

## Bibliography

- Aber J. D. (1979) Foliage-height profiles and succession in northern hardwood forests. *Ecology* 60 18-23
- Adams R. M., Rozenweig C., Peart R. M., Ritchie J. T., McCarl B. A., Glycer J. D., Curry R. B., Jones J. W., Boote K. J. & Hartwell Allen L. (1990) Global climate change and US agriculture. *Nature* 345 219-224
- Al-Mufti M. M., Sydes C. L., Furness S. B., Grime J. P. & Band S. R. (1977) A quantitative analysis of shoot phenology and dominance in herbaceous vegetation. *J. Ecol.* 65 759-791
- Anderson J. M. (1975) Succession, diversity, and trophic relationships of some soil animals in decomposing leaf litter. *J. Anim. Ecol.* 44 475-495
- Anderson J. M. (1978) Inter- and intraspecific relationships between woodland Cryptostigmata species diversity and the diversity of soil and litter microhabitats. *Oecologia (Berlin)* 32 341-348
- Anderson R. C., Loucks O. L., & Swain A. M. (1969) Herbaceous response to canopy cover, light intensity and throughfall precipitation in coniferous forests. *Ecology* 50 255-263
- Andre M. H. (1985) Associations between corticolous microarthropod communities and epiphytic cover on bark. *Holarctic Ecol.* 8 113-119
- Andrzejewska L. (1965) Stratification and its dynamics in meadow communities of Auchenorrhyncha (Homoptera). *Ekol. Pol. A* 13 685-714
- Archer M. (1973) Variations in potash levels in pastures grazed by horses: a preliminary communication. *Equine Vet. J.* 5 45-46
- Arnold G. W. (1964) Factors within plant associations affecting the behaviour and performance of grazing animals. In, Grazing in terrestrial and marine environments, the 4th symposium of the BES, edited by D. J. Crisp, Blackwell Scientific Publications
- Arnold S. M. & Monteith J. L. (1974) Plant development and mean temperature in a Teesdale habitat. *New Phytol.* 62 711-720
- Atkinson D. & Begon M. (1988) Adult size variation in two co-occurring grasshopper species in a sand-dune habitat. *J. Anim. Ecol.* 57 185-200
- Augspurger C. K. (1984) Seedling survival of tropical tree species: interactions of dispersal distance, light-gaps and pathogens. *Ecology* 65 1705-1712
- Augspurger C. K. & Kelly C. K. (1984) Pathogen mortality of tropical tree seedlings: experimental studies of the effects of dispersal distance, seedling density and light gaps. *Oecologia (Berlin)* 61 211-217
- Bacon J. C. (1990) The use of livestock grazing in grassland conservation. In, Calcareous grassland - ecology and management, a BES/NCC symposium, edited S. H. Hillier, D. W. H. Walton & D. A. Wells, Bluntisham Books

Baker H. G. (1972) Seed weight in relation to environmental conditions in California. *Ecology* 53 997-1010

Bakker J. P. (1978) Some experiments of heathland conservation and regeneration. *Phytocoenosis* 7 351-370

Bakker J. P., de Bie S., Dallinga P., Tjaden P. & de Vries Y. (1983) Sheep grazing as a management tool for heathland conservation and regeneration in the Netherlands. *J. Appl. Ecol.* 20 541-561

Bannister P. (1964) The water relations of certain heath plants with reference to their ecological amplitude I. Introduction: germination and establishment. *J. Ecol.* 52 423-432

Barclay-Estrup P. (1970) The description and interpretation of cyclical processes in a heathland community. II. Changes in biomass and shoot production during the Calluna cycle. *J. Ecol.* 58 243-249

Barclay-Estrup P. (1971) The description and interpretation of cyclical processes in a heathland community. III. Microclimate in relation to the Calluna cycle. *J. Ecol.* 59 143-166

Barclay-Estrup P. (1974) Arthropod populations in a heathland as related to cyclical changes in the vegetation. *Ent. Mon. Mag.* 109 79-84

Barclay-Estrup P. & Gimingham C. H. (1969) The description and interpretation of cyclical processes in a heath community. I. Vegetational change in relation to the Calluna cycle. *J. Ecol.* 57 737-758

Barkman J. J. (1979) The investigation of vegetation texture and structure. In, The study of vegetation, edited by M. J. A. Werger, 123-160, Dr. W. Junk Publishers

Barkman J. J. (1988a) Some reflections on plant architecture and its ecological implications: a personal view demonstrated on two species of Quercus. In, Plant form and vegetation structure, edited by M. J. A. Werger, P. J. M. van der Aart, H. J. During & J. T. A. Verhoeven, 1-7, SPB Academic Publishing

Barkman J. J. (1988b) A new method to determine some characters of vegetation structure. *Vegetatio* 78 81-90

Barnes B. M. & Barnes R. D. (1954) The ecology of the spiders of maritime drift lines. *Ecology* 35 25-35

Bartholomew G. A. & Casey T. M. (1977) Endothermy during terrestrial activity in large beetles. *Science* 195 882-883

Bartholomew G. A. & Heinrich B. (1978) Endothermy in African dung beetles during flight, ball making and ball rolling. *J. Exp. Biol.* 73 65-73

Barton-Browne L. B. (1964) Water regulation by insects. *Ann. Rev. Entomol.* 9 63-82

Bates G. H. (1935) The vegetation of footpaths, side walks, cart-tracks and gateways. *J. Ecol.* 23 470-487

- Bazzaz F. A. (1979) The physiological ecology of plant succession. Ann. Rev. Ecol. Syst. 10 351-371
- Bazzaz F. A. & Carlson R. W. (1984) The response of plants to elevated CO<sub>2</sub>. I. Competition among an assemblage of annuals at two levels of soil moisture. Oecologia (Berlin) 62 196-198
- Beament J. W. L. (1958) The effect of temperature on the waterproofing mechanism of an insect. J. Exp. Biol. 35 494-519
- Begon M. (1983) Grasshopper populations and weather: the effect of insolation on Chorthippus brunneus. Ecol. Entomol. 8 361-370
- Beijerinck W. (1940) Calluna: a monograph on Scottish heather. Verh. Akad. Wet. Amst. (3rd Sect.) 38 1-180
- Bell S. S., McCoy E. D. & Mushinsky H. R. (1991) (Eds.) Habitat structure: the physical arrangement of objects in space. Chapman & Hall.
- Belsky A. J. (1983) Small-scale pattern in the grassland communities in the Serengeti National Park, Tanzania. Vegetatio 55 141-151
- Bernays E. A. & Chapman R. F. (1970) Experiments to determine the basis of food selection by Chorthippus parallelus (Zetterstedt) (Orthoptera: Acrididae) in the field. J. Anim. Ecol. 39 761-776
- Bibby C. J. (1979) Foods of the Dartford Warbler, Sylvia undata on southern English heathland (Aves: Sylviidae). J. Zool. Lond. 188 557-576
- Bibby C. J. & Tubbs C. R. (1975) Status, habitats and conservation of the Dartford Warbler in England. British Birds 68 477-495
- Billings W. D. & Morris R. J. (1951) Reflection of visible and infra-red radiation from leaves of different ecological groups. Amer. J. Bot. 38 327-331
- Black J. N. (1958) Competition between plants of different initial seed sizes in swards of subterranean clover (Trifolium subterraneum L.) with particular reference to leaf area and the initial microclimate. Aust. J. Agric. Sci. 9 299-318
- Blackwood J. V. & Tubbs C. R. (1970) A quantitative survey of chalk grassland in England. Biol. Conserv. 3 1-5
- Bliss L. C. (1956) A comparison of plant development in microenvironments of arctic and alpine tundras. Ecol. Monogr. 26 (4) 303-337
- Bliss L. C. (1962) Adaptations of arctic and alpine plants to environmental conditions. Arctic 15 117-144
- Blom C. W. P. M. (1978) Germination, seedling emergence and establishment of some Plantago species under laboratory and field conditions. Acta Bot. Neerl. 27 257-271

