Obituaries

FLORENCE EVA CRACKLES

1918-2007

Eva once told me that her father taking her for walks in the countryside first introduced her to the wonders of nature. Eva's father was unemployed for many years and despite a tough domestic economy and wartime in her native Kingston upon Hull, she managed to achieve a Bachelor of Science (General) Degree (External, London) in mathematics and chemistry at age 22 years. Her mathematics tutor was Dr Jacob 'Bruno' Bronowski, and it was clear that this great man influenced Eva's intellectual and philosophical development, and that her father sowed the first seed of a flourishing career in the study of natural history.

In 1941 Eva started teaching in Hull then, briefly in Cambridge, before spending the remainder of her active teaching career at home. Her first venture into organised study of natural history came by joining the Hull Scientific and Field Naturalists Club in 1941 and thereafter she was introduced to the Yorkshire Naturalists Union (Y.N.U.) in 1943. At that time Eva divided her interest between birds and botany. In the field of ornithology she became seemingly physically attached to the Spurn peninsula, at first for its birds. In the early 1950's Eva's interest in birds waned as greater interest in plants took hold. The wartime bombing of Hull had produced oases of wildflowers on derelict sites and Eva's early accounts of these, her project writing 'Crackles Country' for the Hull Daily Mail and her work on the evening class lecture circuit for the Workers' Educational Association launched Eva into recognition by both the public and academia. Bob Lewis introduced her to the B.S.B.I. and she soon took the reins as recorder for vice county 61 (S.E. Yorkshire), both for the B.S.B.I. and for the Y.N.U. In 1956 Eva replaced her bicycle with motorcycle and her botanising thereafter became less parochial and more rewarding. Her studies and participation in B.S.B.I. events took her to East Anglia, the Northern Isles and Scandinavia where she made lifelong friends. In her capacity as recorder for the B.S.B.I., she was now able to contribute to the Atlas of the British Flora and coordinated the recording activity of local botanists.



Eva Crackles (photograph taken in 1990).

Eva was elected to Fellowship of the Linnean Society of London in 1966. Research on Calamagrostis stricta, C. canescens and their hybrids found at Leven Canal led to a Masters Degree from the University of Hull in 1978. In the 1980's, following the Wildlife and Countryside Act, Eva was engaged in assessing the botanical importance of various sites identified as potential Sites of Special Scientific Interest. Then, in 1990, after an enormous amount of research involving many local botanists, Eva published, "The Flora of the East Riding of Yorkshire". It was shortly after this that Eva's mobility declined and she became wheelchair-bound in the field. I got to know Eva at this time and soon became her chauffeur and honorary wheelchair-pusher on some botanical excursions. I soon learned to ignore Eva complaining, "I wish you would find smoother terrain, I'm trying to make notes", for the learning experience of accompanying Eva in the field was the best available and free of charge.

In 1991, Hull University conferred upon Eva the Degree of Doctor of Science honoris causa and then, in 1992, Her Majesty the Queen graciously granted Membership of the Most Excellent Order of the British Empire (MBE) for her work in conservation. In 1998 the B.S.B.I. launched the Atlas 2000 project, but with failing health Eva realised that she could no longer cope with such a massive undertaking, and she retired as B.S.B.I. recorder and from the Linnean Society. Eva was elected Honorary Life member of the B.S.B.I. in 2000, by which time she had become incapable of caring for herself. Eva was also a supporter of Yorkshire Wildlife Trust, the South

Holderness Country-side Society and the East Yorkshire Local History Society. The range of subjects covered in Eva's published works (q.v.) is broad but can be summarised as, "a study of plant distribution with analysis of why".

Eva's training in mathematics and chemistry made her very intense and scientifically exacting in all that she did and she had a formidable memory for detail. However, many will have witnessed occasions of a dry sense of humour and warmth when engaged in the subject of cricket or her fascinating family

PETER J. COOK

Selected List of Publications of Eva Crackles (1918–2007)

The following list is from the B.S.B.I. Literature database supplemented with local articles published since 1966.

Crackles, E. (1966). Three Umbellifers at the northern edge of their range. Naturalist (Hull), Ser. , **1966**: 49–51.

Crackles, E. (1966). Plant Records: East Riding. Naturalist (Hull), 1966: 22-23

Crackles, E. (1967). Plant records: East Riding. *Naturalist (Hull), Ser. 3*, **1967**: 22–23. Crackles, E. (1967). Some plant records by Robert Teesdale with special reference to the East Yorkshire flora. *Naturalist (Hull), Ser. 3*, **1967**: 34–47.

