Dr Douglas Philip Whitfield

Curriculum vitae

Douglas Philip Whitfield (known as Philip or Phil)

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Personal details

Date of birth: 13 March 1960

Place of birth: Corbridge, Northumberland Nationality: British

Marital status: Married (with two children)

Education

Monkwearmouth School, Sunderland, Tyne & Wear

1978-1981 University College of Wales, Aberystwyth

B.Sc. (Hons.), Class 1, Zoology

1981-1985 University of Edinburgh

Ph.D. "Social organisation and feeding behaviour of wintering turnstone

Arenaria interpres".

Past appointments

1985-1987

NERC Postdoctoral Research Fellowship, held at the Department of Zoology, University of Cambridge. Departmental contact: Dr NB Davies.

Two years of summer fieldwork in northeast Iceland, with two major elements of study: i) evolution of polyandry in the red-necked phalarope, ii) mating and parental care systems of waders in Iceland (purple sandpipers, dunlin, grey and red-necked phalaropes).

1988-1990

NERC Postdoctoral Research Associate on award to Dr L Partridge for "Causes and consequences of individual feeding specialisations of turnstone *Arenaria interpres*". Held at Department of Zoology, University of Edinburgh.

This work was an extension of my PhD work. It employed long-term data on individuals' behaviour, detailed observational studies on specialisation development, and survival and breeding success differences between specialists; data gathered in the Canadian high arctic, Iceland and Scotland.

1990-1992

Research leader on Montane Ecology Project (Nature Conservancy Council/Nature Conservancy Council for Scotland).

Responsibility for devising and organising fieldwork, analysis and dissemination of results on a wide range of topics relating to high mountain areas in Britain. Much of the work was devoted to a detailed study of the dotterel *Charadrius morinellus*, involving breeding success, habitat selection, site fidelity & philopatry, and population dynamics. Other bird species are also studied (golden plover, dunlin, snow bunting & ptarmigan), as well as anthropogenic influences (recreation and skiing developments) on montane birds, invertebrates and vegetation, and the role of grazing mammals in montane ecological processes.

1992-2005

Promoted to post of Ornithologist (permanent staff), Advisory Services, Scottish Natural Heritage (SNH) (the government's statutory advisor on nature conservation in Scotland).

Promoted to post of SNH Senior Ornithologist (permanent staff) in 2004.

Current appointment

2005 – Senior Ornithologist and Director, Natural Research Ltd www.natural-research.org

2009 – Managing Director, Natural Research (Projects) Ltd

Non-salaried research awards

1983 Grants from several sources towards a study of plumage variability in breeding turnstone in Finland.

1987 Royal Society Overseas Research Grant towards an experimental study of parental care in 4 species of waders breeding in Iceland.

Grants from several sources towards several projects studying knot, turnstone and Baird's sandpiper at Borup Fiord, Ellesmere Island in the Canadian high arctic. Fieldwork was assisted by the Joint Services Expedition to the area.

1992 - 2005 Several SNH research projects (see list of examples below).

NERC award (led by W. Cresswell & S. Holt) to investigate the role of incubation costs in the breeding systems of calidridine sandpipers, Barrow on the North Slope of Alaska.

SNH research project responsibility:

- National Survey of Golden Eagles, 1992 (RSPB led), 2003
- National Survey of Merlin, 1993-95 (RSPB led)
- National Survey of Greenshank, 1995 (RSPB led)
- National Survey of Dotterel, 1999
- History of the ptarmigan in the Southern Uplands a precursor to possible reintroduction
- Functional needs of peatland animals within The Peatlands SPA of northern Scotland - a detailed study of habitat use in waders (using radio-tracking and GIS analyses) and invertebrate communities (with University of Durham)
- Using bird-habitat association models in a GIS to predict bird numbers in The Peatlands SPA (with University of Durham)
- Factors affecting field selection by breeding golden plovers (with University of Durham)
- Upland Bird Surveys supporting the Natura 2000 programme, 1993-97 covering most areas of Scotland, especially Caithness, Sutherland, Lewis
- Identification of 'hotspots' in the national distribution of upland birds (with JNCC)
- Creation of a GIS database for peatland birds in the Flow Country
- Creation of a GIS database for montane birds in Scotland
- Management of grasslands important for peatland birds in The Peatlands Management Scheme – the identification of features and management of grasslands used by peatland birds to draw up best practice guidelines under a grant-aid scheme
- Monitoring the effects of snow-fencing on montane birds (with ITE)
- Surveying and monitoring the effects of recreation on montane habitats in the Cairngorms
- Upland birds in the Cairngorms: woodland expansion issues (with RSPB)
- Bird communities of upland scrub (with BTO)
- Montane bird inventory in the Cairngorms
- Monitoring montane birds in the Cairngorms
- Montane Ecology Project (a long-term and large, wide-ranging project focussing on birds, invertebrates, vegetation; grazing, recreation and skiing development impacts)
- Modelling the ranging behaviour of golden eagles and development impacts and the creation of a GIS for golden eagle management
- Effects of afforestation on golden eagles