- Bobbink R. (1991) Effects of nutrient enrichment in Dutch chalk grassland. *J. Appl. Ecol.* 28 28-41
- Bobbink R. & Willems J. H. (1991) Impact of different cutting regimes on the performance of Brachypodium pinnatum in Dutch chalk grassland. *Biol. Conserv.* 56 1-21
- Bobbink R., During H. J., Scheurs J., Willems J. H. & Zielman R. (1987) Effects of selective clipping and mowing time on species diversity in chalk grassland. *Folia Geobot. Phytotax.* 22 363-376
- Bobbink R., Bik L. & Willems J. H. (1988) Effects of nitrogen fertilisation on vegetation structure and dominance of Brachypodium pinnatum (L.) Beauv. in chalk grassland. *Acta Bot. Neerl.* 37 231-242
- Bobbink R., den Dubbelden K. & Willems J. H. (1989) Seasonal dynamics of phytomass and nutrients in chalk grasslands. *Oikos* 55 216-224
- Boorman L. A. (1990) Chapter 11. Coastal habitats. In, The greenhouse effect and terrestrial ecosystems of the UK, ITE research publication no. 4, Edited by M. G. R. Cannell & M. D. Hooper, 51-53, HMSO
- Borthwick H. A., Hendricks S. B., Toole E. H. & Toole V. K. (1954) Action of light on lettuce-seed germination. *Bot. Gaz.* 115 205-225
- Bossenbroek P.H., Kessler A., Liem A. S. N. & Vlijm L. (1977a) The significance of plant growth forms as shelter for terrestrial animals. *J. Zool. Lond.* 182 1-6
- Bossenbroek P.H., Kessler A., Liem A. S. N. & Vlijm L. (1977b) An experimental analysis of the significance of turf-structures as a shelter for invertebrate fauna, with respect to wind velocity and temperature. *J. Zool. Lond.* 182 7-16
- Bostock S. A. (1978) Seed germination strategies of five perennial weeds. *Oecologia (Berlin)* 36 113-126
- Brian M. V. (1964) Ant distribution in a southern English heath. *J. Anim. Ecol.* 33 451-461
- Brian M. V. & Brian A. D. (1951) Insolation and ant population in the west of Scotland. *Trans. R. Ent. Soc. Lond.* 102 303-330
- Brian M. V., Mountford M. D., Abbott A. & Vincent S. (1976) The changes in ant species distribution during ten years of post-fire regeneration of a heath. *J. Anim. Ecol.* 45 115-133
- Broadbent L. (1950) The microclimate of the potato crop. *Q. J. R. Met. Soc.* 76 439-454
- Brown K. W. & Rosenberg N. J. (1972) Shelter-effects on microclimate, growth and water-use by irrigated sugar beets in the grass plains. *Agric. Meteorol.* 9 241-263
- Brown V. K. (1982) Size and shape as ecological discriminants in successional communities of Heteroptera. *Biol. J. Linn. Soc.* 18 279-290
- Brown V. K. (1983) Grasshoppers, Naturalists' Handbooks 2, Richmond Publishing Co. Ltd.

Brown V. K. (1986) Chapter 7 Life cycle strategies and plant succession. In, The evolution of insect life cycles, edited by F. Taylor & Karban R., Springer-Verlag.

Brown V. K. (1990) Chapter 10 Insect herbivores, herbivory and plant succession. In, Insect life cycles: genetics, evolution and coordination, edited by F. Gilbert, Springer-Verlag

Brown V. K. (1991a) Chapter 8 The effects of changes in habitat structure during succession in terrestrial communities. In, Habitat structure: the physical arrangement of objects in space, edited by S. S. Bell, E. D. McCoy & M. R. Mushinsky H. R., Chapman & Hall.

Brown V. K. (1991b) The importance of habitat structure in the maintenance of insect species diversity. In, Biological diversity, edited by F. D. Pineda, M. A. Casado, J.. M. de Miguel & J. Montalvo, 49-55.

Brown V. K. & Hyman P. S. (1986) Successional communities of plants and phytophagous Coleoptera. *J. Ecol.* 74 963-975

Brown V. K. & Llewellyn M. (1985) Variation in aphid weight and reproductive potential in relation to plant growth form. *J. Anim. Ecol.* 54 651-661

Brown V. K. & Southwood T. R. E. (1987) Secondary succession: patterns and strategies. In, Colonization, succession and stability, BES symposium, edited by A. J. Gray, M. J. Crawley & P. J. Edwards, Blackwell Scientific Publications.

Brown V. K. & Gange A. C. (1989a) Differential effects of above- and below-ground insect herbivory during early plant succession. *Oikos* 54 67-76

Brown V. K. & Gange A. C. (1989b) Herbivory by soil-dwelling insects depresses plant species richness. *Functional Ecol.* 3 667-671

Brown V. K. & Gange A. C. (1991) Effects of root herbivory on vegetation dynamics. In, Plant root growth: an ecological perspective, Special publication no. 10 of the BES, edited by D. Atkinson, Blackwell Scientific Publications

Brown V. K. & Southwood T. R. E. (1983) Trophic diversity, niche breadth and generation times of exopterygote insects in a secondary succession. *Oecologia (Berlin)* 56 220-225

Brown V. K. & Lawton J. H. (1991) Herbivory and the evolution of leaf size and shape. *Phil. Trans. R. Soc. Lond. B.* 333 265-272

Brown V. K., Gange A. C. & Gibson C. W. D. (1988a) Insect herbivory and vegetational structure. In, Diversity and pattern in plant communities, edited by M. J. A. Werger, P. J. M. van der Aart, H. J. During & J. T. A. Verhoeven, 263-279, SPB Academic Publishing.

