

Supplementary material

Generation time references

Table S1. Sources used to determine the generation time of each species

For a very small number of species, this information could not be found in the literature. For most of these, the Lead Partner was able to provide some idea of the generation time, but for the two species of fungi, generation times were unknown.

Species	Reference(s)
Mammals	
Otter (<i>Lutra lutra</i>)	(Macdonald <i>et al.</i> 1993)
Dormouse (<i>Muscardinus avellanarius</i>)	(Macdonald <i>et al.</i> 1993)
Greater horseshoe bat (<i>Rhinolophus ferrumequinum</i>)	(Macdonald <i>et al.</i> 1993)
Birds	
Aquatic warbler (<i>Acrocephalus paludicola</i>)	(Pain <i>et al.</i> 2004)
Bittern (<i>Botaurus stellaris</i>)	(Cramp <i>et al.</i> 1977)
Stone curlew (<i>Burhinus oedicnemus</i>)	(Cramp <i>et al.</i> 1983)
Corncrake (<i>Crex crex</i>)	(Cramp <i>et al.</i> 1980)
Cirl bunting (<i>Emberiza cirlus</i>)	(Cramp <i>et al.</i> 1994)
Reed bunting (<i>Emberiza schoeniclus</i>)	(Cramp <i>et al.</i> 1994)
Red-backed shrike (<i>Lanius collurio</i>)	(Müller <i>et al.</i> 2005)
Spotted flycatcher (<i>Muscicapa striata</i>)	(Freeman <i>et al.</i> 2003)
Grey partridge (<i>Perdix perdix</i>)	(Cramp <i>et al.</i> 1980)
Red-necked phalarope (<i>Phalaropus lobatus</i>)	(Cramp <i>et al.</i> 1983)
Turtle dove (<i>Streptopelia turtur</i>)	(Cramp 1985)
Capercaillie (<i>Tetrao urogallus</i>)	(Cramp <i>et al.</i> 1980)
Amphibians	
Natterjack toad (<i>Bufo calamita</i>)	(Beebee <i>et al.</i> 2000)
Pool frog (<i>Rana lessonae</i>)	(Beebee <i>et al.</i> 2000)
Fish	
Allis shad (<i>Alosa alosa</i>)	(Maitland <i>et al.</i> 1992)
Twaite shad (<i>Alosa fallax</i>)	(Maitland <i>et al.</i> 1992)
Basking shark (<i>Cetorhinus maximus</i>)	(Muus <i>et al.</i> 1977)

Vendace (<i>Coregonus albula</i>)	(Hamrin <i>et al.</i> 1986; Maitland <i>et al.</i> 1992)
Spiders	
Ladybird spider (<i>Eresus cinnaberinus</i>)	(Bristowe 1971)
Crickets/grasshoppers	
Mole cricket (<i>Gryllotalpa gryllotalpa</i>)	(Harding <i>et al.</i> 1999)
Beetles	
A diving beetle (<i>Agabus brunneus</i>)	(Balfour-Browne 1950)
A ground beetle (<i>Bembidion argenteolum</i>)	(Anderson 2006)
A diving beetle (<i>Bidessus minutissimus</i>)	(Gray 1981)
Leaf-rolling weevil (<i>Byctiscus populi</i>)	(Cosgrove <i>et al.</i> 2002)
Blue ground beetle (<i>Carabus intricatus</i>)	(Sota <i>et al.</i> 2004; Ramel 2007)
Cliff tiger beetle (<i>Cicindela germanica</i>)	(Dunn 1998)
Northern dune tiger beetle (<i>Cicindela hybrida</i>)	(Dunn 1998)
Hazel pot beetle (<i>Cryptocephalus coryli</i>)	(Cooter 1991)
Pashford pot beetle (<i>Cryptocephalus exiguus</i>)	(Cooter 1991)
A leaf beetle (<i>Cryptocephalus nitidulus</i>)	(Cooter 1991)
A leaf beetle (<i>Cryptocephalus primarius</i>)	(Cooter 1991)
6 spotted pot beetle (<i>Cryptocephalus sexpunctatus</i>)	(Cooter 1991)
A reed beetle (<i>Donacia aquatica</i>)	(Cooter 1991)
Bast bark beetle (<i>Ernoporus tiliae</i>)	(Wermelinger <i>et al.</i> 2007)
Spangled water beetle (<i>Graphoderus zonatus</i>)	(Gray 1981)
Lesser silver water beetle (<i>Hydrochara caraboides</i>)	(Liess <i>et al.</i> 2006)
A weevil (<i>Melanapion minimum</i>)	(Clement <i>et al.</i> 1989; Hoddle 1991; Barat <i>et al.</i> 2007)
A click beetle (<i>Melanotus punctolineatus</i>)	(Rasmussen <i>et al.</i> 2002)
Eyed longhorn beetle (<i>Oberea oculata</i>)	(Monné <i>et al.</i> 2005; Hoskovec <i>et al.</i> 2006)
Gilkicker weevil (<i>Pachytychius haematocephalus</i>)	(JNCC 2006)
Bembridge beetle (<i>Paracymus aeneus</i>)	(Clausen 1962)
A weevil (<i>Procas granulicollis</i>)	(Wildscreen 2003)
Jumping weevil (<i>Rhynchaenus testaceus</i>)	(Wildscreen 2003)