- A conservation framework for the golden eagle in Scotland
- Re-introduction of the red kite to Scotland (with RSPB)
- Monitoring the re-introduced white-tailed eagle in Scotland (with RSPB)
- Cumulative assessment of wind farm related impacts on birds in Scotland through collation of Environmental Impact Assessment conclusions
- Habitat selection and ranging behaviour of hen harriers on Special Protection Areas (with RSPB, Centre for Ecology and Hydrology, Game Conservancy Trust)
- Assessing pollutant levels in breeding peregrines in north east Scotland
- Impacts of raptor predation on racing pigeons

Teaching

University of Cambridge:

tutor to second year students in the Behavioural Ecology course.

University of Edinburgh:

- demonstrator in first year invertebrate course and on ornithological field studies
- sole and joint supervisor of several Honours Zoology research projects
- lectures and tutorials to Honours students on conservation & applied ecology as part of Conservation Science course
- Responsibilities as Honorary Fellow (2007 to present): lectures, tutorials, and Honours student project initiation and supervision

International University of Andalucía, Baeza, Spain

 Module on wind farms and raptors in Raptor Conservation Course, started 2006, and by annual ongoing invitation subsequently

Hawk Mountain Sanctuary, USA

Training course for international interns, 2007

Postgraduate student supervision

Joint supervisor and co-designer of:

 NERC PhD studentship, held at University of Edinburgh, on the impact of raptor predation on wintering waders (W. Cresswell, passed in 1992): Co-supervisors L. Partridge, N.P. Ashmole

- University Scholarship MPhil studentship, held at University of Edinburgh, on the ecology of rocky shore waders (A. Carter, completed in 1993): Co-supervisors N.P. Ashmole, J.M. Deag
- SNH/self-funded PhD studentship, held at University of Stirling, on incubation behaviour of dotterel (S. Holt, 1996-2002): Co-supervisor D. Bryant
- NERC PhD studentship, held at University of Sheffield, on ecological genetics of common sandpipers (A. Mee, 1997-2001): Co-supervisors T. Burke, D.B.A. Thompson
- SNH/self-funded PhD studentship, held at University of Aberdeen, (J. Hardey, ongoing), on ecology of peregrines in northern Scotland: Co-supervisor M. Marquiss

Major involvement and advisory role in several CASE PhD projects attached to SNH's Montane Ecology Project:

- Sexual selection in the dotterel I. Owens, Leicester University
- Ecology of *Racomitrium lanuginosum* moss and the effects of pollution- J. Baddeley, Manchester University
- Territoriality and habitat selection in the ptarmigan S. Rae, Aberdeen University
- Behaviour and ecology of the snow bunting R. Smith, Glasgow University

Other qualifications and experience

Clean driving licence, A-permit ringing licence (waders), referee for several journals (e.g. Animal Behaviour, Auk, Biological Conservation, Ibis, Journal of Animal Ecology, Journal of Avian Biology, Journal of Zoology, Animal Conservation, Journal of Raptor Research) and research award bodies (e.g. NERC, NSF, Leverhulme Trust).

Associate editor of the ornithological journal Bird Study.

Member of the British Ecological Society, British Ornithologists' Union, Wader Study Group, and Raptor Research Foundation.

Director-at-Large, Eurasian Committee of Raptor Research Foundation (RRF).

Scientific Co-ordinator of RRF annual conference, 2009, Pitlochry, Scotland.

Honorary Fellow of the University of Edinburgh; affiliated with Dept. of Geosciences (2007 to present).

Honorary Fellow of the University of Aberdeen (2009 to present).

Invited consultant to World Wildlife Fund (Greece) on wind farm planning in Thrace (ongoing).

Invited consultant to Galician regional government on wind farm research in NW Spain (ongoing).