Brown V. K., Jepsen M. & Gibson C. W. D. (1988b) Insect herbivory: effects on early old-field succession demonstrated by chemical exclusion methods. *Oikos* 52 293-302

Brown V. K., Gibson C. W. D. & Sterling P. H. (1990) The mechanisms controlling insect diversity in calcareous grasslands. In, Calcareous grassland - ecology and

management, a BES/NCC symposium, edited S. H. Hillier, D. W. H. Walton & D. A. Wells, Bluntisham Books

Brown V. K., Gibson C. W. D. & Kathrihamby J. (1992) Community organisation in leaf hoppers. *Oikos* 65 97-106

Brunt D. (1945) Some factors in micro-climatology. *Q. J. Roy. Met. Soc.* 71 1-10

Brunt D. (1953) Bases of microclimatology. *Nature* 171 322-323

Bultman T. L. & Uetz G. W. (1982) Abundance and community structure of the forest floor spiders following litter manipulation. *Oecologia (Berlin)* 55 34-41

Bursell E. (1957) Spiracular control of water loss in the tsetse fly. *Proc. Roy. Soc. Ent. Soc. Lond. A.* 32 21-29

Buxton P. A. (1932) Terrestrial insects and the humidity of the environment. *Biol. Rev.* 7 275-320

Cannell M. G. R. (1990a) Chapter 1 Carbon dioxide and the global carbon cycle. In, The greenhouse effect and terrestrial ecosystems of the UK, ITE research publication no. 4, edited by M. G. R. Cannell & M. D. Hooper, 6-9, HMSO

Cannell M. G. R. (1990b) Chapter 5 Forests. In, The greenhouse effect and terrestrial ecosystems of the UK, ITE research publication no. 4, edited by M. G. R. Cannell & M. D. Hooper, 24-26, HMSO

Cannell M. G. R. & Smith R. I. (1986) Climatic warming, spring budburst and frost damage on trees. *J. Appl. Ecol.* 23 177-191

Cannell M. G. R., Grace J. & Booth A. (1989) Possible impacts of climatic warming on trees and forests in the United Kingdom: a review. *Forestry* 62 337-364

Cargill S. M. & Jefferies R. L. (1984) The effects of grazing by lesser snow geese on the vegetation of a sub-arctic salt-marsh. *J. Appl. Ecol.* 21 669-686

Carne P. B. (1962) The characteristics and behaviour of the sawfly Perga affinis affinis (Hymenoptera). *Aust. J. Zool.* 10 1-34

Carson W. P. & Peterson C. J. (1990) The role of litter in an old-field community: impact of litter quantity in different seasons on plant species richness and abundance. *Oecologia (Berlin)* 85 8-13

Carson W. P. & Pickett S. T. A. (1990) Role of resources and disturbance in the organisation of an old-field plant community. *Ecology* 71 226-238

Carter D. R. & Peterson K. M. (1983) Effects of a CO<sub>2</sub>-enriched atmosphere on the growth and competitive interaction of a C<sub>3</sub> and a C<sub>4</sub> grass. *Oecologia (Berlin)* 58 188-193

Casey T. M. (1976) Activity patterns, body temperature and thermal ecology in two desert caterpillars (Lepidoptera: Sphingidae). *Ecology* 57 485-497

- Cena K. & Clark J. A. (1972) Effect of solar radiation on temperatures of working honey-bees. *Nature (New Biol.)* 236 222-223
- Cernusa A. & Seeber M. C. (1981) Chapter 4 Canopy structure, microclimate and the energy budget in different alpine plant communities. In, Plants and their atmospheric environment, the 21st symposium of the BES, edited by J. Grace, E. D. Ford & P. G. Jarvis, Blackwell Scientific Publications
- Chandler T. J. & Gregory S. (1976) (Eds.) The Climate of the British Isles, Longman
- Champness S. S. (1950) Effect of microclimate on the establishment of timothy grass. *Nature* 165 325
- Chapin F. S. III (1980) The mineral nutrition of wild plants. *Ann. Rev. Ecol. Syst.* 11 233-260
- Chapman R. N., Michel C. E., Parker J. R., Miller G. E. & Kelly E. G. (1926) Studies in the ecology of sand dune insects. *Ecology* 7 416-426
- Chapman R. N., Wall R., Garlough L. & Schmidt C. T. (1931) A comparison of temperatures in widely different environments of the same climatic area. *Ecology* 12 305-322
- Chapman S. B. & Webb N. R. (1978) Chapter 11 The productivity of a Calluna heathland in Southern England. In, Production ecology of British moors and montane grasslands, edited by O. W. Heal & D. F. Perkins, Springer-Verlag.
- Chapman S. B., Hibble J. & Rafarel C. R. (1975) Net aerial production by Calluna vulgaris on lowland heath in Britain. *J. Ecol.* 63 233-252
- Chapman S. B., Hibble J. & Rafarel C. R. (1975) Litter accumulation under Calluna vulgaris on a lowland heath in Britain. *J. Ecol.* 63 259-271
- Chauvel B., Gasquez J. & Darmency H. (1989) Changes in the weed seed bank parameters according to species, time and environment. *Weed Res.* 29 213-219
- Cherrett J. M. (1964) The distribution of spiders on the Moor House National Nature Reserve, Westmoorland. *J. Anim. Ecol.* 33 27-48
- Cherrill A. J. (1989) The diet of the Wart-biter: preliminary report to the British Ecological Society, London. *Bull. Brit. Ecol. Soc.* 20 115-118
- Cherrill A. J. & Brown V. K. (1990a) The life cycle and distribution of the wart-biter Decticus verrucivorus (L.) (Orthoptera: Tettigoniidae) in a chalk grassland in southern England. *Biol. Conserv.* 53 125-143
- Cherrill A. J. & Brown V. K. (1990b) The habitat requirements of adults of the wart-biter Decticus verrucivorus (Orthoptera: Tettigoniidae) in southern England. *Biol. Conserv.* 53 145-157
- Cherrill A. J. & Brown V. K. (1991a) Effects of the summer of 1989 on the phenology of the wart-biter, Decticus verrucivorus (L.) (Orthoptera: Tettigoniidae) in Britain. *Br. J. Ent. Nat. Hist.* 4 163-168

Cherrill A. J. & Brown V. K. (1991b) Variation in the colour of Decticus verrucivorus (L.) (Orthoptera: Tettigoniidae) in southern England. Ent. Gaz. 42 175-183

Cherrill A. J. & Brown V. K. (1992a) Ontogenetic changes in the microhabitat preferences of Decticus verrucivorus (Orthoptera: Tettigoniidae) at the edge of its range. Ecography 15 37-44

Cherrill A. J. & Brown V. K. (1992b) Variation in body size between heathland and chalk grassland populations of the bush-cricket, Decticus verrucivorus (L.) (Orthoptera: Tettigoniidae) in southern England. Ent. Gaz. 43 77-82

Cherrill A. J., Shaughnessy J. & Brown V. K. (1991) Oviposition behaviour of the bush-cricket (Decticus verrucivorus) (L.) (Orthoptera:Tettigoniidae). The Entomologist 110 37-42

Church N. S. (1960a) Heat loss and body temperature of flying insects. I Heat loss by evaporation of water from the body. J. Exp. Biol. 37 171-185

Church N. S. (1960b) Heat loss and the body temperature of flying insects. II. Heat conduction within the body and its loss by radiation and convection. J. Exp. Biol. 37 186-212

Clark E. J. (1948) Studies in the ecology of British grasshoppers. Trans. Roy. Ent. Soc. Lond. 99 173-222