A rove beetle (<i>Stenus palposus</i>)	(Frank <i>et al.</i> 2002)
A click beetle (<i>Synaptus filiformis</i>)	(Rasmussen <i>et al.</i> 2002)
Ants	
Narrow-headed ant (<i>Formica exsecta</i>)	(Pottie 2007)
Black-backed meadow ant (<i>Formica pratensis</i>)	(Pottie 2007)
Bees/wasps	
Great yellow bumblebee (<i>Bombus distinguendus</i>)	(Hoyt 1965)
Short-haired bumble-bee (<i>Bombus subterraneus</i>)	(Hoyt 1965)
Shrill carder bee (<i>Bombus sylvarum</i>)	(Hoyt 1965)
A spider-hunting wasp (<i>Homonotus sanguinolentus</i>)	(Offer <i>et al.</i> 2003)
A cuckoo bee (<i>Nomada armata</i>)	(Hoyt 1965)
A cuckoo bee (<i>Nomada errans</i>)	(Hoyt 1965)
A mason bee (<i>Osmia inermis</i>)	(Hoyt 1965)
A mason bee (<i>Osmia parietina</i>)	(Hoyt 1965)
A mason bee (<i>Osmia xanthomelana</i>)	(Hoyt 1965)
Purbeck mason wasp (<i>Pseudepipona herrichii</i>)	(Spradbery 1973)
Flies	
Hornet robberfly (<i>Asilus crabroniformis</i>)	(Bartlett 2004)
Heath bee-fly (<i>Bombylius minor</i>)	(Bartlett 2004)
A hoverfly (<i>Chrysotoxum octomaculatum</i>)	(Branquart 1999)
A stiletto fly (<i>Clorismia rustica</i>)	(Winterton <i>et al.</i> 2005)
Bog hoverfly (<i>Eristalis cryptarum</i>)	(Perrett 2000; Drake <i>et al.</i> 2005)
A soldierfly (<i>Odontomyia hydroleon</i>)	(DuPonte <i>et al.</i> 2003)
A stiletto fly (<i>Spiriverpa lunulata</i>)	(Winterton <i>et al.</i> 2005)
Mottled bee-fly (<i>Thyridanthrax fenestratus</i>)	(Bartlett 2004)
Butterflies	
Silver-spotted skipper (<i>Hesperia comma</i>)	(Emmet <i>et al.</i> 1991)
Large copper butterfly (<i>Lycaena dispar</i>)	(Emmet <i>et al.</i> 1991)
Adonis blue (<i>Lysandra bellargus</i>)	(Emmet <i>et al.</i> 1991)
Large blue butterfly (<i>Maculinea arion</i>)	(Emmet <i>et al.</i> 1991)
Heath fritillary (<i>Mellicta athalia</i>)	(Emmet <i>et al.</i> 1991)
Silver-studded blue (<i>Plebejus argus</i>)	(Emmet <i>et al.</i> 1991)

