

## Appendix 2 - Papers/books published or in press

Author(s)	Title	Journal	Volume No., Pages	Year
B.J.T. Morgan	'Stimulus-response studies', in Encyclopaedia of Biostatistics (2 <sup>nd</sup> Ed.) - Wiley		5217-5219	2005
R. King, S.M. Bird, S.P. Brooks, S. Hutchinson and G. Hay	Prior information in behavioural capture-recapture methods: demography influences injectors' propensity to be listed on data sources and their drugs-related mortality	American Journal of Epidemiology	162, 1-10	2005
P. Besbeas, S.N.Freeman and B.J.T. Morgan	The potential of integrated population modelling	Aust. New Zeal. J. Stat.	47, 35-48	2005
L. Thomas, S.T. Buckland, K.B. Newman and J. Harwood	A unified framework for modelling wildlife population dynamics.	Australian and New Zealand Journal of Statistics	47, 19-34	2005
R.M. Fewster, J.L. Laake and S.T. Buckland	Line transect sampling in small and large regions.	Biometrics	61, 856-859	2005
D.J.Cole, B.J.T. Morgan and M.S Ridout	Models for strawberry inflorescence data	J. Agric. Biol. and Environ. Statistics	10, 411-423	2005
G. Tavecchia, T.N. Coulson, B.J.T. Morgan, J.M. Pemberton, J.C. Pilkington, F.M.D. Gulland and T.H. Clutton-Brock	Predictors of reproductive cost in Soay sheep	J. Anim. Ecol.	74, 201-213	2005
J. Matthiopoulos, J. Harwood & L. Thomas	Metapopulation consequences of site fidelity for colonially breeding mammals and birds	J. Anim. Ecol.	74, 716-727	2005
C.P. Lynam, S.J. Hay and A.S. Brierley	Jellyfish abundance and climatic variation: contrasting responses in oceanographically distinct regions of the North Sea, and possible implications for fisheries	Journal of the Marine Biological Association of the United Kingdom	85, 435-450	2005
C.P. Lynam, M.R. Heath, S.J. Hay and A.S. Brierley	Evidence for impacts by jellyfish on North Sea herring recruitment	Marine Ecology Progress Series	298, 157-167	2005
S.T. Buckland, A.E. Magurran, R.E. Green and R.M. Fewster	Monitoring change in biodiversity through composite indices.	Phil. Trans. R. Soc. Lond. B	360, 243-254	2005
N.J. Savill, M.J. Tildesley, D.J. Shaw, M.J. Keeling, R. Deardon, S.P. Brooks, M.E.J. Woolhouse and B.T. Grenfell	Spatial and Temporal Heterogenities of Pre-emptive Culling, and their effects on Farm Infectivity in the 2001 UK Foot-and-Mouth Disease Epidemic	BioMed Central - Veterinary Research	2:3	2006

O. Gimenez, C. Crainiceanu, C. Barbraud, S. Jenouvrier and B.J.T. Morgan	Semiparametric regression in capture-recapture modelling	Biometrics	62, 691-698	2006
R. King, S.P. Brooks, B.J.T. Morgan and T. Coulson	Factors influencing Soay sheep survival: a Bayesian analysis	Biometrics	62, 211-220	2006
D.J. Cole, M.S. Ridout, B.J.T. Morgan, L.J.Byrne and M.F.Tuite	New approximations to the Malthusian parameter	Biometrics	62, 1216-1223	2006
S.P. Brooks, Y. Fan and J.S. Rosenthal	Perfect Forward Simulation via Simulated Tempering	Communications in Statistics: Theory and Methods	35, 683-713	2006
C.P. Lynam, M.J. Gibbons, B.E. Axelsen, C.A.J. Sparks, J. Coetzee, B.G. Heywood and A.S. Brierley	Jellyfish overtake fish in a heavily fished ecosystem	Current Biology	16, R492-R493	2006
K.B. Newman, S.T. Buckland, S.T. Lindley, L. Thomas and C. Fernández	Hidden process models for animal population dynamics.	Ecological Applications	16, 74-86	2006
B.J.T. Morgan	New methods for including covariates in models for the survival of wild animals	IWSM2006, Proceedings of the 21 <sup>st</sup> International Workshop on Statistical Modelling	50-61	2006
P.J. Harrison, S.T. Buckland, L. Thomas, R. Harris, P.P. Pomeroy and J. Harwood	Incorporating movement into models of grey seal population dynamics.	J. Anim. Ecol.	75, 634-645	2006
S.T. Buckland, R.W. Summers, D.L. Borchers and L. Thomas	Point transect sampling with traps or lures.	J. App. Ecol.	43, 377-384	2006
Y. Fan, S.P. Brooks and A. Gelman	Convergence Assessment of Monte Carlo Simulations via the Score Statistic	Journal of Computational and Graphical Statistics	15, 178-206	2006
L.R. Johnson and M.S. Mangel	The life histories and the evolution of ageing in bacteria and other single celled organisms	Mechanisms of Ageing and Development	127, 786-793	2006
M.J. Tildesley, N.J. Savill, D.J. Shaw, R. Deardon, S.P. Brooks, M.E.J. Woolhouse, B.T. Grenfell and M.J. Keeling	Optimal Reactive Vaccination Strategies for a Foot-and-Mouth Outbreak in Great Britain	Nature	440, 83-86	2006
K. Moyes, T. Coulson, B.J.T. Morgan, A. Donald, S.J. Morris and T.H. Clutton-Brock	Cumulative costs of reproduction in female red deer	Oikos	115, 241-252	2006
I. Javors'kyi, I. Isayey, Z. Zakrzewski and S.. Brooks	Coherent Correlation Analysis of Periodically Correlated Random Processes	Signal Processing	To appear	2006

S.T. Buckland	Point transect surveys for songbirds: robust methodologies	The Auk	123, 345-357	2006
T.A. Marques, M. Andersen, S. Christensen-Dalsgaard, S. Belikov, A. Boltunov, Ø. Wiig, S.T. Buckland and J. Aars	Comparing distance estimation methods in a helicopter line transect survey.	Wildlife Society Bulletin	34,759-763	2006
B.J.T. Morgan, D.J. Revell and S.N. Freeman	Simplified likelihoods for occupancy models	Biometrics	To appear	2007
S.T. Buckland, D.L. Borchers, A. Proctor, P.A. Henrys and T.A. Marques	Line transect methods for plant surveys.	Biometrics	To appear	2007
L. R. Johnson, C. F. G. Thomas, P. Brain, and P. C. Jepson	Correction to: Aerial activity of linyphiid spiders: modelling dispersal distances from meteorology and behaviour	J. Appl. Ecol.	To appear	2007
L. Thomas, R. Williams and D. Sandilands	Designing line transect surveys for complex survey regions	J. Cetacean Research and Management	To appear	2007
R. Williams and L. Thomas	Distribution and abundance of marine mammals in the coastal waters of British Columbia, Canada	J. Cetacean Research and Management	To appear	2007
C.P. Lynam and A.S. Brierley	Survival of 0-group gadoid fish under jellyfish umbrellas	Marine Biology	150, 1397-1401	2007
S.T. Buckland, K.B. Newman, C. Fernández, L. Thomas and J. Harwood	Embedding population dynamics models in inference.	Statistical Science	To appear	2007
B.J.T. Morgan, K.J. Palmer and M.S. Ridout	Negative score test statistic	The American Statistician	To appear	2007
T.A. Marques, L. Thomas, S.G. Fancy and S.T. Buckland	Improving estimates of bird density using multiple covariate distance sampling.	The Auk	To appear	2007