Clench H. K. (1966) Behavioural thermoregulation in butterflies. Ecology 47 1021-1034

Cloudsley-Thompson J. L. (1952) Studies in the diurnal rhythms. II. Changes in the physiological responses of the woodlouse Oniscus asellus to environmental stimuli. J. Exp. Biol. 29 295-303

Cloudsley-Thompson J. L. (1954) The ecological significance of diurnal rhythms in terrestrial arthropods. Sci. Progr. 42 46-52

Cloudsley-Thompson J. L. (1956) Studies in the diurnal rhythms. VII. Humidity and nocturnal activity in woodlice (Isopoda). J. Exp. Biol. 33 576-582

Cloudsley-Thompson J. L. (1958) The effect of wind on the nocturnal emergence of woodlice and other terrestrial arthropods I-III. Ent. Mon. Mag. 94 106-108. 184-185, 283-284

Cloudsley-Thompson J. L. (1960a) Some aspects of the fauna of the coastal dunes of the Bay of Biscay. Ent. Mon. Mag. 96 49-53

Cloudsley-Thompson J. L. (1960b) Adaptive functions of circadian rhythms. Cold Spring Harbor Symp. Quant. Biol. 25 345-255

Cloudsley-Thompson J. L. (1962) Microclimates and the distribution of terrestrial arthropods. Ann. Rev. Entomol. 7 199-222

Cloudsley-Thompson J. L. (1964) On the function of the sub-elytral cavity in desert Tenebrionidae (Col.) Ent. Mon. Mag. 100 148-151

- Cloudlsey-Thompson J. L. (1969) Microecology, Studies in Biology no. 6, Edward Arnold
- Cloudlsey-Thompson J. L. (1975) Terrestrial environments, Croom Helm.
- Cody M. L. (1968) On the methods of resource division in grassland bird communities. Amer. Nat. 102 107-147
- Colebourn P. H. (1974) The influence of habitat structure on the distribution of Araneus diadematus Clerk. J. Anim. Ecol. 43 401-409
- Collins S. L. & Good R. E. (1987) The seedling regeneration niche: habitat structure of tree seedlings in an oak-pine forest. Oikos 48 89-98
- Cook R. E. (1980) Germination and size dependent mortality in Viola blanda. Oecologia 47 115-117
- Coombe D. E. (1957) The spectral composition of shade light in woodlands. J. Ecol. 45 823-830
- Corbet S. A. & Willmer P. G. (1980) Pollination of the yellow passion-fruit: nectar, pollen and carpenter bees. J. Agric. Sci. 95 655-666
- Corbet S. A. & Willmer P. G. (1981) The nectar of Justicia and Columnea: composition and concentration in a humid tropical climate. Oecologia 51 412-418
- Corbet S. A., Unwin D. M. & Prys-Jones O. E. (1979) Humidity, nectar and insect visits to flowers with special reference to Crataegus, Tilia and Echium. Ecol. Entomol. 4 9-22
- Corbett K. F. & Tamarind T. L. (1979) Conservation of the sand lizard, Lacerta agilis by habitat management. Brit. J. Herpetol. 5 799-823
- Cormack E. & Gimingham C. H. (1964) Litter production by Calluna vulgaris (L.) Hull. J. Ecol. 52 285-297
- Cowling R. M. & Campbell B. M. (1980) Convergence in vegetation structure in the Mediterranean communities of California, Chile and South Africa. Vegetatio 43 191-197
- Crawford S. C. (1934) The habits and characteristics of nocturnal animals. Q. Rev. Biol. 9 201-214
- Crawley M. J. (1983) Herbivory: the dynamics of animal-plant interactions. Studies in Ecology vol. 10, Blackwell Scientific Publications
- Crawley M. J. (1986) Chapter 8 Life history and environment. In, Plant ecology, edited by M. J. Crawley, Blackwell Scientific Publications
- Crawley M. J. (1989) Insect herbivores and plant population dynamics. Ann. Rev. Entomol. 34 531-564
- Cresswell E. G. & Grime J. P. (1981) Induction of a light requirement during seed development and its ecological consequences. Nature 291 583-585
- Critchfield H. J. (1983) General climatology, Fourth edition, Prentice-Hall

- Dadd R. H. (1963) Feeding behaviour and nutrition in grasshoppers and locusts. *Adv. Insect Physiol.* 1 47-109
- Dansereau P. (1951) Description and recording of vegetation on a structural basis. *Ecology* 32 172-229
- Daubenmire R. (1968) Ecology of fire in grasslands. *Adv. Ecol. Res.* 5 209-266
- Davidson G. (1992) Icy prospects for a warmer world. *New Scientist* 8th August pp23-26
- De Hullu (1985) The influence of sward density on the population dynamics of Rhinanthus angustifolius in a grassland succession. *Acta Bot. Neerl.* 34 22-32
- De Jong T. J. & Klinkhammer P. G. L. (1985) The negative effects of litter of parent plants of Cirsium vulgare of their offspring: autotoxicity or immobilisation? *Oecologia* (Berlin) 65 153-160
- De Hullu E. & Gimingham C. H. (1984) Germination and establishment of seedlings in different phases of the Calluna life cycle in a Scottish heathland. *Vegetatio* 58 115-121
- De Keer R., Alderweireldt M., Decleer K., Segers H., Desender K. & Maelfait J. P. (1989) Horizontal distribution of the spider fauna of intensively grazed pastures under the influence of diurnal activity and grass height. *J. Appl. Ent.* 107 455-473
- Delany M. J. (1953) Studies in the microclimate of Calluna heathland. *J. Anim. Ecol.* 22 227-239
- Denno R. F. & Roderick G. K. (1991) Chapter 9 Influence of plant size, vegetation structure and host-plant architecture on the diversity, abundance and life-history of the sap-feeding herbivores. In, Habitat structure: the physical arrangement of objects in space, edited by S. S. Bell, E. D. McCoy & H. R. Mushinsky, Chapman & Hall
- Denslow J. S. (1980) Gap partitioning among tropical rainforest trees. *Biotropica* (suppl.) 12 47-55
- Deregibus V. A., Sanchez R. A., Casel J. J. & Trlica M. J. (1985) Tillering responses to enrichment of red light beneath the canopy in a humid tropical grassland. *J. Appl. Ecol.* 22 199-206
- Dessaint F., Chadoeufs R. & Barralis G. (1991) Spatial pattern analysis of weed seeds in the cultivated soil seed bank. *J. Appl. Ecol.* 28 721-730
- Diemont W. H. & Heil G. W. (1984) Some long-term observations on cyclical and seral processes in Dutch heathlands. *Biol. Conserv.* 30 283-290
- Digby P. S. B. (1955) Factors affecting the temperature excess of insects in sunshine. *J. Exp. Biol.* 32 279-298
- Dobkin D. S. (1985) Heterogeneity of tropical floral microclimates and the response of hummingbird flower mites. *Ecology* 66 536-543