Crackles, E. (1968). Plant records: East Riding. Naturalist (Hull), Ser. 3, 1968: 20–21

Crackles, E. (1968). Some plant associations of the river Hull valley. E. Yorkshire Field Stud. 1: 13 - 24

Crackles, E. (1969). Plant records: East Riding. Naturalist (Hull), Ser. 3, 1969: 21–22.

Crackles, E. (1970). Plant records: East Riding. *Naturalist (Hull), Ser. 3*, **1970**: 29–30. Crackles, E. (1971). Plant records: East Riding. *Naturalist (Hull), Ser. 3*, **1971**: 25–26.

Crackles, E. (1971). Arable weeds in East Yorkshire. E. Yorkshire Field Stud. 3: 1–14. Crackles, E. (1972). Plants records: East Riding. Naturalist (Hull), Ser. 3, 1972: 38–40. Crackles, E. (1974). Seeking to understand the flora of the East Riding of Yorkshire. Naturalist (Hull), Ser. 3, **1974**: 1–17.

Crackles, E. (1974). A rush called the dumble. *Local Historian*, **11**: 63–67.
Crackles, E. (1975). The Monkey Orchid in Yorkshire. *Naturalist (Hull), Ser. 3*, **1975**: 25–26.
Crackles, E. (1975). The flowering plants of Spurn Point. *Naturalist (Hull), Ser. 3*, **1975**: 59–65.
Crackles, E. (1976). *Apium repens* (Jacq.) Lag. and *A. nodiflorum* (L.) L. x *A. repens* (Jacq.) Lag. in the East Riding. *Naturalist (Hull), Ser. 3*, **1976**: 74.

Crackles, E. (1976). Botanical report for 1974: East Riding. Naturalist (Hull), Ser. 3, 1976: 110-

Crackles, F. (1977). Botanical reports for 1975 and 1976: flowering plants and ferns: East Yorkshire (v.c. 61). *Naturalist (Hull), Ser. 3*, **1977**: 147–148 + 152

Crackles, F. E. (1979). Botanical report for 1977: East Yorkshire (v-c61). Naturalist (Hull), Ser. 3, **1979**: 67–68.

Crackles, F. E. (1981). Reports of field meetings 1979: Spurn Point, S. E. Yorkshire. 11th August. Watsonia, 13: 254.

Crackles, E. (1981). Botanical report for 1978 - Flowering plants and ferns, East Yorkshire (v.c. 61). Naturalist (Hull), Ser. 3, 1981: 31–32

Crackles, E. (1981). Botanical report for 1979 - Flowering plants and ferns, East Yorkshire (v.c. 61). Naturalist (Hull), Ser. 3, **1981**: 35–36.

Crackles, E. (1981). Botanical report for 1980 - Flowering plants and ferns, East Yorkshire (v.c.

61). Naturalist (Hull), Ser. 3, **1981**: 149–150. Crackles, F. E. (1982). Stratiotes aloides L. in the East Riding of Yorkshire. Naturalist (Hull), Ser. 3, **1982**: 99–101.