## Appendix 3 - Papers submitted

<b>Author(s)</b>	<b>Title</b>	<b>Journal submitted to</b>	<b>Date of submission</b>	
B.J.T. Morgan and M.S. Ridout	A new mixture model for recapture heterogeneity	Applied Statistics	1 <sup>st</sup> version, October 2006, invited revision	
G. Thomas, S.P. Brooks, S. Goodacre, G. Hewitt, L. Hutchings and C. Woolley	Aerial dispersal by linyphiid spiders in relation to meteorological parameters and climate change	Arachnidae	2006	
S. Figini, P. Giudici and S.P. Brooks	Bayesian Feature Selection for Estimating Customer Survival	Bayesian Statistics	2006	
S.P. Brooks, I. Manolopoulou and C. Emerson	Assessing the Effect of Genetic Mutation - A Bayesian Framework for Determining Population History from DNA Sequence Data	Bayesian Statistics VIII, OUP	To appear in 2007	
D.J. Cole, M.S. Ridout, B.J.T. Morgan, L.J. Byrne and M.F. Tuite	Approximations for expected generation number	Biometrics	To appear in 2007	
K.B. Newman, C. Fernández, S.T. Buckland and L. Thomas	Monte Carlo inference for state-space models of wild animal populations.	Biometrics	2006	
K.E. Anderson, S.P. Brooks and M. Højbjerg	Bayesian Model Discrimination for Glucose-Insulin Homeostasis	Biometrics	2006	
L. Jamieson, S.P. Brooks and C.A. Gilligan	Joint Estimation of Spatial and Temporal Parameters for Epidemic Dynamics from Successive Snapshots	Biometrics	2006	
R.M. Fewster, S.T. Buckland, K.P. Burnham, D.L. Borchers, P.E. Jupp, J.L. Laake and L. Thomas	Estimating the encounter rate variance in distance sampling.	Biometrics	2006	
P. Besbeas and B.J.T. Morgan	Kalman filter initialization for modelling population dynamics	Biometrics	2006, invited revision	
R. King and S. P. Brooks	On the Bayesian Estimation of a Closed Population Size in the Presence of Heterogeneity and Model Uncertainty	Biometrics	2006	
R. King, S. P. Brooks and T. Coulson	Analysing Complex Capture-Recapture Data: Incorporating Time-varying Covariate Information	Biometrics	2006	

N.V.L. Hayes, E. Blackburn, L.V.Smart, M. Boyle, G. Russell, T. Frost, B.J.T. Morgan, A.J. Baines and W.J. Gillick	Identification and characterisation of novel spliced variants of NRG4 in prostate cancer	Clinical Cancer Research	To appear in 2007	
G. Gauthier, P. Besbeas, J-D Lebreton and B.J.T. Morgan	Population growth in Greater Snow Geese: a new modelling approach integrating demographic and census information	Ecology	To appear in 2007	
S. R. Baillie, S. P. Brooks, R. King and L. Thomas	Using a state-space model of the UK Song Thrush <i>Turdus philomelos</i> population to diagnose the causes of a population decline	Environmental and Ecological Statistics	2007	
O. Gimenez, S. Bonner, R. King, R. A. Parker, S. P. Brooks, L. E. Jamieson, V. Grosbois, B. J. T. Morgan, S. Newson, and L. Thomas	WinBUGS for Population Ecologists: Bayesian Modelling using Markov chain Monte Carlo (MCMC) Methods	Environmental and Ecological Statistics	2007, invited revision	
P. Besbeas, R.S. Borysiewicz and B.J.T. Morgan	Completing the ecological jigsaw	Environmental and Ecological Statistics	2007, invited revision	
J.D. Nichols, L. Thomas and P.B. Conn	Inferences about landbird abundance from count data: recent advances and future directions	Environmental and Ecological Statistics	2007	
R.S. Borysiewicz, O. Gimenez, V. Hénau, T. Bregnballe, J-D. Lebreton, and B.J.T. Morgan	An integrated analysis of multisite recruitment, mark-recapture-recovery and multisite census data	Environmental and Ecological Statistics	2007, invited revision	
V.M. Cave, S.N. Freeman, S.P. Brooks and D.E. Balmer	On adjusting for missed visits in the indexing of abundance from 'Constant Effort' ringing	Environmental and Ecological Statistics	2007	
O. Gimenez, B.J.T. Morgan and S.P. Brooks	Weak identifiability in models for mark-recapture-recovery data	Environmental and Ecological Statistics	2007	
B.J.T. Morgan and M.S. Ridout	Estimating N: a robust approach to recapture heterogeneity	Environmental and Ecological Statistics	2007	
R.B. Gramacy and H.K.H. Lee	Bayesian treed Gaussian process models	J. Amer. Stat. Assoc.	1 <sup>st</sup> version, March 2006	
K. Moyes, T. Coulson, B.J.T. Morgan, A. Donald, S.J. Morris, F.E. Guinness and T.H. Clutton-Brock	The influence of spatial, temporal and individual factors on the home range area of female red deer	J. Animal Ecology	1 <sup>st</sup> version, October 2006, invited revision	
E.A. Catchpole, B.J.T. Morgan and G. Tavecchia	Conditional methodology for individual case-history data II	J. Roy. Statist. Soc., B	2 <sup>nd</sup> version, June 2006, invited revision	

R. Deardon, S.P. Brooks, B.T. Grenfell, M.J. Keeling, M.J. Tildesley, N.J. Shaw and M.E.J. Woolhouse	Inference for Individual-Level Models of Infectious Diseases in Large Populations	J. Roy. Statist. Soc., B	2006	
R.B. Gramacy	tgp: an R package for Bayesian nonstationary, semiparametric nonlinear regression and design by treed Gaussian process models	Journal of Statistical Software	1st version January 2006, accepted with minor corrections	
C. Mazetta, S.P. Brooks and S.N. Freeman	On smoothing trends in population index modelling		2006	
L.R. Johnson	Microcolony and biofilm formation as a survival strategy for bacteria	Journal of Theoretical Biology	1 <sup>st</sup> version November 2006, invited revision	
A. Gangadharan, N.S. Kumar, L. Thomas and K.U. Karanth	Improving estimates of forest ungulate density from line transect surveys through forward truncation and improved field protocols	Journal of Zoology	2007	
Aars, J., Marques, T.A., Andersen, M., Belikov, S., Boltunov, A., Buckland, S.T. and Wiig, Ø.	Estimating the Barents Sea polar bear subpopulation size.	Marine Mammal Science	2007	
L.J. Byrne, B.S. Cox, D.J. Cole, M.S. Ridout, B.J.T. Morgan and M.F. Tuite	The role of cell division in elimination of the [PSI <sup>+</sup> ] prion of yeast by guanidine hydrochloride	Proceedings of the National American Academy of Science	2006, invited revision	
T.C.F.N. Barata and S.P. Brooks	Analysis of the Radiocarbon Calibration Curve using MCMC	Radiocarbon	2006	
P. Besbeas and B.J.T. Morgan	Improved estimation for the stable laws	Statistics and Computing	1 <sup>st</sup> version, February 2006, invited revision	
R.B. Gramacy and H.K.H. Lee	Adaptive design of supercomputer experiments	Technometrics	1 <sup>st</sup> version, July 2006	

