

GENERAL SCHEDULE

Monday, 14 September

9:00 - 9:10 **Welcome**

MODEL DIAGNOSTICS – chaired by *D. Fletcher & R. Pradel*

9:10 – 9:50 **One size fits all?** – *R. McCrea, B. Morgan & T. Bregnballe*

9:50 – 10:15 **Determining parameter redundancy of multistate mark-recapture models for sea birds** – *D. Cole*

10:15 – 10:40 Break

10:40 – 11:05 **Comparison of model building strategies when all possible model structures cannot be constructed** – *P. Doherty & G. White*

11:05 – 11:30 **A computationally efficient method for estimating overdispersion** – *D. Fletcher, P. Green & B. Morgan*

11:30 – 11:50 Discussion

11:50 – 12:15 Official opening

13:00 – 14:00 Lunch

Decision analysis – chaired by *C. Moore & R. Barker*

14:00 – 14:40 **Effective use of data from monitoring programs and field studies for conservation decision-making: predictions, designs and models working together** – *M. Conroy, R. Cooper & K. Stodola*

14:40 – 15:05 **An adaptive management framework to optimally control recreational activities in Denali National Park** – *J. Martin, J. Nichols, M. Runge, C. McIntyre, J. Schmutz & M. MacCluskie*

15:05 – 15:30 **Evaluating alternative release decisions for introducing a longlived bird species under uncertainty about performance of offspring** – *C. Moore, S. Converse, M. Runge, S. Nesbitt & M. Folk*

15:30 – 15:50 Discussion

15:50 – 16:15 Break

Study design – chaired by *P. Doherty & B. Link*

16:15 – 16:55 **Designs for capture-mark-recapture studies: review, assessment, and emerging issues** – *M. Lindberg*

16:55 – 17:20 **Occupancy estimation within an adaptive sampling design: A calibrated Bayesian approach to evaluating an integrated estimator for rare or elusive species** – *K. Pacifici, M. Conroy, R. Cooper & J. Peterson*

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- 17:20 – 17:55 **Optimizing sampling effort and study design for seabird population studies: patterns of intra-annual variation of detection probability in a Black-legged kittiwake population** – *T. Chambert, D. Pardo, K. McCoy, N. Yoccoz, T. Tveraa & T. Boulinier*
- 17:55 – 18:20 **Estimating survival and transition rates from aggregate sightings of animals on several sites** – *A. Viallefont, P. Besbeas & B. Morgan*
- 18:20 – 18:40 Discussion
- 20:00 Dinner

Tuesday, 15 September

State-space modelling – chaired by B. Morgan & M. Kéry

- 9:00 – 9:40 **Nonlinear state-space models of population dynamics and integration with capture-mark-recapture data: A review and prospectus of computational methods for maximum likelihood estimation** – *P. de Valpine*
- 9:40 – 10:05 **Estimating abundance from presence/absence and mark-recovery data** – *S. Freeman & P. Besbeas*
- 10:05 – 10:30 **Spatial variation in population dynamics: a state-space framework** – *R. Robinson, S. Baillie & R. King*
- 10:30 – 10:55 Break
- 10:55 – 11:20 **State-space model incorporating multiple data structures: black bear demographics in central Georgia, USA** – *J. Sanderlin & M. Conroy*
- 11:20 – 11:45 **Testing compensatory vs. additive mortality using data on marked animals: a Bayesian state-space modelling approach** – *S. Servanty, R. Choquet, C. Toïgo, J.-M. Gaillard, M. Buoro, M. Schaub, J.-D. Lebreton, E. Baubet, S. Brandt & O. Gimenez*
- 11:45 – 12:05 Discussion
- 13:00 – 14:00 Lunch

Spatial CMR modelling – chaired by A. Royle & C. Francis

- 14:30 – 15:10 **Maximum-likelihood spatially explicit capture-recapture: an overview** – *D. Borchers*
- 15:10 – 15:35 **Inference about survival and movement in marked animals using multi-state models with spatially-indexed states** – *G. Ferraz, B. Gardner & A. Royle*
- 15:35 – 16:00 **Small-scale dispersal, recruitment and survival in wandering albatrosses** – *G. Gauthier, E. Milot & H. Weimerskirch*
- 16:00 – 16:25 Break