OBITUARIES

- Crackles, F. E. (1983). Stratiotes aloides L. in S. E. Yorks. A fruitful search or a hoodwink? Watsonia, 14: 451.
- Crackles, F. É. (1983). Botanical report for 1981: flowering plants and ferns, East Yorkshire (v.c. 61). Naturalist (Hull), Ser. 3, 1983: 29-30.
- Crackles, F. E. (1983). Ruppia spiralis L. ex Dumort. and R. maritima L. in S. E. Yorkshire. Watsonia, 14: 274–275
- Crackles, F. E. (1983). Dumbles or Bumbles. Lore and Language, 3(8): 53–55
- Crackles, F. E. (1983). Carex diandra Schrank x C. paniculata L. in S. E. Yorkshire. Watsonia, **14**: 275–276
- Crackles, F. E. (1983). Botanical report for 1982: flowering plants and ferns, East Yorkshire (v.c. 61). *Naturalist (Hull), Ser. 3*, **1983**: 157.
- Crackles, E. (1983). The Flora of the East Riding of Yorkshire: Progress report. *Naturalist (Hull)*, Ser. 3, 1983: 121.
- Crackles, E. (1984). The Flora of the East Riding of Yorkshire: Tetrad maps. *Bull. Yorkshire Naturalists' Union*, **1**: 17–19.
- Crackles, F. E. (1984). *Carex acuta* L. x *C. acutiformis* Ehrh. in S. E. Yorkshire. *Watsonia*, **15**: 33. Crackles, F. E. (1984). Botanical report from 1983: flowering plants and ferns. *Naturalist (Hull)*, Ser. 3, 1984: 146-147.
- Crackles, E. (1985). Some Plant Associations of Holderness & S. E. Yorks. BSBI News, 41: 6-9. Crackles, F. E. (1985). Botanical report for 1983: flowering plants and ferns. *Naturalist (Hull), Ser. 3*, **1985**: 110.
- Crackles, E. (1985). The Yorkshire Naturalists' Union, 3: People, 1. Bull. Yorkshire Naturalists' Union, 3: 1-2
- Crackles, E. (1985). Botanical comment, 2. Why here and not there? Bull. Yorkshire Naturalists' Union, 4: 12–14.
- Crackles, E. (1985). The Yorkshire Naturalists' Union, 4: People, 2, 4. Some other officers of the Union. Bull. Yorkshire Naturalists' Union, 4: 1–3.
- Crackles, E. (1986). Medieval Gardens in Hull: Archaeological Evidence. Garden History, 14: 1-
- Crackles, E. (1986). Botanical comment, 3. Vanishing arable weeds. Bull. Yorkshire Naturalists'
- *Union*, **5**: 10–12. Crackles, E. (1986). The Flowering Plants of Spurn pp.10.
- Crackles, E. (1986). Botanical comment, 4. How come they?, Bull. Yorkshire Naturalists' Union, 6: 5-7
- Crackles, F. E. (1986). *Dactylorhiza majalis* (Reichb.): F. Hunt and Summerhayes subsp. *cambrensis* (R. H. Roberts) R. H. Roberts in S. E. Yorkshire. *Watsonia*, **16**: 79–80. Crackles, F. E. (1986). Botanical report for 1985. Flowering plants and ferns. East Yorkshire v.c. 61. *Naturalist* (Hull), Ser. 3, **1986**: 25.
- Crackles, E. (1986). In Praise of Hybrids. *BSBI News*, **42**: 12. Crackles, E. (1986). Observe, Record, Think. *BSBI News*, **43**: 9,10.
- Crackles, E. (1986). Crocus vernus (L.) Hill. BSBI News, 43: 18, 20.
- Crackles, E., (1986). Juncus ambiguus Guss. (J. ranarius Song. & Perr.) in Yorkshire. Naturalist (Hull), Ser. 3, **1986** p.23
- Crackles, E. (1987). Botanical comment, 5. Hybrids: be your own expert. Bull. Yorkshire Naturalists' Union, 8: 12–13.
- Crackles, E. (1987). Plants of the railway lines of Holderness. *Holderness Countryside*, **15**: Pp 3. Crackles, E. (1987). The railway saga continued. *Bull. Yorkshire Naturalists' Union*, **7**: 14–15.
- Crackles, F. E. (1988). Botanical report for 1986. Naturalist (Hull), Ser. 3, 1988: 74–75.
- Crackles, E. (1988). Samphire as food: confusion reigns. Plant-Lore Notes & News, 2: 3.
- Crackles, E. (1988). Dumbles. E. Yorks. Local Hist. Soc. Bull. 38: 15–18
- Crackles, E. (1988). Botanical comment, 6. Converging interests. Bull. Yorkshire Naturalists' Union, 9:5-8.

- Crackles, E. (1988). Botanical comment, 7. Conservation or not. *Yorks. Nat. Bull.* **10**: 1–3. Crackles, E. (1988). 'Cat Harrows'. *Plant-Lore Notes & News*, **2**: 3. Crackles, F. E. (1989). *Schoenoplectus lacustris* (L.) Palla: archival information. *B.S.B.I. News*, **51**: 19–21.
- Crackles, F. E. (1989). Botanical report for 1987. Flowering plants and ferns. E. Yorkshire, (v.c.
- 61). Naturalist (Hull), Ser. 3, 1989: 50–51.

 Crackles, F. E. (1989). Botanical report for 1988. Flowering plants and ferns. E. Yorkshire. Naturalist (Hull), Ser. 3, 1989: 103.

 Crackles, E. (1990). Botanical report for 1989. Flowering plants and ferns. East Yorkshire (v.c.
- 61). Naturalist (Hull), Ser. 3, 1990: 148-149.