## Appendix 4 - Technical reports prepared

<b>Author(s)</b>	<b>Title</b>	<b>Technical Report Series, Reference No.</b>	<b>No. of Pages</b>	<b>Year</b>
P. Besbeas and B.J.T. Morgan	Improved estimation for the stable laws	IMSAS, University of Kent, UKC/IMS/05/01	36	2005
O. Gimenez, C. Barbraud, C. Crainiceanu, S. Jenouvrier and B.J.T. Morgan	Semiparametric regression in capture-recapture modelling	IMSAS, University of Kent, UKC/IMS/05/09	16	2005
K.Moyes, T. Coulson, B.J.T. Morgan, A. Donald, S.J. Morris and T.H. Clutton-Brock	Cumulative costs of reproduction in female red deer	IMSAS, University of Kent, UKC/IMS/05/12	24	2005
E.A. Catchpole, B.J.T. Morgan and G. Tavecchia	Conditional methodology for individual case-history data II	IMSAS, University of Kent, UKC/IMS/05/18	17	2005
B.J.T. Morgan	An introduction to statistical methods in population ecology	IMSAS, University of Kent, UKC/IMS/05/21	83	2005
B.J.T. Morgan, D.J. Revell and S.N. Freeman	Simplified likelihoods for occupancy models	IMSAS, University of Kent, UKC/IMS/05/22	12	2005
O. Gimenez, S.P. Brooks and B.J.T. Morgan	Weak identifiability in mark-recapture and mark-recovery models	IMSAS, University of Kent, UKC/IMS/05/27	30	2005
D.J. Cole, M.S. Ridout, B.J.T. Morgan, L.J. Byrne and M.F. Tuite	Approximations for expected generation number	IMSAS, University of Kent, UKC/IMS/05/28	26	2005
L. Thomas and J. Harwood	Estimating the size of the UK grey seal population between 1984 and 2004: model selection, survey effort and sensitivity to priors	NERC Special Committee on Seals Briefing Paper, 05/3	17	2005
B.J.T. Morgan and M.S. Ridout	A new mixture model for recapture heterogeneity	IMSAS, University of Kent, UKC/IMS/06/06	30	2006
B.J.T. Morgan	New methods for including covariates in models for the survival of wild animals	IMSAS, University of Kent, UKC/IMS/06/10	11	2006
G. Gauthier, P. Besbeas, J-D Lebreton and B.J.T. Morgan	Population growth in Greater Snow Geese: a new modelling approach integrating demographic and census information	IMSAS, University of Kent, UKC/IMS/06/12	45	2006
G. Tavecchia, P. Besbeas, T. coulson, T.H. Clutton-Brock, B.J.T. Morgan	Estimating population size and hidden demographic parameters with state-space modelling	IMSAS, University of Kent, UKC/IMS/06/15	28	2006
K. Moyes, T. Coulson, B.J.T. Morgan, A. Donald, S.J. Morris, F.E. Guinness and T.H. Clutton-Brock	The influence of spatial, temporal and individual factors on the home range area of female red deer	IMSAS, University of Kent, UKC/IMS/06/16	32	2006

G. Tavecchia, B.J.T. Morgan, E.A. Catchpole, J. Pemberton, H. Caswell and T. Coulson	Estimating the phenotypic costs of reproduction using reproductive values	IMSAS, University of Kent, UKC/IMS/06/19	21	2006
P. Besbeas and B.J.T. Morgan	Kalman filter initialization for modelling population dynamics	IMSAS, University of Kent, UKC/IMS/06/025	26	2006
L.J. Byrne, B.S. Cox, D.J. Cole, M.S. Ridout, B.J.T. Morgan and M.F. Tuite	The role of cell division in elimination of the [PSI <sup>+</sup> ] prion of yeast by guanidine hydrochloride	IMSAS, University of Kent, UKC/IMS/06/028	43	2006
B.J.T. Morgan, K.J. Palmer and M.S. Ridout	Negative score test statistic	IMSAS, University of Kent, UKC/IMS/06/029	10	2006
O. Gimenez, B.J.T. Morgan and S.P. Brooks	Weak identifiability in models for mark-recapture-recovery data	IMSAS, University of Kent, UKC/IMS/06/030	14	2006
B.J.T. Morgan and M.S. Ridout	Estimating N: a robust approach to recapture heterogeneity	IMSAS, University of Kent, UKC/IMS/06/031	11	2006
L. Thomas and J. Harwood	Estimating the size of the UK grey seal population between 1984 and 2005, and related research	NERC Special Committee on Seals Briefing Paper, 06/3	13	2006
J. Matthiopoulos, L. Thomas, B. McConnell, C.D. Duck, D. Thompson, P. Pomeroy, J. Harwood, E.J. Milner-Gulland, N. Wolf and M. Mangel	Putting long-term, population monitoring data to good use: the causes of density dependence in UK grey seals	NERC Special Committee on Seals Briefing Paper, 06/8	5	2006
B. Wright	Progress report for NCSE – 6 months	N/A	9	2006
C. Lynam	Progress report for NCSE – 6 months	N/A	10	2006
C. Lynam	Progress report for NCSE – 12 months	N/A	9	2006
D. Brown	Progress report for NCSE – 6 months	N/A	10	2006
D. Brown	Progress report for NCSE – 12 months	N/A	24	2006
E. Marley-Zagar	Progress report for NCSE – 6 months	N/A	10	2006
R. B. Gramacy	Progress report for NCSE – 6 months	N/A	16	2006
T. Reynolds	Progress report for NCSE – 6 months	N/A	13	2006
T. Reynolds	Progress report for NCSE – 12 months	N/A	14	2006
V. Cave	Cambridge University First Year Report	N/A	100	2006
V. Cave	Progress report for NCSE – 6 months	N/A	81	2006
V. Cave	Progress report for NCSE – 12 months	N/A	18	2006
R.B. Gramacy and R.J. Samworth	Importance Tempering	N/A	32	2007
P. Besbeas, R.S. Borysiewicz and B.J.T. Morgan	Completing the ecological jigsaw	IMSAS, University of Kent, UKC/IMS/07/001	39	2007
R.S. Borysiewicz, O. Gimenez, V. Hénau, T. Bregnballe, J-D. Lebreton, and B.J.T. Morgan	An integrated analysis of multisite recruitment, mark-recapture-recovery and multisite census data	IMSAS, University of Kent, UKC/IMS/07/002	18	2007

