S.P. Tolerance to zinc in populations of the earthworm *Lumbricus rubellus* from uncontaminated and metal-contaminated ecosystems. *Archives of Environmental Contamination and Toxicology* **37**: 332-337.
- 1999 SPURGEON, D.J. & HOPKIN, S.P. Comparisons of metal accumulation and excretion kinetics in earthworms (*Eisenia fetida*) exposed to contaminated field and laboratory soils. *Applied Soil Ecology* 11: 227-243.
- 1999 SCOTT-FORDSMAND, J.J., KROGH, P.H. & HOPKIN, S.P. Toxicity of nickel to a soildwelling springtail *Folsomia fimetaria* (Collembola: Isotomidae). *Ecotoxicology and Environmental Safety* **43**: 57-61.
- 1999 SPURGEON, D.J., HOPKIN, S.P. Seasonal variation in the abundance, biomass and biodiversity of earthworms in soils contaminated with metal emissions from a primary smelting works. *Journal of Applied Ecology* **36**: 173-183.

- 1999 SPURGEON, D.J. & HOPKIN, S.P. Life-history patterns in metal-exposed populations of the earthworm *Lumbricus rubellus*. *Ecotoxicology* **8**: 133-141.
- 2000 SPURGEON, D.J., SVENDSEN, C., RIMMER, V.K., HOPKIN, S.P. & WEEKS, J.M. Relative sensitivity of life-cycle and biomarker responses in four earthworm species exposed to zinc: *Environmental Toxicology and Chemistry* **19**: 1800-1808.
- 2000 SCOTT-FORDSMAND, J.J., WEEKS, J.M. & HOPKIN, S.P. Importance of contamination history for understanding toxicity of copper to earthworm *Eisenia fetida* (Oligochaeta: Annelida), using the neutral-red retention assay. *Environmental Toxicology and Chemistry* **19**: 1774-1780.
- 2000 SPURGEON, D.J. & HOPKIN, S.P. The development of genetically inherited resistance to zinc in laboratory selected generations of the earthworm *Eisenia fetida*. *Environmental Pollution* **109**: 193-201.
- 2001 RAINBOW, P.S., HOPKIN, S.P. & CRANE, M. (Eds.) Forecasting the Environmental Fate and Effects of Chemicals. John Wiley, Chichester, pp. 221.
- 2001 FRAMPTON, G. & HOPKIN, S.P. Springtails in search of Britain's most abundant insects. *British Wildlife* 12: 402-410.
- 2001 HOPKIN, S.P. & SPURGEON, D.J. Forecasting the environmental effects of zinc, the metal of benign neglect in soil ecotoxicology. In : RAINBOW, P.S., HOPKIN, S.P. & CRANE, M. (Eds.) Forecasting the Fate and Effects of Toxic Chemicals, John Wiley, Chichester pp. 91-96.
- 2001 FOUNTAIN, M.T. & HOPKIN, S.P. Continuous monitoring of *Folsomia candida* (Insecta: Collembola) in a metal exposure test. *Ecotoxicology and Environmental Safety* **48**: 275-286.
- 2002 HOPKIN, S.P. Collembola. In: R. LAL (Ed.) *Encyclopaedia of Soil Science*. Marcel Dekker, New York pp. 207-210.
- 2003 HOPKIN, S.P. *The Woodlouse Name Trail: a Key to Common Woodlice*. Field Studies Council (Identification chart).
- 2003 HOPKIN, S.P. Photographing insects. Antenna 27: 152-158.
- 2003 HOPKIN, S.P. Woodlice, chiselbobs and sow-bugs. British Wildlife 14: 381-387.
- 2004 HOPKIN, S.P. Millipedes. British Wildlife 16: 77-84.
- 2004 FOUNTAIN, M. & HOPKIN, S.P. A comparative study of the effects of metal contamination in Collembola in the field and in the laboratory. *Ecotoxicology* **13**: 573-587.
- 2004 FOUNTAIN, M. & HOPKIN, S.P. Biodiversity of Collembola in urban soils and the use of *Folsomia candida* to assess soil 'quality'. *Ecotoxicology* **13**: 555-572.
- 2005 FOUNTAIN, M.T. & HOPKIN, S.P. *Folsomia candida* (Collembola): a 'standard' soil arthropod. *Annual Review of Entomology* **50**: 201-222.
- 2006 WALKER, C.H., HOPKIN, S.P., SIBLY, R.M. & PEAKALL, D.B. *Principles of Ecotoxicology*. Taylor & Francis, 321pp. 3rd edition.
- 2006 HOPKIN, S.P. Centipedes. British Wildlife 18: 000-000.
- 2007 HOPKIN, S.P. A Key to the Springtails (Insecta: Collembola) of Britain and Ireland. Field Studies Council (AIDGAP Project).
- 2007 NOEL, H.L., HOPKIN, S.P., HUTCHINSON, T.H., WILLIAMS, T.D. & SIBLY, R.M. Population growth rate and carrying capacity for springtails *Folsomia candida* exposed to ivermectin. *Ecological Applications*.
- 2007 NOEL, H.L., HOPKIN, S.P., HUTCHINSON, T.H., WILLIAMS, T.D. & SIBLY, R.M. Towards a population ecology of stressed environments: the effects of zinc on the springtail *Folsomia candida. Journal of Applied Ecology.*