Independent Ornithological Expert for ecological monitoring of the St Nikola wind farm, Bulgaria (ongoing)

Invited speaker at several international conferences, including the 2008 Nordic Golden Eagle Symposium, and the 2011 Shorebird Workshop symposium in Oman.

Publications

- **Whitfield, DP**. 1985. Raptor predation on wintering waders in southeast Scotland. *Ibis* 127: 544-558.
- **Whitfield, DP**. 1986. Plumage variability and territoriality in breeding turnstone *Arenaria interpres*: status signalling or individual recognition? *Animal Behaviour* 34: 1471-1482.
- **Whitfield, DP**. 1987. Plumage variability, status signalling and individual recognition in avian flocks. *Trends in Ecology and Evolution* 2: 13-17.
- Whitfield, DP & Magnusson, J. 1987. The migration of high arctic waders through Melrakkasletta, northeast Iceland. Wader Study Group Bulletin, 49 Suppl./IWRB Special Publication 7: 85-89.
- **Whitfield, DP**. 1988. The social significance of plumage variability in wintering turnstone *Arenaria interpres*. *Animal Behaviour* 36: 408-415.
- **Whitfield, DP**. 1988. Sparrowhawks *Accipiter nisus* affect the spacing behaviour of wintering turnstone *Arenaria interpres* and redshank *Tringa totanus*. *Ibis* 130: 284-287.
- Summers, RW, Corse, CJ, Nicoll, M, Smith, R & **Whitfield, DP**. 1988. The biometrics and wintering area of Icelandic purple sandpipers. *Ringing & Migration* 9: 133-138.
- **Whitfield, DP**, Evans AD & Whitfield PA. 1988. The impact of raptor predation on wintering waders. *Proceedings of the International Ornithological Congress* 19: 674-687.
- **Whitfield, DP**. 1990. Individual feeding specialisations in wintering turnstone *Arenaria* interpres. Journal of Animal Ecology 59: 193-211.
- Whitfield, DP. 1990. Male choice and sperm competition as constraints on polyandry in the red-necked phalarope *Phalaropus lobatus*. *Behavioural Ecology* & *Sociobiology* 27: 247-254.
- **Whitfield, DP** & Brade, JJ. 1991. The breeding behaviour of the Knot *Calidris canutus*. *Ibis* 133: 246-255.
- Galbraith, H, Murray, S, Duncan K, Smith, R, **Whitfield, DP** & Thompson DBA. 1993. Diet and habitat use of the Dotterel *Charadrius morinellus* in Scotland. *Ibis* 135: 148-155.
- Galbraith, H, Murray, S, Rae, S, **Whitfield, DP** & Thompson, DBA. 1993. Numbers and distribution of the dotterel (*Charadrius morinellus*) breeding in Great Britain. *Bird Study*: 40: 161-169.
- Cresswell, W & **Whitfield, DP**. 1994. The effects of raptor predation on wintering wader populations at the Tyninghame estuary, southeast Scotland. *Ibis* 136: 223-232.
- **Whitfield, DP**. 1995. Behaviour and ecology of a polyandrous population of Grey Phalaropes *Phalaropus fulicarius* in Iceland. *Journal of Avian Biology* 26: 349-352.