## Appendix 5 - Seminars/talks/workshops/courses delivered by members to other institutions

Person	Title	Conference/Location	Date	Duration (Hrs/Days)
Byron Morgan	Discussant for Presidential Address	Biometric Society Meeting/Rothamsted Research Station	15 November 2006	10 mins
Byron Morgan	Current problems in statistical ecology	Edinburgh	6 May 2005	1 hour
Byron Morgan	Plenary speaker: Completing the ecological jigsaw	Euring 2007/New Zealand	17 January 2007	40 mins
Byron Morgan, Chiara Mazzetta, Olivier Gimenez	Bayesian methods	Euring 2007/New Zealand	January 2007	3 hours
Byron Morgan	An overview of statistical ecology	General Applications Section meeting of the RSS, London	21 June 2006	1 hour
Byron Morgan	A new approach to modelling case-history data with missing individual covariates	International Biometric Conference/Montreal, Canada	21 July 2006	15 mins
Byron Morgan	An introduction to statistical models in population ecology	Max Planck Institute, Rostock, Germany	17 November 2005	3 days
Byron Morgan	100 years of marking	Open University	22 April 2005	1 hour
Byron Morgan	Mark-recapture with heterogeneity – open population methods	St Andrews	25-27 August 2005	1 day
Byron Morgan	Likelihood methods in ecology	Uncertainty in ecological analysis/Ohio	3 April	30 mins
Byron Morgan	Current problems in statistical ecology	University of Exeter at Falmouth	30 November 2006	1 hour
Byron Morgan	New methods for including covariates in models for the survival of wild animals	University of Galway, Eire	3 July 2006	1 hour
Chris Lynam	Modelling the spread of the Borders Sika Deer population	Borders Deer Management Group, Tweedsmuir	6 September 2006	15 mins
Daniel Brown	Local weather covariates for wild animal survival	International Biometric Conference/Montreal, Canada	21 July 2006	15 mins
David Borchers, Louise Burt, Eric Rexstad, Steve Buckland	Workshop on Advanced Techniques and Recent Developments in Distance Sampling,,	University of St Andrews	5 -7 September 2005	3 days
David Miller	Direct methods for computing perturbation analyses with application to the long-lived perennial orchid <i>himantoglossum hircinum</i>	International Biometric Conference/Montreal, Canada	17 July 2006	15 mins
David. Borchers, Jon Bishop, Byron Morgan	Estimating Animal Abundance workshop	University of St Andrews	23-27 August 2005	5 days
Diana Cole	Approximating generation-time distributions	International Biometric Society, British Region/University of Leicester	April 2005	15 mins

Ella Marley-Zagar	Topics in statistical ecology	CREEM internal seminar, University of St Andrews	1 March 2006	30 mins
Eric Rexstad, David Borchers, Louise Burt, Steve Buckland and Tiago Marques	Advanced Techniques in Distance Sampling	St Andrews	Aug 2006	3 days
Eric Rexstad, Steve Buckland, Tiago Marques	Introduction to Distance Sampling	St Andrews	Aug 2006	3 days
Kelly Moyes	Survival and cumulative reproduction in female red deer	International Biometric Conference/Montreal, Canada	17 July 2006	15 mins
Len Thomas, Steve Buckland, Louise Burt, Tiago Marques,	Introduction to Distance Sampling workshop	University of St Andrews	31 August – 2 September 2005	3 days
Len Thomas	Bayesian methods for modelling wildlife population dynamics	General Applications Section meeting of the RSS, London	21 June 2006	1 hour
Len Thomas, Steve Buckland, Tiago Marques, Louise Burt, Jon Bishop	Counting Critters - An Introduction to Estimating Animal Abundance and Distance Sampling	DisneyWorld, Florida	November 2005	5 days
Len Thomas, Steve Buckland, Louise Burt, Tiago Marques, Jon Bishop	Introduction to Distance Sampling for Ornithologists	Flagstaff, USA	11-14 January 2005	4 days
Len Thomas	Development of New Methods and Software for Distance Sampling Surveys of Cetacean Populations	Invited talk at second workshop on Environmental Consequences of Underwater Sound, Arlington, Virginia	March 2005	30 mins
Len Thomas	Where are they? - Predicting the location of marine mammals	Written for workshop on "The Effects of Sound in the Ocean on Marine Mammals", La Spezia	May 2005	30 mins
Len Thomas	Monitoring Marine Mammals Using Passive Detector Arrays: A Statistical Perspective	Invited talk at Range Monitoring Workshop, Virginia	September 2005	40 mins
Len Thomas	Use of Monte Carlo particle filters to fit and compare models for the dynamics of wild animal populations	Invited talk at the International Biometrics Conference, Montreal	July 2006	40 mins
Len Thomas, David Borchers, Tiago Marques, Louise Burt	Advanced distance sampling workshop	St Andrews	28-30 Aug 2007	3 days
Len Thomas, Eric Rexstad, Louise Burt	Density surface modelling workshop	St Andrews	30 Aug – 1 Sept 2006	3 days
Len Thomas	Wildlife population assessment: the science (and statistics) behind the headlines	Organismal and Environmental Biology Seminar Series, University of Birmingham	October 2006	1 hour
Len Thomas	A unified framework for modelling wildlife population dynamics in conservation and ecology	Community Ecology Group, University of Sheffield	October 2006	1 hour

Len Thomas	Bayesian methods for modelling wildlife population dynamics	Statistics Seminar Series, Univeristy of Nottingham	October 2006	1 hour
Len Thomas	Overview of distance sampling  Fitting and comparing models of wildlife population dynamics	Workshop on New directions in the estimation of landbird abundance from count data, Patuxent Wildlife Research Center, MD, USA.	November 2006	45 mins  45 mins
Len Thomas	Use of Monte-Carlo particle filters to fit and compare models for the dynamics of wild animal populations	Workshop on Stochastic Computation for the Analysis of Ecological and Epidemiological Data, Isaac Newton Institute for Mathematical Sciences, Cambridge	November 2006	45 mins
Len Thomas	Temporal inferences from ecological and environmental data  A unified framework for mechanistic modelling of wild animal and plant population dynamics	Invited speaker at CEH Applied Statistics Network, Edinburgh	November 2006	1 hour  1 hour
Len Thomas, Steve Buckland, David Borchers and Joane Potts	How many animals?	Royal Institution Mathematics Masterclass (for high school students)	December 2006	½ day
Len Thomas	Co-chair for abundance estimation session	Euring 2007/New Zealand	January 2007	2 hours
Len Thomas, Jeff Laake and David Borchers	Distance 5: Mark-Recapture Distance Sampling	Euring 2007 technical workshop, Dunedin, New Zealand	January 2007	45 mins
Rachel Borysiewicz	The combined analysis of multisite mark-recapture-recovery and census data	Euring 2007/New Zealand	17 January 2007	25 mins
Rachel Borysiewicz	The combined analysis of multisite mark-recapture-recovery and census data	International Biometric Conference/Montreal, Canada	21 July 2006	15 mins
Robert B. Gramacy	(Parallelization in nonstationary modelling and) Design of Supercomputer experiments	Meeting of the Statistical Society of Canada Adams Society, St. John's, University of Cambridge	May 2006  October 2006	30 mins  30 mins
Robert B. Gramacy	Bayesian treed Gaussian process models	Queen Mary, University of London University of Oxford Acadia University, Nova Scotia, Canada Fidelity Intl Bank	March 2006  April 2006 May 2006  Dec 2006	1 hour  1 hour 1 hour  1 hour
Robert B.Gramacy	Importance Tempering	Nottingham University	March 2007	1 hour
Ruth King	A Bayesian S.tudy of Ornithological Surveys	Heriot-Watt University	January 2007	1 hour