- Crackles, E. (1990). The Flora of the East Riding of Yorkshire. Bull. Yorkshire Naturalists' Union, **13**: 10–13
- Crackles, E. (1990). A 1907 plant list for Nunburnholme, East Yorkshire. Naturalist (Hull), Ser. 3, **1990**: 17–20.
- Crackles, E. (1990). Flora of the East Riding of Yorkshire pp.xi + 271 + 41 coloured plates and including 465 dot distribution maps and 4 transparent overlays.
- Crackles, F. E. (1990). Hypericum x desetangsii Lamotte nm. desetangsii in Yorkshire with special reference to its spread along railways. Watsonia, 18: 63-67.
- Crackles, E. (1991). Botanical report for 1990. Flowering plants and ferns. East Yorkshire (v.c.
- 61). Naturalist (Hull), Ser. 3, 1991: 137.

 Crackles, Eva. (1992). Reports of Field Meetings, 1992. Lower Derwent Valley N.N.R. South East Yorkshire. 20th June. B.S.B.I. News, 62: 55–56.

 Crackles, F. E. (1992). Botanical reports for 1992, Flowering plants and ferns. Naturalist (Hull),
- Ser. 3, 1992: 21.
- Crackles, E. (1993). A conservation victory with food for thought. Bull. Yorkshire Naturalists' Union, 20: 7-9.
- Crackles, E. (1993). The story of Gorse in Holderness. Holderness Countryside, 38: 10-12
- Crackles, F. E. (1994). Botanical reports for 1991. Flowering plants and ferns, East Yorkshire (v.c. 61). Naturalist (Hull), Ser. 3, 1993: 39.
- Crackles, F. E. (1994). *Calamagrostis stricta* (Timm.) Koeler, *C. canescens* (Wigg.) Roth and their hybrids in S. E. Yorks. v.c. 61, northern England. *Watsonia*, **20**: 51–60.
- Crackles, F. E. (1994). Kilnsea Canal. Holderness Countryside, 41: 8–9
- Crackles, E. (1995). Personal recollections 1. The Nineteen Forties. Bull. Yorkshire Naturalists' *Union*, **23**: 9–12
- Crackles, F. E. (1995). Botanical reports for 1993. Flowering plants and ferns. East Yorkshire, v.c. 61. *Naturalist (Hull), Ser. 3*, **1995**: 39–40.
- Crackles, F. E. (1995). A graphical analysis of the characters of *Calamagrostis stricta* (Timm) Koeler, *C. canescens* (Wigg.) Roth and their hybrid populations in S. E. Yorks, v.c. 61, northern England. *Watsonia*, **20**: 397–404.
- Crackles, F. E. (1995). Botanical report for 1994. Flowering plants and ferns. East Yorkshire, v.c. 61. Naturalist (Hull), Ser. 3, 1995: 119–120.
- Crackles, E. (1995). Personal recollections 2. The Nineteen Fifties. Bull. Yorkshire Naturalists'
- Union, 24: 5–9.
 Crackles, F. E. (1996). Botanical report for 1995. East Yorkshire (v.c. 61). Naturalist (Hull), 1996: 112-113
- Crackles, E. (1995). Personal recollections 3. The Nineteen Sixties. Bull. Yorkshire Naturalists' Union. 25: 16–20.
- Crackles, É. (1996). Personal recollections 4. The Nineteen Seventies. Bull. Yorkshire Naturalists' Union, 26: 17-2
- Crackles, E. (1997). Personal recollections 5. The Nineteen Eighties. Bull. Yorkshire Naturalists' Union, 27: 13-17
- Crackles, E. (1997). Personal recollections 6. The Nineteen Nineties. Bull. Yorkshire Naturalists' Union, 28: 6-11.
- Crackles, E. (1997). Botanical Comment 8. Dormant Seed. Bull. Yorkshire Naturalists' Union, 28: 19 - 21
- Crackles, E. (1997). The vegetation of Spurn (1946–1996). Naturalist (Hull), Ser. 3, 1997: 79–83.
- Crackles, F. E. (1997). Botanical report for 1996. Flowering plants and ferns. East Yorkshire (v.c. 61). *Naturalist (Hull), Ser. 3*, **1997**: 61–62.
- Crackles, F. E. (1997). Variation in some populations of Calamagrostis stricta (Timm.) Koeler in the British Isles and the putative past hybridization with C. canescens (Wigg.) Roth. Watsonia, 21: 341-354.