- Smith, R & Whitfield, DP. 1995. Renesting by male Dotterel *Charadrius morinellus* after successfully rearing chicks. *Bird Study* 42: 174-175.
- **Whitfield, DP** & Tomkovich, PS. 1996. Mating system and timing of breeding in Holarctic waders. *Biological Journal of the Linnaean Society* 57: 277-290.
- Whitfield, DP, Brade, JJ, Burton, RW, Hankinson, KW & Young, S. 1996. The abundance of breeding Knot *Calidris canutus islandica*. *Bird Study* 43: 290-299.
- **Whitfield, DP**, Duncan K, Pullan, D & Smith, RD. 1996. Recoveries of Scottish-ringed Dotterel *Charadrius morinellus* in the non-breeding season: evidence for seasonal shifts in wintering distribution. *Ringing & Migration* 17: 105-110.
- Whitfield, DP. 1997. Waders (Charadrii) on Scotland's blanket bogs: recent changes in numbers of breeding birds. In: *Conserving Peatlands* (Eds. L Parkyn, RE Stoneman & HAP Ingram), pp. 103-111. CAP International, Wallingford.
- Downie, IS, Foster, GN, Coulson, JC & Whitfield, DP. 1998. The water beetles of Badanloch Bog, Sutherland. *Glasgow Naturalist* 23: 31-34.
- Downie, IS, Foster, GN, Coulson, JC & Whitfield, DP. 1998. Distribution of aquatic macroinvertebrates within peatland pool complexes in the Flow Country, Scotland. *Hydrobiologia*. 377: 95-105.
- **Whitfield, DP**. 1999. Methods for ageing Dotterel *Charadrius morinellus*. *Ringing* & *Migration* 19: 200-204.
- **Whitfield, DP**, Cresswell, W, Ashmole, NP, Clark, NA & Evans, AD. 1999. No evidence for sparrowhawks selecting redshanks according to size or condition. *Journal of Avian Biology* 30: 31-39.
- Fuller, RJ, Gillings, S & **Whitfield, DP**. 1999. Responses of breeding birds to expansion of scrub in the eastern Scottish Highlands: preliminary implications for conservation strategies. *Vogelwelt* 120 Suppl.: 53-62.
- Whitfield, DP, McLeod, DRA, Fielding, AH, Evans, RJ, Broad, RA & Haworth, PF. 2001. The effects of forestry on golden eagles on the island of Mull, western Scotland. *Journal of Applied Ecology* 38: 1208-1220.
- **Whitfield, DP**. 2002. Status of breeding Dotterel *Charadrius morinellus* in Britain in 1999. *Bird Study* 49: 237-249.
- **Whitfield, DP**, Evans, RJ, Broad, RA, Fielding, AH, Haworth, PF, Madders, M & McLeod, DRA. 2002. Are reintroduced white-tailed eagles in competition with golden eagles? *Scottish Birds* 23: 36-45.
- McLeod, D, **Whitfield, DP** & McGrady, MJ. 2002. Improving prediction of golden eagle (*Aquila chrysaetos*) ranging in western Scotland, using GIS and terrain modelling. *Journal of Raptor Research* 36 (1 Supplement): 70-77.
- Watson J & Whitfield, P. 2002. A conservation framework for the golden eagle *Aquila chrysaetos* in Scotland. *Journal of Raptor Research* 36 (1 Supplement): 41-49.
- Holt, S, **Whitfield, DP** & Gordon, J. 2002. Potential reproductive rates in the Eurasian dotterel. *Bird Study* 49: 87-88.
- Reid, JM, Cresswell, W, Holt, S, Mellanby, RJ, **Whitfield, DP** & Ruxton, GD. 2002. Nest scrape design and clutch heat loss in Pectoral Sandpipers *Calidris melanotos. Functional Ecology* 16: 305-312.
- Holt, S, **Whitfield, DP**, Duncan, K, Rae, S & Smith, RD. 2002. Mass loss in incubating Eurasian dotterel: adaptation or constraint? *Journal of Avian Biology* 33:219-224.