Ruth King	Recent Advances in Statistical Ecology using Computationally Intensive Methods	Invited speaker at Isaac Newton Institute Workshop on Stochastic Computation in the Biological Sciences	November 2006	1 hour 15 mins
Ruth King	On the Bayesian Estimation of a Closed Population Size in the Presence of Heterogeneity and Model Uncertainty	International Biometric Conference, Montreal, Canada	July 2006	15 mins
Ruth King	Recent Approaches to Analysing Complex Ecological Data	Invited speaker at General Applications Section meeting of the RSS, London	June 2006	30 mins
Ruth King	Estimating Hidden Population Sizes in the Presence of Covariates and Prior Information	University of Glasgow	January 2006	1 hour
Ruth King	The Analysis of Ecological Data through the Eyes (and Computer) of a Bayesian	University of Durham	December 2005	1 hour
Ruth King	Analysing Ecological Data: A Bayesian Perspective	University of Newcastle	November 2005	1 hour
Ruth King	Bayesian Applications to Capture-Recapture Data	Invited speaker at European Meeting of Statisticians	July 2005	30 mins
Steve Brooks	Bayesian Methods for Population Ecology	International Biometric Conference/Montreal, Canada	July 2006	30 mins
Steve Brooks, Byron Morgan, Ruth King, Olivier Gimenez	Bayesian computation for population ecology	Cambridge	4-8 September 2005	5 days
Steve Buckland	Embedding population dynamics models in inference	Dundee	24 October 2006	1 hour
Steve Buckland	Embedding population dynamics models in inference	Invited speaker, Australian Statistical Conference/New Zealand Statistical Association Conference, Auckland	July 2006	1 hour
Steve Buckland	Monitoring regional biodiversity: some statistical issues	Invited speaker, joint meeting between the Environmental Statistics Study Groups of the RSS and of the French Statistical Society, and of the British and Irish Region and the French Region of the International Biometric Society, Paris	May 2006	45 mins
Steve Buckland	Handling uncertainty in models of population dynamics	Invited speaker, Mathematical Biosciences Institute workshop on 'Uncertainty in Ecological Analysis', Columbus, Ohio	April 2006	30 mins

Steve Buckland	Defining and fitting matrix population models	Invited speaker, opening plenary, XIII Congress of the Portuguese Statistical Society, Ericeira	September/October 2005	1 hour
Steve Buckland	Embedding population dynamics models in inference	Penn State	10 November 2006	1 hr
Steve Buckland	Surveys of cryptic species	Point count workshop, Patuxent, Maryland	November 2006	45 mins
Steve Buckland	Comparing point transect methods	Point count workshop, Patuxent, Maryland	November 2006	45 mins
Steve Buckland	Density surface modelling of distance sampling data	Point count workshop, Patuxent, Maryland	November 2006	30 mins
Steve Buckland and John Harwood	Applying the precautionary principle to fisheries and conservation: what statistics has to offer	Invited speaker, Environmental Statistics Study Group of the RSS, London	February 2006	1 hour
Steve Buckland and Patrick Osborne	Surveys for great bustards	Saratov, Russia	March 2006	3 days
Steve Buckland, Ken Newman, Carmen Fernández, Len Thomas, John Harwood	Embedding population dynamics models in inference	Isaac Newton Institute Workshop on Stochastic Computation in the Biological Sciences	November 2006	1 hr 15 mins
Takis Besbeas	Classical methods for modelling wildlife population dynamics	General Applications Section meeting of the RSS, London	21 June 2006	1 hour
Takis Besbeas	Wildlife population modelling: existing and new methods	International Biometric Conference/Montreal, Canada	17 July 2006	30 mins
Vanessa Cave	Indices of Abundance for Sedge Warblers from CES data	BTO, Thetford	3 May 2006	1 hour

## Appendix 6 – Posters presented by NCSE members

Person	Title	Conference/Location	Date	
Diana Cole, Lee Byrne, Martin Ridout, Byron Morgan and Mick Tuite	Growing yeast: better mathematical approximations in cell growth calculations	British Yeast Group/Kent	March 2005	
Byron Morgan and Martin Ridout	A new mixture model for recapture heterogeneity	Euring 2007/New Zealand	14-20 January 2007	
Chiara Mazzetta, Steve Brooks and Stephen Freeman	Integrating conditional ring-recovery data and population survey data	Euring 2007/New Zealand	14-20 January 2007	
Daniel Brown, Byron Morgan, Ian Jolliffe and David Thompson	Local weather covariates for wild animal survival	Euring 2007/New Zealand	14-20 January 2007	
Jon Bishop and Len Thomas	Embedding Population Dynamics In Mark-Recapture Models: A Conditional Approach	Euring 2007/New Zealand	January 2007	
Len Thomas	Use of sequential Monte Carlo methods to fit state-space models for the dynamics of wildlife populations	Euring 2007/New Zealand	14-20 January 2007	
Olivier Gimenez, Byron Morgan and Steve Brooks	Weak identifiability in mark-recapture and mark-recovery models	Euring 2007/New Zealand	14-20 January 2007	
Simon Bonner, Byron Morgan and Ruth King	Comparison of two methods for including time-varying individual covariates in mark-recapture-recovery models	Euring 2007/New Zealand	14-20 January 2007	
Ted Catchpole, Byron Morgan, Tim Coulson and Giacomo Tavecchia	A new approach to modelling case-history data with missing individual covariates	Euring 2007/New Zealand	14-20 January 2007	
Lee Byrne, Diana Cole, Tobias von der Haar, Martin Ridout, Byron Morgan and Mick Tuite	Estimating the number of prion seeds in yeast: a stochastic modelling approach	International Biometric Conference/Montreal, Canada	11-22 July 2006	
Olivier Gimenez and Byron Morgan	Nonparametric estimation of survival in the wild using capture-recapture data: applications in ecology and evolution	International Biometric Conference/Montreal, Canada	11-22 July 2006	
Lee Byrne, Diana Cole, Tobias von der Haar, Martin Ridout, Byron Morgan and Mick Tuite	Estimating the number of prion seeds in yeast: a stochastic modelling approach	Joint Group Funders' Transmissible Spongiform Encephalopathies Workshop/York	September 2006	
Ella Marley-Zagar	Assessing the non-linear effects of climate change on the southern resident killer whales ( <i>Orcinus orca</i> )	Student conference on Conservation Science/Cambridge	27-30 April 2006	
Robert B. Gramacy	tgp: and R package for Bayesian treed Gaussian process models	Valencia Meeting on Bayesian Statistics	June 2006	

Lee Byrne, Diana Cole, Tobias von der Haar, Martin Ridout, Byron Morgan and Mick Tuite	Stochastic modelling the [PSI <sup>+</sup> ] prion of <i>Saccharomyces cerevisiae</i>	Wellcome Trust-Cold Spring Harbor Conference on Prion Biology/ Cambridge	September 2005	
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## Appendix 7 - NCSE Conferences and Meetings