- Crackles, E. (1998). Hybrids are Fun. *Bull. Yorkshire Naturalists' Union*, **29**: 24–27. Crackles, E. (1998). *Spartina* species and hybrids. *Bull. Yorkshire Naturalists' Union*, **30**: 15. Crackles, E. (1998). Kelsey Hill Gravel Pits SSSI A Sad Loss: *Holderness Countryside*, **61**: 8,9.
- Crackles, E. (1999). Botanising by Boat. Bull. Yorkshire Naturalists' Union, 31: 18–20.
- Crackles, E. (1999). Fertile hybrids between Veronica anagallis-aquatica and V. catenata (V. x lackschewitzii) in Yorkshire. BSBI News 81: 32, 33.
- Crackles, E. (1999). Botanising by Boat. Bull. Yorkshire Naturalists' Union, **31**: 18–20. Crackles, E. (1999). Plants of Nottingham (book review). Bull. Yorkshire Naturalists' Union, **32**: 16.17
- Crackles, E. (1999). Allerthorpe Common, Site of Special Scientific Interest. Bull. Yorkshire Naturalists' Union, 32: 38,39
- Crackles, E. (2000). The Crackles Family of Hull in the Nineteenth Century. East Yorkshire Historian 1: 40-70.

DAVID PAUL STEVENS (1958–2007)

With the premature death of David Stevens on 24 April 2007, Wales lost its foremost authority on the floristic composition, distribution and ecology of species-rich pastures and hay meadows. We and many other of his close working friends and colleagues have also lost a mentor and a highly talented conservation scientist.

David was born and brought up in Redditch in the west Midlands, and whilst at school in his mid teens developed a strong interest in field botany and natural history that was to last for the rest of his life. He was drawn at an early age to applying a scientific approach to understanding the natural world. He joined the Worcestershire Wildlife Trust at the age of 17, and began to appreciate the floristic interest of remnant unimproved grasslands, such as Eades Meadow, in that county.

But it was as an undergraduate at the University of Leicester that his future career began to take shape, particularly under the influence of Clive Stace; he joined the B.S.B.I. in 1980 and became fascinated by field studies in ecology and evolution, gaining a first class honours degree in Biological Sciences in 1979. He subsequently became a research student of John Richards at the University of Newcastle, working on genetic adaptation in the Meadow Saxifrage Saxifraga granulata and completing his PhD in 1985. His discovery that this species is gynodieocious, with populations having both hermaphrodite and male-sterile individuals (Stevens & Richards 1985; Stevens 1988), was later supplemented by a modelling approach to evolutionary aspects of gynodioecy (Stevens & van Damme 1988). David then worked in a busy teaching post in the Genetics Department at the University of Wales, Swansea, between 1984-1987, where he and Quentin Kay undertook a review of British dioecious flowering plant species (Kay & Stevens 1986). In his subsequent career in conservation, David continued to take an active, if sideline, interest in plant reproductive biology and sexual systems, including a wide-ranging study of gynodioecy in British populations of the Hare's-tail Cottongrass Eriophorum vaginatum (Stevens & Blackstock 1997).

David's working life undertook a major change of direction in 1988 when he joined the Nature Conservancy Council in Bangor (later in 1991 to become the Countryside Council for



Wales) as its leading specialist in grassland conservation. His initial work concentrated on directing an intensive floristic and plant community survey of different forms of remnant species-rich grasslands across the lowland landscapes of Wales. Although now well characterised, it is important to realise that at that time the Welsh grassland resource was poorly known, with many key sites unprotected and no real concept of the character or variation of the resource across Wales. Execution of this survey meant coming to grips with the new "neo-phytosociological" approach to community recognition and mapping that came to life in the British conservation scene through the development and publication of the National Vegetation Classification (Rodwell 1991-2000). He encouraged his survey team to adopt a critical approach to all aspects of their work, including plant identification, and many new and interesting records, such as those for Carex montana in Molinia vegetation (Stevens et al. 1994), were distributed to B.S.B.I. recorders. By 2004, when the survey was completed, over 1000 sites had been recorded and mapped (digitally), supported by some 10,000 relevés. The findings have transformed the conservation prospects for this habitat in Wales, with the best surviving unimproved neutral, acid, calcareous and marshy grasslands put clearly on the map, and as a result many now notified as S.S.S.I.