Moths

Straw belle (<i>Aspitates gilvaria gilvaria</i>)	(Emmet <i>et al.</i> 1991)
Marsh moth (<i>Athetis pallustris</i>)	(Emmet <i>et al.</i> 1991)
Light crimson underwing (<i>Catocala promissa</i>)	(Emmet <i>et al.</i> 1991)
Dark crimson underwing (<i>Catocala sponsa</i>)	(Emmet <i>et al.</i> 1991)
Basil-thyme case-bearer (<i>Coleophora tricolor</i>)	(Emmet <i>et al.</i> 1991)
White-spotted pinion (<i>Cosmia diffinis</i>)	(Emmet <i>et al.</i> 1991)
Dingy mocha (<i>Cyclophora pendularia</i>)	(Emmet <i>et al.</i> 1991)
Heart moth (<i>Dicyclia oo</i>)	(Emmet <i>et al.</i> 1991)
Bordered gothic (<i>Heliophobus reticulata</i>)	(Emmet <i>et al.</i> 1991)
Narrow-bordered bee hawk-moth (<i>Hemaris tityus</i>)	(Emmet <i>et al.</i> 1991)
Waved carpet (<i>Hydrelia sylvata</i>)	(Emmet <i>et al.</i> 1991)
Buttoned snout (<i>Hypena rostralis</i>)	(Emmet <i>et al.</i> 1991)
Silky wave (<i>Idaea dilutaria</i>)	(Emmet <i>et al.</i> 1991)
Bright wave (<i>Idaea ochrata</i>)	(Emmet <i>et al.</i> 1991)
Orange upperwing (<i>Jodia croceago</i>)	(Emmet <i>et al.</i> 1991)
Netted mountain moth (<i>Macaria carbonaria</i>)	(Emmet <i>et al.</i> 1991)
Double line (<i>Mythimna turca</i>)	(Emmet <i>et al.</i> 1991)
Brighton wainscot (<i>Oria musculosa</i>)	(Emmet <i>et al.</i> 1991)
Barberry carpet (<i>Pareulype berberata</i>)	(Emmet <i>et al.</i> 1991)
Common fan-foot (<i>Pechipogo strigilata</i>)	(Emmet <i>et al.</i> 1991)
Pale shining brown (<i>Polia bombycina</i>)	(Emmet <i>et al.</i> 1991)
Fiery clearwing (<i>Pyropteron chrysidiiformis</i>)	(Emmet <i>et al.</i> 1991)
Argent and sable (<i>Rheumaptera hastata</i>)	(Emmet <i>et al.</i> 1991)
Striped lychnis (<i>Shargacucullia lychnitis</i>)	(Emmet <i>et al.</i> 1991)
Black-veined moth (<i>Siona lineata</i>)	(Emmet <i>et al.</i> 1991)
Barred tooth-striped (<i>Trichopteryx polycommata</i>)	(Emmet <i>et al.</i> 1991)
Four-spotted moth (<i>Tyta luctuosa</i>)	(Emmet <i>et al.</i> 1991)
Square-spotted clay (<i>Xestia rhomboidea</i>)	(Emmet <i>et al.</i> 1991)
New Forest burnet (<i>Zygaena viciae argyllensis</i>)	(Emmet <i>et al.</i> 1991)
Molluscs	
Ramshorn snail (<i>Anisus vorticulus</i>)	(Terrier <i>et al.</i> 2006)
Fan mussel (<i>Atrina fragilis</i>)	(Richardson <i>et al.</i> 1999)