<b>Dates</b>	<b>Title</b>	<b>Venue</b>	<b>Institutions/Groups participating</b>	<b>Number of participants</b>
12-13 January 2006	Inaugural meeting	Moller Centre, Cambridge	NCSE members (Kent, St Andrews, Cambridge), Management and Steering Committees	20
15-19 May 2006	First Annual Workshop (Training and Research)	St Andrews University	NCSE members (Kent, St Andrews, Cambridge), BTO, Reading University, Marine Laboratory, University of Sheffield, IMEDEA	48
18-19 December 2006	Centre meeting	Cambridge University	NCSE members (Kent, St Andrews, Cambridge), Management and Steering Committees	19
18-22 June 2007	Second Annual Workshop (Scientific meeting)	University of Kent	NCSE members (Kent, St Andrews, Cambridge) and others to be confirmed	Not yet confirmed

## Appendix 8 - Contributions to NCSE Research workshop – 15-19 May 2006

Person	Title	Institution	Duration (Hrs)	
Alison Johnston	Stone-curlews: losing the plot?	Cambridge	15 mins	
Ben Wright	Diagnosing convergence with partitions	NCSE	15 mins	
Byron Morgan	A new approach to modelling case-history data with missing individual covariates	NCSE	15 mins	
Carl Donovan	Quantification of the effects of sonar on marine mammals	St Andrews	15 mins	
Charles Paxton	Distance to ice edge or distance to shelf?: the distribution of pack ice seals off Antarctica	St Andrews	15 mins	
Chiara Mazzetta	On smoothing trends in population index modelling	Cambridge	15 mins	
Chris Lynam	Modelling the proliferation of Sika deer ( <i>Cervus nipon nippon</i> ) in the Scottish borders	NCSE	15 mins	
Daniel Brown	Local weather covariates for wild animal survival	NCSE	15 mins	
David Miller	Modelling population dynamics of orchids using matrix population models	Kent	15 mins	
Ella Marley-Zagar	Assessing the non-linear effects of climate change on top marine predators: the case of the southern-resident killer whales	NCSE	15 mins	
Eric Rexstad	Abundance estimation and pattern assessment in a 13-year series of rodent population data from Alaska	St Andrews	15 mins	
Giacomo Tavecchia	Estimating the phenotype costs of reproduction using reproductive values Slide show – Where do sheep data come from?	IMEDEA, Italy	15 mins 30 mins	
Ian Jolliffe	A statistician in a meteorology department: confessions of a discipline bridger	Reading	15 mins	
Jason Matthiopoulos	Estimating space use and habitat preference in UK grey seals ( <i>Halichoerus grypus</i> )	St Andrews	15 mins	
John Simmonds	Change in stock dynamics in the medium term: the implications and options for management when stock dynamics may be unstable: West of Scotland herring as an example	Marine Laboratory, Aberdeen	15 mins	
Jonathan Bishop	An approach to state-space modelling of animal populations with no observation error	St Andrews	15 mins	
Kelly Moyes	Estimating survival and transition probabilities between reproductive states in female red deer	Kent/Imperial	15 mins	

Ken Newman	Comparing MCMC and sequential Monte Carlo methods to fit state-space models to animal population data	St Andrews	15 mins	
Len Thomas	Model selection in particle filtering applications	St Andrews	1.5 hours	
Leslie New	Model framework for the predator-prey interactions of the hen barrier and red grouse	St Andrews	15 mins	
Martin Cox	The effect of missing acoustic observations (dropped pings) on mean area density estimates of Antarctic krill ( <i>Euphausia superba</i> )	St Andrews	15 mins	
Monique Mackenzie	Monitoring indices of abundance for UK butterflies using generalized additive models and generalized estimating equations	St Andrews	15 mins	
Pajaro Morales	Simple movement models for complex animals in heterogeneous landscapes	Cambridge	15 mins	
Paul Birrell	Bayesian capture-recapture-recovery modelling incorporating continuous time-dependent covariates	Cambridge	15 mins	
Paul Blackwell	Random tessellations, animal territories and Bayesian inference	Sheffield	15 mins	
Rachel Borysiewicz	The combined analysis of multisite mark-recapture-recovery and census data	Kent	15 mins	
Rob Fryer	State-space models in fish stock assessment	Marine Laboratory, Aberdeen	15 mins	
Robert B. Gramacy	Monte Carlo methods for models in statistical ecology	NCSE	15 mins	
Stephen Baillie	Statistical modelling in population ecology	British Trust for Ornithology	1 hour	
Steve Buckland	Monitoring regional biodiversity: some statistical issues	NCSE		
Steve Freeman	BTO, NCSE and integrated population models	British Trust for Ornithology	15 mins	
Takis Besbeas	Simultaneous survival, abundance and fecundity estimation for assessing animal population dynamics	Kent	15 mins	
Teresa Frost	Monitoring wildfowl over winter	Kent	15 mins	
Tiago Marques	Ins and outs of a PhD in 20 minutes	St Andrews	15 mins	
Toby Reynolds	A Bayesian assessment of the Isle of May common guillemot population	NCSE	15 mins	
Vanessa Cave	Indices of abundance for sedge warblers	NCSE	15 mins	

## Appendix 9 - NCSE Seminars

<b>Speaker</b>	<b>Title</b>	<b>Institutions participating</b>	<b>Date</b>	<b>Number of participants</b>
Mark Maunder, Inter-America Tropical Tuna Commission, USA	Incites into Bayesian Analysis	Kent (with DVD distributed to Cambridge and St Andrews)	25 October 2005	Approx. 20
Jim Nichols, Patuxent Wildlife Research Centre, USA	Ecological Monitoring: Why, What, How?	Kent, St Andrews, Cambridge	12 January 2006	Approx. 40
Paul Blackwell, University of Sheffield	Bayesian inference for deformed tessellation models	Kent	16 February 2006	Approx. 20
David Thomson, Max Planck Institute, Rostock, Germany	Statistical analyses in biodemography	Kent, St Andrews, Cambridge	12 June 2006	Approx. 20
Mark Maunder and Rick Deriso, Inter-America Tropical Tuna Commission, USA	Including covariates in population dynamics models	Kent, St Andrews, Cambridge, Marine Laboratory	19 June 2006	Approx. 20
David Fletcher, University of Otago, Dunedin, New Zealand	Mark-recapture models and population dynamics	Kent, St Andrews, Cambridge	30 August 2006	Approx. 10
Carmen Fernandez, Spanish Oceanographic Institute	Inference for state space models of wild animal populations	Kent, St Andrews, Cambridge, CEFAS, Marine Laboratory	29 November 2006	Approx. 50
Jeremy Greenwood, BTO	What the BTO does and how it does it	Kent, St Andrews, Cambridge	18 December 2006	Approx. 25