- McLeod, DRA, **Whitfield, DP**, Fielding, AH, Haworth, PF & McGrady, MJ. 2002. Predicting home range use by golden eagles *Aquila chrysaetos* in western Scotland. *Avian Science* 2: 183-198.
- Buchanan, GM, Pearce-Higgins, JW, Grant, MC & Whitfield, DP. 2003. Correlates of the change in Ring Ouzel *Turdus torquatus* abundance in Scotland from 1989-91 to 1999. *Bird Study* 50: 97-105.
- **Whitfield, DP**. 2003. Predation by Eurasian sparrowhawks produces density-dependent mortality in wintering redshanks. *Journal of Animal Ecology* 72: 27-35.
- **Whitfield, DP**, McLeod, DRA, Watson, J, Fielding, AH & Haworth, PF. 2003. The association of grouse moors in Scotland with the illegal use of poisons to control predators. *Biological Conservation* 114: 157-163.
- Cresswell, W, Holt, S, Reid, JM, **Whitfield, DP** & Mellanby, RJ. 2003. Do energetic demands constrain incubation scheduling in a biparental species? *Behavioral Ecology* 14: 97-102.
- Holt, S & Whitfield, DP. 2003. Timing of nest departure by broods of dotterel *Charadrius morinellus. Bird Study* 49: 88-90.
- **Whitfield, DP**. 2003. Redshank *Tringa totanus* flocking behaviour, distance from cover and vulnerability to sparrowhawk *Accipiter nisus* predation. *Journal of Avian Biology* 34: 163-169.
- **Whitfield, DP**. 2003. Density-dependent mortality of wintering Dunlins *Calidris alpina* through predation by Eurasian Sparrowhawks *Accipiter nisus*. *Ibis* 145: 432-438.
- **Whitfield, DP**. 2003. Raptor predation on non-breeding shorebirds: some thoughts for the future. *Wader Study Group Bulletin* 100: 134-137.
- Thompson, DBA, **Whitfield, DP**, Galbraith, H, Duncan, K, Smith, RD, Murray, S & Holt, S. 2003. Breeding bird assemblages of alpine areas in Scotland. *In*: Nagy, L, Grubher, G, Korner, C & Thompson, DBA (eds.) *Alpine Biodiversity in Europe*. Springer-Verlag, London.
- **Whitfield, DP**. 2003. Does timing of breeding affect breeding plumage acquisition in shorebirds? *Wader Study Group Bulletin* 101/102: 77-80.
- Whitfield, DP. 2003. The effects of predation by Sparrowhawks on the behaviour and population dynamics of wintering Redshanks. *In*: Thompson, DBA, Redpath, SM, Fielding, AH, Marquiss, M & Galbraith, CA (eds.), pp. 269-274. *Birds of Prey in a Changing Environment*. The Stationery Office, Edinburgh.
- Watson, J, Fielding, AH, **Whitfield, DP**, Broad, RA, Haworth, P, Nellist, K, Crane, K & Macdonald, EJ. 2003. Golden eagle breeding performance in relation to climate in western Scotland during the period 1981-2000. *In*: Thompson, DBA, Redpath, SM, Fielding, AH, Marquiss, M & Galbraith, CA (eds.), pp. 149-161. *Birds of Prey in a Changing Environment*. The Stationery Office, Edinburgh.
- Fielding, A, **Whitfield, DP**, McLeod, DRA, McGrady, MJ, & Haworth, PF. 2003. Modelling the impact of land use change on golden eagles (*Aquila chrysaetos*). *In*: Thompson, DBA, Redpath, SM, Fielding, AH, Marquiss, M & Galbraith, CA (eds.), pp. 323-340. *Birds of Prey in a Changing Environment*. The Stationery Office, Edinburgh.
- Fielding, AH, Haworth, PF, Morgan, DH, Thompson, DBA & Whitfield, DP. 2003. The impact of golden eagles (*Aquila chrysaetos*) on a diverse bird of prey assemblage. *In*: Thompson, DBA, Redpath, SM, Fielding, AH, Marquiss, M &