- Dobkin D. S., Oliveri I. & Ehrlich P. R. (1987) Rainfall and interaction of microclimate with larval resources in the population dynamics of checkerspot butterflies (Euphydryas editha) inhabiting serpentine grassland. *Oecologia (Berlin)* 71 161-166
- Donelan M. & Thompson K. (1980) Distribution of buried viable seeds along a successional series. *Biol. Cons.* 17 297-311
- Dreisig H. (1980) Daily activity, thermoregulation and water loss in the Tiger Beetle, Cicindela hybrida. *Oecologia* 44 376-389
- Duffey E. (1956) Aerial dispersal in an unknown spider population. *J. Anim. Ecol.* 25 85-112
- Duffey E. (1962a) A population study of spiders in limestone grassland. Description of study area, sampling methods and population characteristics. *J. Anim. Ecol.* 30 571-599
- Duffey E. (1962b) A population study of spiders in limestone grassland: the field layer fauna. *Oikos* 13 15-28
- Duffey E. (1975) The effects of trampling on the fauna of grassland litter. *Biol. Conserv.* 7 255-274
- Duffey E. (1981) Chapter 11 Lowland grassland and scrub: management for wildlife. In, Conservation in practice, edited by A. Warren & F. B. Goldsmith, John Wiley & Sons.
- Duffey E., Morris M. G., Sheail J., Ward L. K., Wells D. A. & Wells T. C. E. (1974) Grassland ecology and wildlife management, Chapman & Hall
- During H. J. (1990) The bryophytes of chalk grassland. In, Calcareous grassland - ecology and management, a BES/NCC symposium, edited S. H. Hillier, D. W. H. Walton & D. A. Wells, Bluntisham Books
- Eamus D. (1990) Chapter 4 Carbon dioxide and plant physiological processes. In, The greenhouse effect and terrestrial ecosystems of the UK, ITE research publication no. 4, edited by M. G. R. Cannell & M. D. Hooper, 19-23, HMSO
- Eamus D. & Jarvis P. G. (1989) The direct effects of increases in the global atmospheric CO<sub>2</sub> concentration on natural and commercial temperate trees and forests. *Adv. Ecol. Res.* 19 1-56
- Edmond D. B. (1958) Some effects of treading on pasture. *Proc. NZ. Soc. Anim. Prod.* 18 43-49
- Edney E. B. (1971) The body temperature of tenebrionid beetles in the Namib desert of southern Africa. *J. Exp. Biol.* 55 253-272
- Edwards P. J. & Gillman M. P. (1987) Chapter 14 Herbivores and plant succession. In, Colonization, succession and stability, the 26th symposium of the BES, edited by A. J. Gray, M. J. Crawley & P. J. Edwards, Blackwell Scientific Publications.
- Edwards P. J. & Hollis S. (1982) The distribution of excreta on a New Forest grassland used by cattle, ponies and deer. *J. Appl. Ecol.* 19 953-964

- Edwards P. J. & Wratten S. D. (1980) Ecology of insect-plant interactions, Studies in Biology no. 121, Edward Arnold
- Ehleringer J. R. & Bjorkman O. (1978) Pubescence and leaf spectral characteristics in a desert shrub, Encelia farinosa. *Oecologia (Berlin)* 36 151-162
- Ehleringer J. & Forseth I. (1980) Solar tracking by plants. *Science* 210 1094-1098
- Elton C. S. & Miller R. S. (1954) The ecological survey of animal communities: with a practical system of classifying habitats by structural characteristics. *J. Ecol.* 42 460-496
- Emanuel W. R., Shugart H. H. & Stevenson M. P. (1985) Climatic change and the broadscale distribution of terrestrial ecosystem complexes. *Climatic change* 7 29-43
- Enders F. (1973) Selection of habitat by the spider Argiope aurantia Lucas (Araneidae). *Amer. Midl. Nat.* 90 47-55
- Enders F. (1974) Vertical stratification of orb-web spiders (Araneidae; Araneae) and a consideration of other methods of coexistence. *Ecology* 55 317-328
- Erdelen M. (1984) Bird communities and vegetation structure: I. Correlations and comparisons of simple and diversity indices. *Oecologia (Berlin)* 61 277-284
- Esch H. (1976) Body temperature and flight performance of honey bees in a servo-mechanically controlled wind tunnel. *J. Comp. Physiol.* 109 265-277
- Espigares T. & Peco B. (1993) Mediterranean pasture dynamics: the role of germination. *J. Veg. Sci.* 4 189-194
- Evans F. C. & Dahl E. (1955) The vegetational structure of an abandoned field in southeastern Michigan and its relation to environmental factors. *Ecology* 36 685-706
- Evans R. A. & Young J. A. (1982) Microhabitat variation in relation to weed seed germination and seedling emergence. In, Biometeorology in integrated pest management, edited by J. L. Hatfield & I. J. Thomason, , 421-448, Academic Press
- Facelli J. M. & Carson W. P. (1991) Heterogeneity of plant litter accumulation in successional communities. *Bull. Torrey Bot. Club* 118 62-66
- Facelli J. M. & Pickett S. T. A. (1991) Plant litter: its dynamics and effects of plant community structure. *Bot. Rev.* 57 2-32
- Fenner M. (1979) Germination tests on 32 East African weed species. *Weed Res.* 19
- Fenner M. (1980) The inhibition of germination of Bidens pilosa seeds by leaf canopy shade in some natural vegetation types. *New Phytol.* 84 95-101
- Fenner M. (1985) Seed ecology, Chapman & Hall
- Fenner M. (1987) Seedlings. *New Phytol.* 106 (suppl.) 35-47
- Findlay R., Young M. R. & Findlay J. A. (1983) Orientation behaviour in the Grayling butterfly: thermoregulation or crypsis ? *Ecol. Entomol.* 8 145-153

Fliervoet L. M. (1987) Characterisation of the canopy structure of Dutch grasslands. *Vegetatio* 70 105-117

Fliervoet L. M. & Werger M. J. A. (1984) Canopy structure and microclimate of two wet grassland communities. *New Phytol.* 96 115-130

Fliervoet L. M. & Werger M. J. A. (1985) Vegetation structure and microclimate of three Dutch Calthion palustris communities under different climatic conditions. *Vegetatio* 59 159-169

Floyd C. (1965) Conservation of chalk grassland: winter grazing or summer grazing or mowing of chalk downland on nature reserves. Society for the Promotion of Nature Reserves 48th annual report pp59-61

Ford M. J. (1982) The changing climate: responses of the natural fauna and flora. George Allen & Unwin.