## Appendix 10 - NCSE Student Seminars

<b>Person(s) leading the discussion</b>	<b>Purpose</b>	<b>Institutions participating</b>	<b>Date</b>	<b>Number of participants</b>
Chris Lynam, Robert Gramacy, Rachel Borysiewicz	General introductory session	Kent, St Andrews, Cambridge	13 June 2006	Approx. 15
Chris Lynam	Discussion of 'Hidden process models for animal population dynamics', Newman et al (2004)	Kent, St Andrews, Cambridge	28 June 2006	Approx. 15
Robert Gramacy	Discussion of 'A sequential Monte Carlo method for Bayesian analysis of massive datasets', Ridgeway et al (2002)	Kent, St Andrews, Cambridge	8 August 2006	Approx. 15
Rachel Borysiewicz, David Miller, Daniel Brown	Discussion of 'Methods for investigating parameter redundancy', Gimenez et al (2004)	Kent, St Andrews, Cambridge	10 October 2006	8
Toby Reynolds	Discussion of 'Recruitment to a seabird population depends on environmental factors and population size', Crespín et al (2006)	Kent, St Andrews, Cambridge	3 November 2006	Approx. 10
Leah Johnson	Discussion of 'The Problem of Pattern and Scale in Ecology: The Robert H. MacArthur Award Lecture', Levin (1992)	Kent, St Andrews, Cambridge	4 April 2007	Approx. 10 expected

## Appendix 11 - Visits by members – to other parts of Centre

<b>Person</b>	<b>Institution visited</b>	<b>Purpose of visit</b>	<b>Dates</b>	
Byron Morgan, Kent	Cambridge	Discussions with Ben Wright and Vanessa Cave	15 November 2005	
Byron Morgan, Kent	St Andrews	Discussions with staff and Directors' meeting with Steve Buckland	May 2007	
Leah Johnson, Cambridge	St Andrews	Meeting Centre members	3-9 September 2006	
Len Thomas, Cambridge	Cambridge	Discussion with Robert Gramacy re: importance tempering	November 2006	
Pajaro Morales, Cambridge	Kent	Discussions with Kelly Moyes, Paul Blackwell, Robert Gramacy, re animal movement	16-17 February 2006	
Robert Gramacy, Cambridge	Kent	Seminar by Paul Blackwell; discussions with Kelly Moyes, Paul Blackwell, Pajaro Morales, re animal movement	16-17 February 2006	
Robert Gramacy, Cambridge	St Andrews	State space modelling, MCMC and SIS, with Len Thomas and Ruth King	3-9 September 2006	
Ruth King, St Andrews	Kent	Discussions with Byron Morgan and Takis Besbeas	21-23 September 2005	
Steve Buckland, St Andrews	Kent	Planning for a book on modelling open populations	26-27 Sept 2005	
Vanessa Cave, Cambridge	Kent	Discussions with Byron Morgan, David Fletcher and Martin Ridout	30 August 2006	

See also: NCSE Conferences and Meetings

## Appendix 12 - Visits to NCSE by others

<b>Person</b>	<b>Institution visited</b>	<b>Purpose of visit</b>	<b>Dates</b>	
Carl Schwarz, Simon Fraser University, Canada	Cambridge	Bayesian identifiability	September 2005	
David Fletcher, University of Otago, New Zealand	Kent	Discussions with Byron Morgan and Martin Ridout NCSE Seminar	14-31 August 2006	
Jean-Dominique Lebreton, CEFE, Montpellier, France	Kent	Discussions with Byron Morgan and Rachel Borysiewicz	15-18 January 2006	
John Simmonds, Marine Laboratory, Aberdeen	St Andrews	Collaborative development of fisheries population dynamics models	March–October 2006	
Mark Maunder, Inter-America Tropical Tuna Commission, USA	Kent	Short course on ADMD Model Builder; Seminar; Discussions with Takis Besbeas, Martin Ridout, Byron Morgan and PhD students/PDRAs NCSE seminar	22-26 October 2005	
Paul Blackwell, University of Sheffield	Kent	Discussions with Kelly Moyes, Pajaro Morales, Robert Gramacy re animal movement NCSE seminar	16-17 February 2006	
Stephen Baillie, BTO	Cambridge and St Andrews	Sabbatical, developing collaborative research projects	Feb–July 2006	
Jean-Michel Guillard, CNRS, Lyons	Kent	PhD and to give a seminar	To be confirmed	
Shirley Pledger, Wellington University, New Zealand	Kent	Joint research	To be confirmed	
Shirley Pledger, Wellington University, New Zealand	Kent	Joint research	To be confirmed	
Ted Catchpole, ADFA, Canberra	Kent	Joint research	To be confirmed	
Rachel Fewster, University of Auckland	St Andrews	Sabbatical, developing collaborative research projects	July - September 2007	
Rachel Fewster, University of Auckland	Kent	Sabbatical, developing collaborative research projects	July - September 2007	

## Appendix 13 - Training received by PDRAs

<b>Person</b>	<b>Training received/attended</b>	<b>Dates/time input</b>		
Ben Wright	The Kalman filter, MCMC and Bugs and Sequential MC methods Health and Safety Induction, Cambridge	15-16 May 2006/ 10 hours		
Chris Lynam	The Kalman filter, MCMC and Bugs and Sequential MC methods Bayesian methods for population ecology Gradskills: Introductory database design and use in research	15-16 May 2006/ 10 hours 4-8 September 2005/ 40 hours 7 March 2007/ 3 hours		
Robert Gramacy	The Kalman filter, MCMC and Bugs and Sequential MC methods Health and Safety Induction, Cambridge	15-16 May 2006/ 10 hours		
Diana Cole	To start February 2007			
A further 4 PDRAs attended the 10-hour training on The Kalman filter, MCMC and Bugs and Sequential MC methods, 15-16 May 2006				

## Appendix 14 - Training received by Research Students

Person	Training received/attended	Dates/time input		
Daniel Brown	The Kalman filter, MCMC and Bugs and Sequential MC methods Climate change impacts meeting at the Royal Statistical Society AD Model Builder workshop International Biometric Conference 2006 Health and Safety in the workplace	15-16 May 2006/ 10 hours 17 October 2005/ 4 hours 24 October 2005/ 3 hours 16-21 July 2006 17 October 2006/ 30 mins		
Eleni Matechou	Graduate module in Survival analysis (Max Planck Institute) Graduate module in Evolutionary demography (Max Planck Institute) Modelling simulation and forecasting (European Doctoral School in Demography)	2006/2007 2006/2007 2006/2007		
Ella Marley-Zagar	University of St Andrews Gradskills and statistics/computing courses The Kalman filter, MCMC and Bugs and Sequential MC methods Photo identification and marine fieldwork techniques, Centre for Whale Research, San Juan Island, WA	Spring 2006 15-16 May 2006/ 10 hours June and July 2006/ 2 months		
Toby Reynolds	Bayesian methods for population ecology Health and safety Field safety Introduction to tutoring and assessment Demonstrating practicals Starting LaTeX: an introduction to scientific document preparation Getting the best from your supervisor Ethical issues relating to research Maximising your impact at conferences Sustainable data creation The Kalman filter, MCMC and Bugs and Sequential MC methods CEH Banchory Station Conference Student Conference on Conservation Science The Seabird Group 9 <sup>th</sup> International Conference	4-8 September 2005/ 40 hours 4 October 2005/ 2 hours 4 October 2005/ 2 hours 17-18 October 2005/ 16 hours 4 November 2005/ 4 hours 8 November 2005/ 2 hours  17 November 2005/ 3 hours 13 December 2005/ 2 hours 16 March 2006/ 3 hours 26 April 2006/ 2 hours 15-16 May 2006/ 10 hours  27 January 2006/ 1 day 28-30 March 2006/ 3 days 1-3 September 2006/ 2 days		

Vanessa Cave	The Kalman filter, MCMC and Bugs and Sequential MC methods Bird survey techniques, BTO workshop UNIX course C programming course	15-16 May 2006/ 10 hours  14 May 2006/ 1 day October 2005/ 6 hours November 2005/ 6 hours		
A further 12 postgraduate students attended the 10-hour training on The Kalman filter, MCMC and Bugs and Sequential MC methods, 15-16 May 2006.				