- Galbraith, CA (eds.), pp. 221-244. *Birds of Prey in a Changing Environment.* The Stationery Office, Edinburgh.
- Cresswell, W, Holt, S, Reid, JM, **Whitfield, DP**, Mellanby, RJ, Norton, D & Waldron, S. 2004. The energetic costs of egg heating constrain incubation attendance but do not determine daily energy expenditure in the pectoral sandpiper. *Behavioral Ecology* 15: 498-507.
- Mee, A, **Whitfield, DP**, Thompson, DBA & Burke, TA. 2004. Extra-pair paternity in the common sandpiper *Actitis hypoleucos*, revealed by DNA fingerprinting. *Animal Behaviour* 67, 333-342.
- **Whitfield, DP**, Fielding, AH, McLeod, DRA & Haworth, PF. 2004. The effects of persecution on age of breeding and territory occupation in golden eagles in Scotland. *Biological Conservation* 118: 249-259.
- **Whitfield, DP**, Fielding, AH, McLeod, DRA & Haworth, PF. 2004. Modelling the effects of persecution on the population dynamics of golden eagles in Scotland. *Biological Conservation* 119, 319-333.
- Madders, M & **Whitfield, DP**. 2006. Upland raptors and the assessment of windfarm impacts. *Ibis* 148, 43-56.
- **Whitfield, DP**, Fielding, AH, McLeod, DRA, Haworth, PF & Watson, J. 2006. A conservation framework for the golden eagle in Scotland: refining condition targets and assessment of constraint influences. *Biological Conservation* 130, 465-480.
- Fielding, AH, **Whitfield, DP** & McLeod, DRA. 2006. Spatial association as an indicator of the potential for future interactions between wind energy developments and golden eagles *Aquila chrysaetos* in Scotland. *Biological Conservation* 131, 359-369.
- Haworth, PF, McGrady, MJ, **Whitfield, DP**, Fielding, AH & McLeod, DRA. 2006. Ranging distance of adult golden eagles *Aquila chrysaetos* in western Scotland according to season and breeding status. *Bird Study* 53, 265-273.
- **Whitfield, DP**, Fielding, AH, Gregory, MJP, Gordon AG, McLeod, DRA & Haworth, PF. 2007. Complex effects of habitat loss on golden eagles *Aquila chrysaetos*. *Ibis* 149, 26-36.
- Band, W, Madders, M, & Whitfield, DP. 2007. Developing field and analytical methods to assess avian collision risk at wind farms. *In*: de Lucas, M, Janss, GFE & Ferrer, M (eds.) *Birds and Wind Farms: Risk Assessment and Mitigation*, pp. 259-275. Quercus, Madrid.
- **Whitfield, DP**, Fielding, AH, McLeod, DRA, Morton, K, Stirling-Aird, P & Eaton, M. 2007. Factors constraining the distribution of Golden Eagles *Aquila chrysaetos* in Scotland. *Bird Study* 54, 199-211.
- Eaton, MA, Dillon, IA, Stirling-Aird, PK. & **Whitfield, DP**. 2007. Status of Golden Eagle *Aquila chrysaetos* in Britain in 2003. *Bird Study* 54, 212-220.
- Cresswell, W, Lind, J, Quinn, JL, Minderman, J & Whitfield, DP. 2007. Ringing or colour-banding does not increase predation risk in Redshanks *Tringa totanus*. *Journal of Avian Biology* 38, 309-316.
- Parrott, D., Henderson, I., Deppe, C. & **Whitfield, P**. 2008. Scottish racing pigeons killed by Peregrine Falcons *Falco peregrinus*: estimation of numbers from ring recoveries and Peregrine daily food intake. *Bird Study* 55, 32-42.
- **Whitfield, DP**, Fielding AH & Whitehead, S. 2008. Long-term increase in the fecundity of hen harriers *Circus cyaneus* in Wales is explained by reduced human interference and warmer weather. *Animal Conservation* 11, 144-152.

- Whitfield, DP & Coupar, A. 2008. Effects of terrestrial wind farms on birds and upland habitats. In: Galbraith, C.A. & Baxter, J.M. (eds). *Energy and the Natural Heritage*, pp. 205-220. The Stationery Office, Edinburgh.
- Cresswell, W & Whitfield, DP 2008. How starvation risk in redshanks *Tringa totanus* results in predation mortality from sparrowhawks *Accipiter nisus*. *Ibis* 150 (Suppl. 1), 209-218.
- **Whitfield, DP**, Ruddock, M & Bullman, R. 2008. Expert opinion as a tool for quantifying bird tolerance to human disturbance. *Biological Conservation* 141, 2708-2717.
- de Lucas, M, Janss, GFE, **Whitfield, DP** & Ferrer, M. 2008. Collision fatality of raptors in wind farms does not depend on raptor abundance. *Journal of Applied Ecology* 45, 1695-1704.
- **Whitfield, DP**, Reid, R, Haworth, PF, Madders, M, Marquiss, M, Tingay, R & Fielding, AH. 2009. Diet specificity is not associated with increased reproductive performance of Golden Eagles *Aquila chrysaetos* in western Scotland. *Ibis* 151, 255-264.
- Whitfield, DP, Douse, A, Evans, RJ, Grant, J, Love, J, McLeod, DRA, Reid, R & Wilson, JD. 2009. Natal and breeding dispersal in a reintroduced population of White-tailed Eagles *Haliaeetus albicilla*. *Bird Study* 56, 177-186.
- Evans, RJ, Wilson, JD, Amar, A, Douse, A, MacLennan, A, Ratcliffe, N & Whitfield, **DP**. 2009. Growth and demography of a re-introduced White-tailed Eagle *Haliaeetus albicilla* population in Scotland. *Ibis* 151, 244-254.
- Whitfield, DP, Duffy, K, McLeod, DRA, Evans, RJ, MacLennan, AM, Reid, R, Sexton, D, Wilson, JD & Douse, A. 2009. Juvenile dispersal of White-tailed Eagles in western Scotland. *Journal of Raptor Research* 43, 110-120.