Sandbowl snail (<i>Catinella arenaria</i>)	(Baker 1965)
Freshwater pearl mussel (<i>Margaritifera margaritifera</i>)	(Young <i>et al.</i> 1984)
Glutinous snail (<i>Myxas glutinosa</i>)	(Cooper 1931; Whitfield <i>et al.</i> 1998)
Native oyster (<i>Ostrea edulis</i>)	(Yonge 1960)
Depressed river mussel (<i>Pseudanodonta complanata</i>)	(Aldridge 1999)
Shining ram's-horn snail (<i>Segmentina nitida</i>)	(Liess <i>et al.</i> 2006)
Narrow-mouthed whorl snail (<i>Vertigo angustior</i>)	(Cameron 2003)
Round-mouthed whorl snail (<i>Vertigo genesii</i>)	(Pokryszko 1992; Killeen 2003)
Whorl snail (<i>Vertigo geyeri</i>)	(Pokryszko 1992; Killeen 2003)
Desmoulin's whorl snail (<i>Vertigo moubensiana</i>)	(Pokryszko 1992; Killeen 2003)
Sea mats	
Freshwater bryozoan (<i>Lophopus crystallinus</i>)	(Ryland 1970)
Vascular plants	
Ribbon-leaved water-plantain (<i>Alisma gramineum</i>)	(Wildscreen 2003; Palmer 2006)
Creeping marshwort (<i>Apium repens</i>)	(McDonald <i>et al.</i> 2006)
Tower mustard (<i>Arabis glabra</i>)	(Plantlife International 2004)
Norwegian mugwort (<i>Artemisia norvegica</i>)	(C. Sydes, pers. comm.)
Wild asparagus (<i>Asparagus officinalis</i> ssp. <i>Prostrates</i>)	(Tutin <i>et al.</i> 1980)
Newman's lady fern (<i>Athyrium flexile</i>)	(Loewer 2005)
Prickly sedge (<i>Carex muricata</i> ssp. <i>Muricata</i>)	(Filatova 2003)
Mountain scurvy-grass (<i>Cochlearia micacea</i>)	(Stace 1997)
Lundy cabbage (<i>Coincyd wrightii</i>)	(Wildscreen 2003)
Wild cotoneaster (<i>Cotoneaster integerrimus</i>)	(JNCC 2006)
Deptford pink (<i>Dianthus armeria</i>)	(Plantlife International 2004)
Young's helleborine (<i>Epipactis youngiana</i>)	(Plantlife International 2004)
Red-tipped cudweed (<i>Filago lutescens</i>)	(Plantlife International 2004)
Broad-leaved cudweed (<i>Filago pyramidalis</i>)	(Plantlife International 2004)
Western ramping-fumitory (<i>Fumaria occidentalis</i>)	(Stace 1997)

Corn cleavers (<i>Galium tricornutum</i>)	(Plantlife International 2004)
Early gentian (<i>Gentianella anglica</i>)	(Plantlife International 2004)
Fen orchid (<i>Liparis loeselii</i>)	(Rasmussen 1995)
Small Cow-wheat (<i>Melampyrum sylvaticum</i>)	(Stace 1997)
Holly-leaved naiad (<i>Najas marina</i>)	(Hutchinson 1973; Preston <i>et al.</i> 2002)
Yellow marsh saxifrage (<i>Saxifraga hirculus</i>)	(Ohlson 1989)
Shepherd's needle (<i>Scandix pecten-veneris</i>)	(Plantlife International 2004)
Triangular club-rush (<i>Schoenoplectus triquetus</i>)	(Hutchinson 1973)
Spreading hedge parsley (<i>Torilis arvensis</i>)	(Plantlife International 2004)
Killarney fern (<i>Trichomanes speciosum</i>)	(Newman 1865)
Broad-fruited corn salad (<i>Valerianella rimosa</i>)	(JNCC 2006)
Oblong woodsia (<i>Woodsia ilvensis</i>)	(Loewer 2005)
Liverworts	
Atlantic lejeunea (<i>Lejeunea mandonii</i>)	(McLatchie 1999)
Norfolk flapwort (<i>Lophozia rutheana</i>)	(McLatchie 1999)
Western rustwort (<i>Marsupella profunda</i>)	(McLatchie 1999)
Mosses	
Triangular pygmy-moss (<i>Acaulon triquetrum</i>)	(JNCC 2006)
Icy rock moss (<i>Andreaea frigida</i>)	(A. Amphlett, pers. comm.)
Green shield-moss (<i>Buxbaumia viridis</i>)	(D. Genney, pers. comm.)
Glaucous beard-moss (<i>Didymodon glaucus</i>)	(R. Porley, pers. comm.)
Slender green feather-moss (<i>Hamatocaulis vernicosus</i>)	(A. Hale, pers. comm.)
Slender thread-moss (<i>Orthodontium gracile</i>)	(Wilson 1855)
Blunt-leaved bristle-moss (<i>Orthotrichum obtusifolium</i>)	(Wilson 1855)
Pale bristle-moss (<i>Orthotrichum pallens</i>)	(Wilson 1855)
Yorkshire feather-moss (<i>Thamnobryum cataractarum</i>)	(Wilson 1855)
Freiberg's screw-moss (<i>Tortula freibergii</i>)	(Wilson 1855)
Lichens	
A lichen (<i>Calicium corynellum</i>)	(Hale 1973)
A lichen (<i>Caloplaca aractina</i>)	(Hale 1973)
A lichen (<i>Cladonia peziziformis</i>)	(Hale 1973)
Ear-lobed dog-lichen (<i>Peltigera lepidophora</i>)	(Hale 1973)