Foster S. A. & Janson C. H. (1985) The relationship between seed size and establishment conditions in tropical woody plants. *Ecology* 66 773-780

Fowler A. D. (1992) The soil and seed bank and vegetation of ancient grassland patches in Wytham Woods, Oxfordshire, unpublished thesis, Department for Continuing Education, Oxford University

Fowler D. (1990) Chapter 2 Methane, ozone an nitrous oxide and chlorofluorocarbons. In, The greenhouse effect and terrestrial ecosystems of the UK, ITE research publication no. 4, edited by M. G. R. Cannell & M. D. Hooper, 10-13, HMSO

Fowler S. V. (1985) Differences in insect species richness and faunal composition of birch seedlings, saplings and trees: the importance of plant architecture. *Ecol. Entomol.* 10 159-169

Franco A. C. & Nobel P. S. (1988) Interactions between seedlings of Agave deserti and the nurse plant Hilaria rigida. *Ecology* 67 1731-1740

Franco A. C. & Nobel P. S. (1989) Effect of nurse plants on the microhabitat and growth of cacti. *J. Ecol.* 77 870-886

Frankland J. C., Ovington J. D. & McRae C. (1963) Spatial and temporal variations in soil, litter and ground vegetation in some Lake District woodlands. *J. Ecol.* 51 97-112

Fraser Rowell C. H. (1971) The variable coloration of the acridoid grasshoppers. *Adv. Insect Physiol.* 8 146-195

Fuller R. M. (1987) The changing extent and conservation interest of lowland grasslands in England and Wales: a review of grassland surveys 1930-1934. *Biol. Conserv.* 40 281-300

Fuller R. J. & Moreton B. D. (1987) Breeding bird populations of Kentish sweet chestnut (Castanea sativa) coppice in relation to age and structure of the coppice. *J. Appl. Ecol.* 24 13-27

Gange A. C. (1990) Chapter 4 Effects of insect herbivory on herbaceous plants. In, Pests, pathogens and plant communities, edited by J. J. Burdon & S. R. Leather, Blackwell Scientific Publications.

- Gange A. C. & Brown V. K. (1991) Effects of insecticide application on weed and pasture plant communities. Brighton Crop Protection Conference - Weeds 1991, 901-910
- Gange A. C., Brown V. K., Evans I. M. & Stott A. L. (1989) Variation in the impact of insect herbivory on Trifolium pratense through early plant succession. J. Ecol. 77 537-551
- Garbutt K. & Bazzaz F. A. (1984) The effects of elevated CO<sub>2</sub> on plants. III Flower, fruit and seed production and abortion. New Phytol. 98 433-446
- Gates D. M. (1980) Biophysical ecology, Springer
- Geiger R. (1965) (Ed.) The climate near the ground, Harvard University Press
- Gibson C. W. D. (1986) Management history in relation to changes in the flora of different habitats on an Oxfordshire estate, England. Biol. Cons. 38 217-232
- Gibson C. W. D. & Brown V. K. (1991a) The effects of grazing on local colonization and extinction during early succession. J. Veget. Sci. 2 291-300
- Gibson C. W. D. & Brown V. K. (1991b) The nature and rate of development of calcareous grassland in Southern England. Biol. Conserv. 58 297-316
- Gibson C. W. D. & Brown V. K. (1992a) Grazing and vegetation change: deflected or modified succession? J. Appl. Ecol. 29 120-131
- Gibson C. W. D. & Brown V. K. (1992b) Grazing and the development of limestone pastures on ex-arable land. Focus, English Nature
- Gibson C. W. D., Dawkins H. C., Brown V. K. & Jepsen M. (1987a) Spring grazing by sheep: effects on seasonal changes during early old-field succession. Vegetatio 70 33-43
- Gibson C. W. D., Watt T. A. & Brown V. K. (1987b) The use of sheep grazing to recreate species-rich grassland from abandoned arable land. Biol. Conserv. 42 165-183
- Gibson C. W. D., Hamblen C. & Brown V. K. (1992a) Changes in spider (Araneae) assemblages in relation to succession and grazing management. J. Appl. Ecol. 29 132-142
- Gibson C. W. D., Brown V. K., Losito L. & McGavin G. C. (1992b) The response of invertebrate assemblies to grazing. Ecography 15 166-176
- Gibson D. J. (1988a) The relationship of sheep grazing and soil heterogeneity to plant spatial patterns in dune grassland. J. Ecol. 76 233-252
- Gibson D. J. (1988b) The maintenance of plant and soil heterogeneity in dune grassland. J. Ecol. 76 497-508
- Gibson D. J. & Hulbert L. C. (1987) Effects of fire, topography and year-to-year climatic variation on species composition in tall-grass prairie. Vegetatio 72 175-185
- Gilby A. R. (1980) Transpiration, temperature and lipids in insect cuticle. Adv. Ecol. Physiol. 15 1-33

- Gill P. D. (1979) Colour-pattern variation in relation to habitat in the grasshopper, Chorthippus brunneus (Thunberg). *Ecol. Entomol.* 4 249-257
- Gimingham C. H. (1960) Biological flora of the British Isles: Calluna vulgaris (L.) Hull. *J. Ecol.* 48 455-483
- Gimingham C. H. (1972) Ecology of heathlands, Chapman & Hall
- Gimingham C. H. (1978) Calluna and its associated species: some aspects of coexistence in communities. *Vegetatio* 36 179-186
- Gimingham C. H. (1985) Age-related interactions between Calluna vulgaris and phytophagous insects. *Oikos* 44 12-16
- Givnish T. J. (1979) Chapter 16 On the adaptive significance of leaf form. In, Topics in plant population biology, edited by O. T. Solbrig, S. K. Jain, C. B. Johnson & P. H. Raven, Columbia University Press
- Givnish T. J. & Vermeij G. J. (1976) Sizes and shapes of liane leaves. *Amer. Nat.* 110 743-778
- Glenn-Lewin D. C. & der Hoef J. M. (1988) Scale, pattern analysis and species diversity in grasslands. In, Diversity and pattern in plant communities, edited by H. J. During, M. J. A. Werger & J. H. Willems, 115-129, SPB Academic Publishing
- Goddard P. (1983) Heathland management and the smooth snake. In, Heathland management, Focus on Nature Conservation no. 2, edited by L. Farrell, Nature Conservancy Council
- Godwin H. (1944a) Neolithic forest clearance. *Nature* 153 511-512
- Godwin H. (1944b) Age and origin of the 'Breckland' heaths of East Anglia. *Nature* 154 6-7
- Goldberg D. E. & Gross K. L. (1985) Disturbance regimes of mid-successional old-fields. *Ecology* 69 1677-1688
- Goldberg D. E. & Werner P. A. (1983) The effects of size of opening in vegetation and litter cover on seedling establishment of goldenrods (Solidago spp.). *Oecologia (Berlin)* 60 149-155
- Gorski T., Gorski K. & Nowicki J. (1977) Germination of seeds of various herbaceous species under leaf canopy. *Flora* 166 249-259
- Grace J. (1977) Plant response to wind. Academic Press
- Grace J. (1981) Chapter 2 Some effects of wind on plants. In, Plants and their atmospheric environment, the 21st symposium of the BES, edited by J. Grace, E. D. Ford & P. G. Jarvis, Blackwell Scientific Publications
- Grace J. (1983) Plant-atmosphere relationships, Outline studies in ecology, Chapman & Hall

Grace J. (1987) Climatic tolerance and the distribution of plants. *New Phytol.* **106** (suppl.) 113-130

Grace J. (1988) The functional significance of short stature in montane vegetation. In, Plant form and vegetation structure, edited by M. J. A. Werger, P. J. M. van der Aart, H. J. During & J. T. A. Verhoeven , 201-210, SPB Academic Publishing