Through the 1990s, David's role as a conservation scientist with C.C.W. became increasingly influential. He became leader of a team of ecological specialists, commissioning, publishing and interpreting new research to benefit habitat protection programmes and new countryside conservation initiatives, and more generally providing science advice for all aspects of terrestrial habitat conservation in Wales . Much of this work takes place behind the scenes in government-sponsored conservation agencies, but a rigorous and often original approach is fundamental to providing the evidence-base for those engaged in policy development and conservation applications at field level. David was highly skilled and wellsuited to this work, typically with a keen and influential sense of the direction we should take. He was especially influential in the development of the first all-Wales agrienvironment scheme, and also contributed hugely to the development and subsequent implementation of the UK Biodiversity Action Plan in Wales. One outcome of the latter concerned his work to disaggregate our Habitat Survey of Wales data-set (run in conjunction with the grassland survey by Liz Howe) for use by the new Local BAP partnerships (Jones et al. 2003). He also used his understanding of genetics to review the policy position in this field of conservation (Stevens & Blackstock 1997b). Before his illness struck in late 2005, he was developing an interest in the current landscape-scale perspective for habitat conservation in response to environmental change.

David was endearingly modest, thoughtful and helpful to others and he was a key formative influence in the career development of many conservation scientists. There is little

doubt that David would have excelled in academia, being both a gifted teacher and researcher, but his career path was ultimately to the immense gain of nature conservation; his conviction that it could only be pursued effectively when firmly under-pinned by scientific evidence remains as a continuing influence among his many colleagues in the conservation world. Perhaps less widely appreciated was David's humanity and compassion. Many of those close to him in C.C.W. had direct experience of this over the years, and this quality combined with his rare intellect made him one of those people that one is truly blessed to have known.

When David was diagnosed with an incurable brain tumour in January 2006, a strong and remarkable aspect of his character emerged. He confronted the diagnosis directly and courageously, accepted that he had to undergo difficult and harrowing treatment, and determined to live as fully as possible with his family and at work through his final months. His very open and honest approach, set out in widely distributed newsletters, was truly inspiring for all of us in close connection. He worked hard through this period on a booklength account of Welsh grasslands, as well as a synopsis of the survey he oversaw (Stevens et al. 2007). Throughout this time, he and his wife Jane kept a happy and active home life with their sons Clive and Glyn. In his personal memoir, written in hospital during 2006, David hoped that he 'will be remembered fondly and with a sense of celebration' rather than sadness. Of course, those close to David have been profoundly moved by his passing, but he did indeed give us considerable cause for celebration.

REFERENCES

- JONES, P. S., STEVENS, D. P., BLACKSTOCK, T. H., BURROWS, C. R. & HOWE, E. A. (2003). *Priority habitats of Wales: a technical guide*. Countryside Council for Wales, Bangor.
- KAY, Q. O. N. & STEVENS, D. P. (1986). The frequency, distribution and reproductive biology of dioecious species in the native flora of Britain and Ireland. *Botanical Journal of the Linnean Society* **92**: 39–64.
- RODWELL, J. S. (ed) (1991–2000). British Plant Communities. Cambridge University Press, Cambridge.
- STEVENS, D. P. (1988). On the gyndioecious polymorphism in *Saxifraga granulata* L. (Saxifragaceae). *Biological Journal of the Linnean Society* **35**: 15–28.
- STEVENS, D. P., BEVAN, J. M. S. & WOODMAN, J. P. (1994). Some new records of *Carex montana* L. from Glamorgan (v.c. 41) and Carmarthenshire (v.c. 44). *Botanical Society of the British Isles Welsh Bulletin* 57: 5–9.
- STEVENS, D. P. & BLACKSTOCK, T. H.. (1997a). Gynodioecy in British populations of *Eriophorun vaginatum* L. (Cyperaceae). *Watsonia* **21**: 247–257.
- STEVENS, D. P. & BLACKSTOCK, T. H. (1997b). Genetics and nature conservation: the role of the statutory conservation agencies. In: Tew T E, Crawford T. J., Spenser J. W., Stevens D. P., Usher M. B., Warren J. (Eds) *The role of genetics in conserving small populations* pp. 193-203. Joint Nature Conservation Committee, Peterborough.

- STEVENS, D. P., BLACKSTOCK, T. H., SMITH, S. L. N. & BOSANQUET, S. D. S. (2007). Lowland grassland survey of Wales. *British Wildlife* **18**: 314–323.

 STEVENS, D. P. & RICHARDS, A. J. (1985). Gynodioecy in *Saxifraga granulata* L. (Saxifragaceae). *Plant Systematics and Evolution* **151**: 43–54.

 STEVENS, D. P. & VAN DAMME, J. M. M. (1988). The evolution and maintenance of gynodioecy in sexually and vegetatively reproducing plants. *Heredity* **61**: 329–337.

T. H. BLACKSTOCK & P. S. JONES