A lichen (<i>Pseudocyphellaria aurata</i>)	(Hale 1973)
Warty wax-lichen (<i>Thelenella modesta</i>)	(Hale 1973)
Fungi	
Devil's bolete (<i>Boletus satanas</i>)	Unknown
White stalkball (<i>Tulostoma niveum</i>)	Unknown
Stoneworts	
Convergent stonewort (<i>Chara connivens</i>)	(JNCC 2006)
Mossy stonewort (<i>Chara muscosa</i>)	(Wildscreen 2003; JNCC 2006)
Slender stonewort (<i>Nitella gracilis</i>)	(Wildscreen 2003)
Dwarf stonewort (<i>Nitella tenuissima</i>)	(JNCC 2006)
Starry stonewort (<i>Nitellopsis obtusa</i>)	(JNCC 2006)
Tassel stonewort (<i>Tolypella intricata</i>)	(JNCC 2006)
Algae	
Red alga (<i>Anotrichium barbatum</i>)	(Hill <i>et al.</i> 2006)

References

- Aldridge, D. C. (1999). The Morphology, Growth and Reproduction of Unionidae (Bivalvia) in a Fenland Waterway. *Journal of Molluscan Studies* **65**, 47–60.
- Anderson, R. (2006). 'Priority Species in Northern Ireland: *Bembidion argenteolum* – a ground beetle.' (National Museums Northern Ireland: Belfast, Northern Ireland.) Available from <http://www.habitas.org.uk/priority/species.asp?Item=7208> [Accessed April 2007]
- Baker, R. E. (1965). *Catinella arenaria* Bouchard Chantereux at the Braunton Burrows National Nature Reserve, Devon. *Proceedings of the Malacological Society* **36**, 259.
- Balfour-Browne, F. (1950). 'British Water Beetles. Volume 2.' (Ray Society: London.)
- Barat, M., Tarayre, M. and Atlan, A. (2007). Plant phenology and seed predation: interactions between gorses and weevils in Brittany (France). *Entomologia Experimentalis et Applicata* **124**, 167–176.
- Bartlett, T. (2004). 'BugGuide: Family Asilidae – Robber Flies.' (Iowa State University Entomology: Ames, IA.) Available from <http://bugguide.net/node/view/151> [Accessed June 2007]
- Bartlett, T. (2004). 'BugGuide: Family Bombyliidae – Bee Flies.' (Iowa State University

Entomology: Ames, IA.) Available from <http://bugguide.net/node/view/185>

[Accessed June 2007]

Beebee, T. J. C. and Griffiths, R. A. (2000). 'The New Naturalist: Amphibians and Reptiles – A Natural History of the British Herpetofauna.' (Harper Collins Publishers: London.)

Branquart, E. (1999). 'Life-history strategies of hoverflies with predacious larvae (Diptera: Syrphinae).' (Agricultural University of Gembloux: Belgium.)

Bristowe, W. S. (1971). 'The New Naturalist: The World of Spiders.' (Collins: London.)

Cameron, R. A. D. (2003). Life-cycles, molluscan and botanical associations of *Vertigo angustior* and *Vertigo geyeri* (Gastropoda, Pulmonata: Vertiginidae). *Heldia* **5**, 95–110.

Clausen, C. P. (1962). 'Entomophagous Insects.' (Hafner Publishing Company: New York.)

Clement, S. L., Alonsozarazaga, M. A., Mimmocchi, T. and Cristofaro, M. (1989). Life-History and Host Range of *Ceratapion basicorne* (Coleoptera, Apionidae) with Notes on Other Weevil Associates (Apioninae) of Yellow Starthistle in Italy and Greece. *Annals of the Entomological Society of America* **82**, 741–747.

Cooper, J. E. (1931). Life history of *Myxas glutinosa* (Müll) in East Kent. *Journal of Conchology* **19**, 113.

Cooter, J. (1991). 'A Coleopterist's Handbook.' (The Amateur Entomologists' Society: Feltham.)