Grace J. & Unsworth H. H. (1988) Climate and microclimate of the uplands. In, Ecological change in the uplands, special publication no. 7 of the BES, edited by M. B. Usher & D. B. A. Thompson, 137-150, Blackwell Scientific Publications

Grant S. A. & Hunter R. F. (1962) Ecotypic differentiation of Calluna vulgaris (L.) in relation to altitude. *New Phytol.* **61** 44-55

Grayson F. W. L. & Hassall M. (1985) Effects of rabbit grazing on population variables of Chorthippus brunneus (Orthoptera). *Oikos* **44** 27-34

Green B. H. (1972) The relevance of seral eutrophication and plant competition to the management of successional communities. *Biol. Cons.* **4** 378-384

Green B. H. (1983) The management of herbaceous vegetation for wildlife conservation, in, Management of vegetation, edited by J. M. Way, British Crop Protection Council

Green B. H. (1985) Countryside conservation: the protection and management of amenity ecosystems, 2nd edition, George Allen & Unwin

Green B. H. (1986) Chapter 12 Controlling ecosystems for amenity, in, Ecology and design in landscape, 24th symposium of the BES, Blackwell Scientific Publication.

Green B. H. (1990) Agricultural intensification and the loss of habitat, species, and amenity in British grasslands: a review of historical change and assessment of future prospects. *Grass & Forage Sci.* **45** 365-372

Greenstone M. H. (1984) Determinants of web spider species diversity: vegetation structural diversity vs. prey availability. *Oecologia (Berlin)* **62** 299-304

Greenstone M. H. (1990) Meteorological determinants of spider ballooning: the role of thermals vs. the vertical windspeed gradient in becoming airborne. *Oecologia* **84** 164-168

Gribbin J. (1988) The greenhouse effect, Inside science no. 13, New Scientist 22nd October.

Grime J. P. (1979) Plant strategies and vegetation processes, John Wiley & Sons.

Grime J. P. (1980) Chapter 2 An ecological approach to management. In, Amenity grassland: an ecological perspective, edited by I. H. Rorison & R. Hunt, John Wiley & Sons. Ltd.

Grime J. P. (1983) Prediction of weed and crop response to climate based upon measurements of nuclear DNA content. *Aspects Appl. Biol.* **4** 87-97

Grime J. P. (1989) Foreword: seed banks in ecological perspective. In, Ecology of soil seed banks, edited by M. A. Leck, V. T. Harper & R. L. Simpson, Academic Press

Grime J. P. (1990) Mechanisms promoting floristic diversity in calcareous grasslands. In, Calcareous grassland - ecology and management, a BES/NCC symposium, edited S. H. Hillier, D. W. H. Walton & D. A. Wells, Bluntisham Books

Grime J. P. & Jeffrey D. W. (1965) Seedling establishment in vertical gradients of sunlight. *J. Ecol.* 53 621-642

Grime J. P. & Jarvis B. C. (1975) Chapter 25 Shade avoidance and shade tolerance in flowering plants. II. Effects of light on the germination of species of contrasted ecology. In, Light as an ecological factor II, the 16th symposium of the BES, edited by G. C. Evans, R. Bainbridge & O. Rackham, Blackwell Scientific Publications

Grime J. P. & Mowforth M. A. (1982) Variation in genome size - an ecological interpretation. *Nature* 299 151-153

Grime J. P. & Callaghan T. V. (1988) Direct and indirect effects of climate change on plant species, ecosystems and processes of conservation and amenity interest (NERC contract report to the Department of Environment), Natural Environment Research Council

Grime J. P., Mason G., Curtis A. V., Rodman J., Band S. R., Mowforth M. A. G., Neal A. M. & Shaw S. (1981) A comparative study of the germination characteristics in a local flora. *J. Ecol.* 69 1017-1059

Grime J. P., Shacklock J. M. L. & Band S. R. (1985) Nuclear DNA contents, shoot phenology and species coexistence in a limestone grassland community. *New Phytol.* 100 435-445

Grime J. P., Mackey J. M. L., Hillier S. H. Hillier & Read D. J. (1987) Floristic diversity in a model system using experimental microcosms. *Nature* 328 420-422

Grime J. P., Hodgson J. G. & Hunt R. (1988) Comparative plant ecology: a functional approach to common British species, Unwin, Hyman

Gross K. L. & Werner P. A. (1982) Colonizing abilities of 'biennial' plant species in relation to ground cover: implications for their distributions in a successional sere. *Ecology* 63 921-931

Grubb P. J. (1976) A theoretical background to the conservation of ecologically distinct groups of annuals and biennials in the chalk grassland ecosystem. *Biol. Conserv.* 10 53-76

Grubb P. J. (1977) The maintainance of species-richness in plant communities: the importance of the regeneration niche. *Biol. Rev.* 52 107-145

Grubb P. J. (1990) Demographic studies of the perennials of chalk grasslands. In, Calcareous grassland - ecology and management, a BES/NCC symposium, edited S. H. Hillier, D. W. H. Walton & D. A. Wells, Bluntisham Books

Grubb P. J., Kelly D. & Mitchley J. (1982) The control of relative abundance in communities of herbaceous plants. In, The plant community as a working mechanism, Special publication no.1 of the BES produced as a tribute to A. S. Watt, edited by E. I. Newman, 79-97, Blackwell Scientific Publications

Hadley N. F. (1970) Micrometeorology and energy exchange in two desert arthropods. *Ecology* 51 434-444

- Hadley N. F. (1979) Wax secretion and colour phases of the desert tenebrionid beetle Cryptoglossa virucosa (Le Conte). *Science* 203 367-369
- Haes E. C. M. (1976) Orthoptera in Sussex. *Entomol. Gaz.* 27 181-202
- Haes E. C. M., Cherrill A. J. & Brown V. K. (1990) Meteorological correlates of Wart-biter (Orthoptera: Tettigoniidae) abundance. *The Entomologist* 109 93-99
- Hamilton W. J. (1971) Competition and thermoregulatory behaviour of the Namib desert Tenebrionid beetle genus Cardiosis. *Ecology* 52 810-822
- Hanegan J. L. & Heath J. E. (1970) Activity patterns and energetics of the moth Hyalophora cecropia. *J. Exp. Biol.* 53 611-627
- Hansen J., Johnson D., Lacis A., Lebedeff S., Lee P., Rind D. & Russell G (1981) Climate change of increasing atmospheric carbon dioxide. *Science* 213 957-966
- Harborne J. B. (1977) Introduction to ecological biochemistry, Academic Press
- Harper J. L. (1977) Population biology of plants, Academic Press.
- Harper J. L., Williams J. T. & Sagar G. R. (1965) The behaviour of seeds in soil. I. The heterogeneity of soil surfaces and its role in determining the establishment of plants from seed. *J. Ecol.* 53 273-286
- Harrison C. (1981) Recovery of lowland grassland and heathland in southern England from disturbance by seasonal trampling. *Biol. Conserv.* 19 119-130
- Hatfield J. L. (1982) Modification of the microclimate via management. In, Biometeorology in integrated pest management, edited by J. L. Hatfield & I. J. Thomason, 147-170, Academic Press.
- Hatley C. L. & McMahon J. A. (1980) Spider community organisation: seasonal variation and the role of vegetation architecture. *Environ. Entomol.* 9 632-639
- Heath J. E. (1967) Temperature responses of the periodical '17 year' cicada, Magicicada casini. *Amer. Midl. Nat.* 77 64-76
- Heath J. E. & Adams P. A. (1967) Regulation and heat production in large moths. *J. Exp. Biol.* 47 21-33
- Heath J. E. & Wilkin P. J. (1970) Temperature responses of the desert cicada Diceroprocta apache. *Physiol. Zool.* 43 145-154
- Heath J. E. & Josephson R. K. (1970) Body temperature and singing in the katydid, Neoconocephalus robustus. *Biol. Bull.* 138 272-285
- Heath J. E., Hanegan J. L., Wilkin P. J. & Heath M. S. (1971) Adaptation of the thermal responses of insects. *Amer. Zool.* 11 145-158
- Heath J. E., Wilkin P. J. & Heath M. S. (1972) Temperature responses of the cactus dodger Cacama valvata. *Physiol. zool.* 45 238-246