## Appendix 15 - Contributions to NCSE

<b>Institution</b>	<b>Contribution</b>	<b>Dates/duration</b>	<b>Financial value (approx.)</b>	
Cambridge	25% relief for co-Director	October 2005 to November 2006	£16,500	
Cambridge	Additional fees for Vanessa Cave (overseas student)	October 2005 to date	£17,200 for 2 years	
Cambridge	Teleconference facilities	Ongoing	All charges waived	
Cambridge	Video conference equipment	Ongoing	£10,000	
International Biometric Society	Travel grant for David Miller – IBC, Montreal, Canada	May 2006	£500	
Kent	50% relief for Director	October 2005 to date	£42,500 to March 2007	
Kent	50% studentship for three years – Eleni Matechou	October 2006 – September 2009	£23,500	
Kent	Half-time administrator for five years	October 2005 to date	£42,500 to March 2007	
Kent	Teleconference facilities	Ongoing	All charges waived	
Kent	Travel grant for Teresa Frost – NCSE workshop	May 2006	£500	
Kent	Travel grants for Daniel Brown and David Miller – IBC, Montreal, Canada	May 2006	£1,000	
Kent	Video conference facilities	Ongoing	All charges waived	
Leverhulme Trust	1 year Research Assistant	July 2005-July 2006	£35,000	
Leverhulme Trust	Research Fellowship	June 2005 – Nov 2006	£21,500	
Max Planck Institute, Rostock, Germany	50% studentship for three years - Eleni Matechou	October 2006 – September 2009	£23,500	
NAG	Access to code for random number generators	Agreed/ to be arranged	£2,000	
Royal Society	Travel grant for Byron Morgan – IBC, Montreal, Canada	May 2006	£935	
Royal Society	Travel grant for Byron Morgan – Euring conference, Dunedin, New Zealand	January 2007	£1,139	
St Andrews	25% relief for co-Director	October 2005 to date	£21,000 to March 2007	
St Andrews	Half-time administrator for five years	October 2005 to date	£21,000 to March 2007	
St Andrews	Studentship – fees + stipend, Ella Marley-Zagar	October 2005 – September 2008	£50,000	
St Andrews	Teleconference facilities	Ongoing	All charges waived	

St Andrews	Video conference facilities	Ongoing	All charges waived	
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## Appendix 16 - Academic links developed/being developed by NCSE

<b>Lead NCSE person</b>	<b>Name of lead person, department and institution</b>	<b>'Purpose' of link</b>	<b>Progress</b>
Byron Morgan	Varena Trenkel, University of Montpellier, France	Habilitation examination	Visit by Byron Morgan, 26 October – 3 November 2006
Byron Morgan	CNRS Montpellier, France	Joint research with Roger Pradel, JDL and Olivier Gimenez	Visit by Byron Morgan, 26 October – 3 November 2006
Byron Morgan	David Thompson, Max Planck Institute, Rostock, Germany	Joint studentship	Visit to Rostock 22-26 Nov. 2005, Student started October 2006
Byron Morgan	J-M Gaillard, University of Lyon, France	Research collaboration; extraction of data	Visit by Giacomo Tavecchia and Byron Morgan for discussions with J-M Gaillard and A. Loisson, 27-28 June 2006
Byron Morgan	Ted Catchpole, ADFA, Canberra, Australia	Discussions on research collaboration	Visit by Byron Morgan 8-14 January 2007
Byron Morgan and Ian Jolliffe	Prof. David Stephenson, University of Exeter	Joint research for the effects of climate on animal populations	Continuing discussions
Len Thomas and Steve Buckland	Anne Savage, DisneyWorld, Florida	Studentship to develop methods to estimate the size of the threatened Key Largo woodrat population	First field season underway
Len Thomas	Bob Gisiner, Office of Naval Research, US	Developing distance sampling methods and capability of Distance software	One project in progress, awaiting funding decision on another
Steve Brooks	Brent Emerson, University of East Anglia	Insect movement	Several papers in preparation
Steve Brooks	Pajaro Morales, Universidad Nacional del Comahue, Argentina	Animal movement project	Paper in preparation
Steve Brooks	Paul Thompson, University of Aberdeen	Dolphin monitoring	Several small grants and jointly supervised PhD and RA positions. Papers in preparation (see also Corkrey et al above)
Steve Brooks	Sara Goodacre, University of Nottingham	Insect movement	Several papers in preparation

## Appendix 17 – Non-academic links developed/being developed by NCSE

<b>Lead NCSE person</b>	<b>Name of lead person, department and institution</b>	<b>'Purpose' of link</b>	<b>Progress</b>
Byron Morgan	Allan Reese, CEFAS	Collaboration, joint research, research student	Continuing discussions
Byron Morgan	Giacomo Tavecchia, IMEDEA, Esporles, Majorca	Fieldwork and joint research	Visit 4-7 July 2005
Byron Morgan	Peter Rothery and Peter Carey, CEH Monks Wood	Fieldwork opportunity for David Miller	Fieldwork visit by David Miller, Byron Morgan and Martin Ridout, 1 April 2006. Visit by Byron Morgan and David Miller 30 November 2005.
Byron Morgan	Reception at House of Commons to promote publicly-funded research in Mathematics and Statistics	Promotion of EPSRC-funded research and Engaging Maths brochure	28 February 2007
Chris Lynam	Maitland Rankin, Borders Deer Management Group	Research collaboration in order to develop an understanding of the spread in sika deer range in the Scottish Borders.	Seminar given 6 September 2006
Ella Marley-Zagar	Craig Matkin, North Gulf Oceanic Society, Alaska	Research collaboration	Collaboration agreed July 2006
Ella Marley-Zagar	Diane Claridge, Bahamian Marine Mammal Survey	Research collaboration	Collaboration agreed June 2006
Ella Marley-Zagar	Dr John Durban, NOAA Seattle/Centre for Whale Research, San Juan Island	Research collaboration	Visited July 2006
Len Thomas	Mike Hammill, Department of Fisheries and Oceans, Canada	To develop and fit population dynamics models of Canadian Grey Seals	Contract currently underway
Steve Buckland	Robin Cook, Director, Fisheries Research Services	To build expertise in modelling fisheries and the marine environment	Signed contract, FRS funding a readership for 4 years and a postgraduate studentship for 3 years.
Steve Buckland	The Tropical Ecology and Monitoring Network, coordinated by Conservation International	To develop a strategy for monitoring the rate of loss of biodiversity in tropical rain forests, on a regional and global scale	Attended research meetings at Silwood Park and Iguacu (Brazil); a training workshop on quantifying trends in regional biodiversity is planned for June 2007.

Steve Buckland	US Office of Naval Research	'Distance' development	Version 5 of Distance was released in late 2006. A consortium has been formed to improve the ability to estimate cetacean abundance from line transect data from ferries.
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