Cosgrove, P. and Amphlett, A. (2002). 'The Biodiversity and Management of Aspen Woodlands: Proceedings of a one-day conference held in Kingussie, Scotland, on 25th May 2001.' (Trees for Life: Forres, Scotland.) Available from http://www.treesforlife.org.uk/kingussie2001/aspen_contents.html [Accessed April 2007]

Cramp, S. (1985). 'Handbook of the Birds of Europe the Middle East and North Africa: The Birds of the Western Palearctic, Volume 4 – Terns to Woodpeckers.' (Oxford University Press: Oxford.)

Cramp, S. and Perrins, C. M. (1994). 'Handbook of the Birds of Europe the Middle East and North Africa: The Birds of the Western Palearctic, Volume 9 – Buntings and New World Warblers.' (Oxford University Press: Oxford.)

Cramp, S. and Simmons, K. (1980). 'Handbook of the Birds of Europe the Middle East and North Africa: The Birds of the Western Palearctic, Volume 2 – Hawks to Bustards.' (Oxford University Press: Oxford.)

- Cramp, S. and Simmons, K. (1983). 'Handbook of the Birds of Europe the Middle East and North Africa: The Birds of the Western Palearctic, Volume 3 – Waders to Gulls.' (Oxford University Press: Oxford.)
- Cramp, S. and Simmons, K. E. L. (1977). 'Handbook of the Birds of Europe the Middle East and North Africa: The Birds of the Western Palearctic, Volume 1 – Ostrich to Ducks.' (Oxford University Press: Oxford.)
- Drake, M. and Baldock, N. (2005). The Bog Hoverfly on Dartmoor. *British Wildlife* **17**, 102–106.
- Dunn, G. A. (1998). 'Biology of Tiger Beetles.' (Young Entomologists Society: Lansing, MI.) Available from <http://members.aol.com/yesedu/biology.html> [Accessed April 2007]
- DuPonte, M. W. and Burnham Larish, L. (2003). 'Livestock Management Insect Pests 10.7: Soldier Fly.' (College of Tropical Agriculture and Human Resources: University of Hawaii at Manoa.) Available from <http://www.ctahr.hawaii.edu/oc/freepubs/pdf/LM-10-7.pdf> [Accessed January 2008]
- Emmet, A. M. and Heath, J. (1991). 'The Moths and Butterflies of Great Britain and Ireland, Volume 7, Part 2: Lasiocampidae – Thyatiridae with Life History Chart of the British Lepidoptera.' (Harley Books: Colchester.)
- Filatova, L. O. (2003). The ontogenesis of *Carex muricata* L. *Biological Series* **108**, 61–67.
- Frank, J. H. and Thomas, M. C. (2002). 'Featured Creatures.' (University of Florida: Gainesville.) Available from http://creatures.ifas.ufl.edu/misc/beetles/rove_beetles.htm [Accessed January 2008]
- Freeman, S. N. and Crick, H. Q. P. (2003). The decline of the Spotted Flycatcher *Muscicapa striata* in the UK: an integrated population model. *Ibis* **145**, 400–412.
- Gray, L. J. (1981). Species composition and Life Histories of Aquatic Insects in a Lowland Sonoran Desert Stream. *American Midland Naturalist* **106**, 229–242.
- Hale, M. E. (1973). Growth. In 'The Lichens'. (Ed. V. Ahmadjian and M. E. Hale.) pp. 473–492. (Academic Press: London.)
- Hamrin, S. F. and Persson, L. (1986). Asymmetrical Competition between Age Classes as a Factor Causing Population Oscillations in an Obligate Planktivorous Fish Species. *Oikos* **47**, 223–232.
- Harding, P., Malone, R. and Cooksey, E. (1999). 'Our South West – Millennium Archive.' (Sustainability, Climate and Environment Directorate: Bristol.) Available from http://www.oursouthwest.com/Wild_Hab/zSpecies/Mole%20Cricket/cricket.htm

[Accessed April 2007]