- Heinrich B. (1972) Energetics of temperature regulation and foraging in a bumble-bee, Bombus terricola, Kirby. J. Comp. Physiol. 77 49-64
- Heinrich B. (1974) Thermoregulation in insects. Science 185 747-756
- Heinrich B. (1980a) Mechanisms of body temperature regulation in honeybees Apis mellifera. I. Regulation of head temperature. J. Exp. Biol. 85 61-72
- Heinrich B. (1980b) Mechanisms of body temperature regulation in honeybees Apis mellifera. II. Regulation of thoracic temperature at high air temperatures. J. Exp. Biol. 85 73-87
- Heinrich B. & Pantle C. (1975) Thermoregulation in small flies (Syrphus spp.) basking and shivering. J. Exp. Biol. 62 599-610
- Henderson C. B., Petersen H. E. & Redak R. A. (1988) Spatial and temporal patterns in the seed bank and vegetation of a desert grassland seed bank. J. Ecol. 76 717-728
- Hendry G. A. F. & Grime J. P. (1990) Chapter 6 Natural vegetation. In, The greenhouse effect and terrestrial ecosystems of the UK, edited by M. G. R. Cannell & M. D. Hooper, 27-31, HMSO
- Henson W. R. (1958) The effects of radiation on habitat temperatures of some poplar-inhabiting insects. Can. J. Zool. 36 463-478
- Hewett D. G. (1985) Grazing and mowing as management tools on dunes. Vegetatio 62 441-447
- Hilder E. J. & Mottershead B. E. (1964) The redistribution of plant nutrients through free-grazing sheep. Austr. J. Sci. 26 88-89
- Hillier S. H. (1984) A quantitative study of gap recolonisation in two contrasted limestone grasslands, unpublished Ph.D. thesis, University of Sheffield
- Hillier S. H. (1990) Gaps, seed banks and plant species diversity in calcareous grasslands. In, Calcareous grasslands - ecology and management, a BES/NCC symposium, edited S. H. Hillier, D. W. H. Walton & D. A. Wells, Bluntisham Books
- Hobbs R. J. (1984) Length of burning rotation and community composition in high-level Calluna-eriophorum bog in N England. Vegetatio 57 129-136
- Hobbs R. J. & Gimingham C. H. (1984) Studies of fire in Scottish heathland communities. I. Fire characteristics. J. Ecol. 72 223-240
- Hobbs R. J., Mallik A. U. & Gimingham C. H. (1984) Studies of fire in Scottish heathland communities. III. Vital attributes of the species. J. Ecol. 72 963-976
- Hocking B. & Sharplin C. D. (1965) Flower basking by arctic insects. Nature 206 215
- Hodgson J. G. (1986a) Commonness and rarity in plants with special reference to the Sheffield flora. Part I: The identity, distribution and habitat characteristics of the common and rare species. Biol. Conserv. 36 199-252

Hodgson J. G. (1986b) Commonness and rarity in plants with special reference to the Sheffield flora. Part II: The relative importance of climate, soils and land use. Biol. Conserv. 36 253-274

Hoffman J. H., Moran V. C. & Webb J. W. (1975) The influence of host-plant and saturation deficit on the temperature tolerance of a psyllid. Ent. Exp. Appl. 18 55-67

Holmes M. G. & Smith H. (1977) The function of phytochrome in the natural environment. II. The influence of vegetation canopies on the spectral energy distribution of natural daylight. Photochem. & Photobiol. 25 539-545

Holst K. (1986) The saltatoria of northern Europe. Fauna Entomologica Scand. 12 127 pp.

Hooper M. D. (1990) Chapter 12 Historical evidence of climate change effects. In, The greenhouse effect and terrestrial ecosystems of the UK, ITE research publication no. 4, edited by M. G. R. Cannell & M. D. Hooper, 54-56, HMSO.

Hope-Simpson J. F. (1941) Studies on the vegetation of the English chalk. VIII. A second survey of the chalk grasslands of the South Downs. J. Ecol. 29 217-263

Hopkins B. (1978) The effects of the 1976 drought on chalk grassland in Sussex, England. Biol. Conserv. 14 1-11

Hopkins P. J. & Webb N. R. (1984) The composition of the beetle and spider faunas of fragmented Calluna-heathland. J. Appl. Ecol. 21 935-946

Hough A. F. (1945) Frost pocket and other microclimates in forests of the northern Allegheny plateau. Ecology 26 235-250

Houghton J. T. Jenkins G. J. & Ephraums J. J. (1990) (Eds.) Climate change: the IPCC scientific assessment, Cambridge University Press

Houghton R. A. (1987) Terrestrial metabolism and atmospheric CO<sub>2</sub> concentrations. BioScience 37 672-678

Houghton R. A., Hobbie J. E., Mellilo J. H., Moore B., Peterson B. J., Shauer G. R. & Woodwell G. H. (1983) Changes in the carbon content of terrestrial biota and soils between 1860 and 1980: a net release of CO<sub>2</sub> to the atmosphere. Ecol. Monogr. 53 235-262

House S. M. & Spellerberg I. F. (1983) Ecology and conservation of the sand lizard (Lacerta agilis L.) habitat in southern England. J. Appl. Ecol. 20 417-437

Hudson P. J. (1988) Spatial variations, patterns and management options in upland bird communities. In, Ecological change in the uplands, Special publication no. 7 of the BES, edited by M. B. Usher & D. B. A. Thompson, Blackwell Scientific Publications

Humphreys W. F. (1975) The influence of burrowing and thermoregulatory behaviour on the water relations of Geolycosa godeffroyi (Aranae: Lycosidae), an Australian wolf spider. Oecologia (Berlin) 21 291-311

Ineson P. & Stevens P. A. (1990) Chapter 3 Soil processes. In, The greenhouse effect and terrestrial ecosystems of the UK, edited by M. G. R. Cannell & M. D. Hooper, 14-18, HMSO