Manuscripts in press

- Janss, GFE, de Lucas, M, Lazo, A., Ferrer, M. & Whitfield, DP. In press. The precautionary principle and wind-farm planning in Andalucía. *Biological Conservation*
- Evans, RJ, Pearce-Higgins, J, **Whitfield, DP**, Grant, JR, MacLennan, AM & Reid, R. In press. Comparative nest site characteristics of sympatric White-tailed *Haliaeetus albicilla* and Golden Eagles *Aquila chrysaetos* in western Scotland. *Bird Study*
- Reid, R, McLeod, DRA, Haworth, PF, Fielding AH, McGrady, MJ & Whitfield, DP. In press. Spatial distribution of undulating flight displays in pairs of golden eagles. *Journal of Raptor Research*
- Fielding, AH, **Whitfield, DP** & Whitehead, S. In press. Population dynamics of the hen harrier *Circus cyaneus* in Wales. *Bird Study*

Selected reports/articles

Whitfield, DP. 1989. Sexual conflict in the red-necked phalarope. *Bliki* 7, 59-62.

- **Whitfield, DP**. 1996. Habitat requirements of breeding waders on blanket bogs in Northern Scotland. SNH Information and Advisory Note 53, Battleby.
- **Whitfield, DP.** 1998. Environmental impacts of mountaineering and hillwalking: montane birds. SNH, Edinburgh.
- **Whitfield, DP.** 1998. Red deer and sheep in the montane zone of Scotland. SNH, Edinburgh.
- **Whitfield, DP**. 2000. *Golden eagle* Aquila chrysaetos *ecology and conservation issues*. SNH Review 132, Battleby.
- Whitfield, DP. 2002. Dotterel *Charadrius morinellus*. In *The Migration Atlas: Movements of Birds of Britain and Ireland* (eds C.V. Wernham, M.P. Toms, J. Marchant, J.A. Clark, G.M. Siriwardena & S.R. Baillie). Poyser, London.
- Whitfield, DP. 2002. Turnstone Arenaria interpres. In The Migration Atlas:

 Movements of Birds of Britain and Ireland (eds C.V. Wernham, M.P. Toms, J. Marchant, J.A. Clark, G.M. Siriwardena & S.R. Baillie). Poyser, London.
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- **Whitfield, DP** & Tharme, AP. 1997. An evaluation of the effects of native pinewood regeneration on the birds of the Cairngorms. SNH, Edinburgh.
- Whitfield, DP, Evans, AD & Magnusson, J. 1989. The first confirmed breeding attempt of the Curlew *Numenius arquata* in Iceland. *Bliki* 8, 3-6.
- Whitfield, DP, Duncan, K, Murray, S, Rae, S, Smith, R & Thompson, DBA. 1991. Monitoring the dotterel population of Britain. In: *Britain's Birds in 1989-1990: the conservation and monitoring review* (Eds. D Stroud & D Glue), pp 109-11. NCC, Peterborough.
- Holt, S & Whitfield, DP. 1996. Montane Ecology Project site report series: Glas Maol, eastern Grampians. SNH, Edinburgh.
- Holt, S & Whitfield, DP. 1996. Montane Ecology Project site report series: East Drumochter, central Grampians. SNH, Edinburgh.
- Holt, S & Whitfield, DP. 1996. Montane Ecology Project site report series: Cairn Gorm study area. SNH, Edinburgh.
- Tharme, AP & Whitfield, DP. 1996. Ornithological importance of moorland within the Forest of Strathspey and Forest of Mar Priority Forest Areas. RSPB, Edinburgh.
- Thompson, DBA & Whitfield, DP. 1993. Research Progress Report: Research on mountain birds and their habitats. *Scottish Birds* 17: 1-8.
- Thompson, DBA & Whitfield, DP. 1994. The Dotterel. In: Gibbons, DW, Reid, J & Chapman, R, *The New Atlas of Breeding Birds in Britain and Ireland.* Poyser, London.
- McLeod, D. & Whitfield, DP 1999. GIS for Golden Eagle Management. SNH, Edinburgh.
- Fernley, J, Lowther, S & Whitfield DP. 2007. A Review of Goose Collisions at Operating Wind Farms and Estimation of the Goose Avoidance Rate.

 Unpublished Report by West Coast Energy, Hyder Consulting and Natural Research.
- Whitfield, DP & Madders, M. 2006. A review of the impacts of wind farms on hen harriers Circus cyaneus and an estimation of collision avoidance rates. Natural Research Information Note 1 (revised). Natural Research Ltd, Banchory, UK.

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