- Hill, J. M., Hiscock, K., Jackson, A., Pizzolla, P., Rayment, W. J., Riley, K. and Tyler-Walters, H. (2006). 'Marine Life Information Network: Biology and Sensitivity Key Information Sub-programme – Species Information.' (Marine Biological Association: Plymouth.) Available from
http://www.marlin.ac.uk/sah/species_index.php?phy=Rhodophycota [Accessed May 2007]
- Hoddle, M. S. (1991). Lifetable Construction for the Gorse Seed Weevil, *Apion ulicis* (Forster) (Coleoptera, Apionidae) before Gorse Pod Dehiscence, and Life-History Strategies of the Weevil. *New Zealand Journal of Zoology* **18**, 399–404.
- Hoskovec, M. and Rejzek, M. (2006). '*Oberea oculata* (Linnaeus, 1758).' (MH & MR: Prague and Norwich.) Available from
<http://www.uochb.cas.cz/~natur/cerambyx/oobeocul.htm> [Accessed April 2007]
- Hoyt, M. (1965). 'The World of Bees.' (The Bodley Head: London.)
- Hutchinson, J. (1973). 'The Families of Flowering Plants.' (Oxford University Press: London.)
- JNCC (2006). 'UK Biodiversity Action Plan.' (Joint Nature Conservation Committee: Peterborough.) Available from <http://www.ukbap.org.uk/> [Accessed July 2007]
- Killeen, I. J. (2003). Ecology of Desmoulin's Whorl Snail. Conserving Natura 2000 Rivers Ecology Series No. 6. (English Nature: Peterborough.)
- Liess, M., Von der Ohe, P. C., Schriever, C. A., Schäfer, R. and Beketov, M. (2006). 'SPEAR Database.' (Helmholzt Centre for Environmental Research Leipzig.) Available from
<http://www.ufz.de/data/ufzlifehistory3209.xls> [Accessed May 2007]
- Loewer, P. (2005). 'Seeds: The Definitive Guide to Growing, History & Lore.' (Timber Press: Portland, Oregon.)
- Macdonald, D. and Barrett, P. (1993). 'Collins Field Guide: Mammals of Britain & Europe.' (Harper Collins Publishers: London.)
- Maitland, P. S. and Campbell, R. N. (1992). 'The New Naturalist: Freshwater Fishes of the British Isles.' (Harper Collins Publishers: London.)
- McDonald, A. W. and Lambrick, C. R. (2006). *Apium repens* creeping marshwort: Species Recovery Programme, 1995–2005. English Nature Research Reports No. 706. (English Nature: Peterborough.)
- McLetchie, D. N. (1999). Dormancy/Nondormancy Cycles in Spores of the Liverwort

- Sphaerocarpos texanus*. *The Bryologist* **102**, 15–21.
- Monné, M. A. and Hovore, F. T. (2005). 'Checklist of the Cerambycidae, of the Western Hemisphere.' (Texas Entomology: Texas.) Available from <http://www.texasento.net/beetles.htm> [Accessed April 2007]
- Müller, M., Pasinelli, G., Schiegg, K., Spaar, R. and Jenni, L. (2005). Ecological and social effects on reproduction and local recruitment in the red-backed shrike. *Oecologia* **143**, 37–50.
- Muus, B. and Dahlstrøm, P. (1977). 'Collins Guide to the Sea Fishes of Britain and North-West Europe.' (Collins: London.)
- Newman, E. (1865). 'A History of British Ferns.' (John Van Voorst: London.)
- Offer, D., Edwards, M. and Edgar, P. (2003). Grazing heathland – a guide to impact assessment for insects and reptiles. English Nature Research Reports No. 497. (English Nature: Peterborough.)
- Ohlson, M. (1989). Ecotypic Differentiation and Phenotypic Plasticity in *Saxifraga hirculus* Populations in Central and Northern Sweden. *Holarctic Ecology* **12**, 46–53.
- Pain, D. J., Green, R. E., Gießing, B., Kozulin, A., Poluda, A., Ottosson, U., Flade, M. and Hilton, G. M. (2004). Using stable isotopes to investigate migratory connectivity of the globally threatened aquatic warbler *Acrocephalus paludicola*. *Oecologia* **138**, 168–174.
- Palmer, M. (2006). Ribbon-leaved water-plantain *Alisma gramineum* Lejeune – a review of conservation work carried out under English Nature's Species Recovery Programme and the UK Biodiversity Action Plan, 1991 to 2005. English Nature Research Reports, No. 675. (English Nature: Peterborough.)
- Perrett, J. (2000). *Eristalis cryptarum* – a study of the phenology and extent of the Devon population, 1999-2000. English Nature Research Reports No. 414. (English Nature: Peterborough.)
- Plantlife International (2004). 'Species dossiers.' (Plantlife International: Salisbury.) Available from <http://www.plantlife.org.uk/uk/plantlife-saving-species-under-our-care.html> [Accessed April 2007]
- Pokryszko, B. M. (1992). Life history of *Vertigo pusilla* O.F. Möller, 1774 Gastropoda: Pulmonata: Vertiginidae. In 'Proceedings of the ninth international malacological conference, Edinburgh'. (Ed. E. Gittenberger and J. Goud.) pp. 247–256. (National Museum of History: Leiden.)

- Pottie, S. (2007). 'Trees for Life: Restoring the Caledonian Forest.' (Trees for Life: Forres, Scotland.) Available from <http://www.treesforlife.org.uk/tfl.woodants.html> [Accessed March 2007]
- Preston, C. D., Pearman, D. A. and Dines, T. D. (2002). 'New Atlas of the British & Irish Flora.' (Oxford University Press: Oxford.)
- Ramel, G. (2007). 'Ground Beetles: Carabidae.' (Earth-Life Web Productions: Greece.) Available from <http://www.earthlife.net/insects/carabids.html> [Accessed April 2007]
- Rasmussen, H., Marcelli, M. and Brown, A. (2002). 'Maryland Potato Profile.' (University of Maryland: Maryland.)
- Rasmussen, H. N. (1995). 'Terrestrial orchids: from seed to mycotrophic plant.' (Cambridge University Press: Cambridge.)
- Richardson, C. A., Kennedy, H., Duarte, C. M., Kennedy, D. P. and Proud, S. V. (1999). Age and growth of the fan mussel (*Pinna nobilis*) from south east Spanish Mediterranean seagrass (*Posidonia oceanica*) meadows. *Marine Biology* **133**, 205–212.
- Ryland, J. S. (1970). 'Bryozoans.' (Hutchinson University Library: London.)
- Sota, T. and Ishikawa, R. (2004). Phylogeny and life-history evolution in *Carabus* (subtribe Carabina: Coleoptera, Carabidae) based on sequences of two nuclear genes. *Biological Journal of the Linnean Society* **81**, 135–149.
- Spradbery, J. P. (1973). 'Wasps: An account of the biology and natural history of solitary and social wasps.' (Sidgwick & Jackson: London.)
- Stace, C. (1997). 'New Flora of the British Isles.' (Cambridge University Press: Cambridge.)
- Terrier, A., Castella, E., Falkner, G. and Killeen, I. J. (2006). Species account for *Anisus voticulus* (Troschel, 1834) (Gastropoda: Planorbidae), a species listed in Annexes 2 and 4 of the Habitats Directive. *Journal of Conchology* **39**, 193–205.
- Tutin, T. G., Heywood, V. H., Burges, N. A., Moore, D. M., Valentine, D. H., Walters, S. M. and Webb, D. A. (1980). 'Flora Europaea: Volume 5 – Alismataceae to Orchidaceae (Monocotyledones).' (Cambridge University Press: Cambridge.)
- Wermelinger, B., Flückiger, P. F., Obrist, M. K. and Duelli, P. (2007). Horizontal and vertical distribution of saproxylic beetles (Col., Buprestidae, Cerambycidae, Scolytinae) across sections of forest edges. *Journal of Applied Entomology* **131**, 104–114.
- Whitfield, M., Carlsson, R., Biggs, J., Walker, D., Corfield, A., Fox, G. and Williams, P. (1998). The ecology and conservation of the glutinous snail *Myxas glutinosa* (Müller)

in Great Britain: A review. *Journal of Conchology Special Publication No. 2*, 209–221.

Wildscreen (2003). 'ARKive: Images of Life on Earth.' (Wildscreen: Bristol.) Available from <http://www.arkive.org/> [Accessed August 2008]

Wilson, W. (1855). 'Bryologia Britannica.' (Longman, Brown, Green & Longmans: London.)

Winterton, S., Skevington, J. and Lambkin, C. (2005). 'Stiletto-flies of Australia: Biology & Ecology.' (California Department of Food & Agriculture: Sacramento, CA.) Available from

<http://www.cdfa.ca.gov/phpps/ppd/Entomology/Lucid/Therevidae/Austherevid/key/Austherevid/Media/Html/bioloecon.html> [Accessed June 2007]

Yonge, C. M. (1960). 'The New Naturalist: Oysters.' (Collins: London.)

Young, M. and Williams, J. (1984). The reproductive biology of the freshwater pearl mussel in Scotland 1: Field studies. *Archiv für Hydrobiologie* **99**, 405–422.