- 16:25 – 16:50 **Source-sink status of small and large wetland fragments and growth rate of a population network** – *G. Pasinelli, J. Runge & K. Schiegg*
- 16:50 – 17:15 **Spatial modeling of survival and residency probability with an application to data from the monitoring avian productivity and survivorship (MAPS) program** – *J. Saracco, A. Royle, D. DeSante & B. Gardner*
- 17:15 – 17:35 **Discussion**
- 17:35 – 20:00 **Poster session**
- 20:00 **Dinner**

Wednesday, 16 September

Uncertain states and covariates – chaired by *O. Gimenez & D. MacKenzie*

- 9:00 – 9:40 **If only there was no missing data...** – *M. Schofield*
- 9:40 – 10:05 **Bayesian estimation of abundance for open populations with covariate dependent capture and survival probabilities** – *S. Bonner & C. Schwarz*
- 10:05 – 10:30 **Estimating breeding success in Brünnich's guillemot - multievent modeling with photo series data** – *E. Lorentzen, R. Choquet & H. Steen*
- 10:30 – 10:55 **Break**
- 10:55 – 11:20 **Heterogeneity capture-recapture models to study survival senescence** – *G. Péron, P.-A. Crochet, R. Choquet, R. Pradel, J.-D. Lebreton & O. Gimenez*
- 11:20 – 11:45 **Modelling temporal emigration by multievent models** – *A. Sanz-Aguilar, G. Tavecchia, M. Genovart, J.M. Igual, D. Oro, L. Rouan & R. Pradel*
- 11:45 – 12:05 **Discussion**
- 13:00 – 14:00 **Lunch**

Disease ecology – chaired by *J. Nichols & S. Baillie*

- 14:30 – 15:10 **Analysis of marked individuals in modeling disease dynamics** – *E. Cooch*
- 15:10 – 15:35 **Accounting for detection probability in force-of-infection models** – *P.B. Conn, E. Cooch & P. Caley*
- 15:35 – 16:00 **Combining occupancy and mark-recapture models to adjust for state uncertainty: application to disease ecology** – *W. Kendall, G. White, J. Nichols, J. Hines & A. Franklin*
- 16:00 – 16:25 **Break**

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- 16:25 – 16:50 **Temporal and spatial dynamics of avian influenza virus infection in greater white-fronted geese in their winter staging areas** – *D. Kleijn, G. Müskens, D. Jonkers, R. Fouchier, V. Munster & B. Ebbinge*
- 16:50 – 17:15 **Addressing state uncertainty in disease ecology** – *B. McClintock, J. Nichols, L. Bailey & W. Kendall*
- 17:15 – 17:35 Discussion
- 20:00 Dinner

Thursday, 17 September

Excursions

Friday, 18 September

Modelling individual variation – chaired by *J. Rotella & E. Cam*

- 9:00 – 9:40 **Modeling individual effects in Jolly-Seber type models using data augmentation** – *A. Royle*
- 9:40 – 10:05 **Comparison of methods based on capture-recapture data to estimate heritability of dispersal behaviour: the collared flycatcher as a case study** – *B. Doligez, T. Pärt, L. Gustafsson & D. Reale*
- 10:05 – 10:30 **Combining capture-recapture and animal models to assess heritability of demographic parameters in the wild** – *O. Gimenez, S. Cubaynes, A. Charmantier, P. Perret & J. Papaix*
- 10:30 – 10:55 Break
- 10:55 – 11:20 **Decomposition of population change** – *M. Rebke, T. Coulson, P. Becker & J. Vaupel*
- 11:20 – 11:45 **Bayesian analysis of multi-state data with individual covariates for estimating demographic effects of inbreeding** – *S. Converse & A. Royle*
- 11:45 – 12:05 Discussion
- 13:00 – 14:00 Lunch

Open forum – chaired by *D. Thomson & J.-D. Lebreton*

- 14:30 – 14:55 **Movement and persistence by Ross's geese in Canada's arctic** – *R. Alisauskas, K. Drake, J. Caswell, J. Leafloor & P. Kellett*
- 14:55 – 15:20 **Incorporating 'breeding rate' in matrix-based projection models: estimation, parameters, and the influence of mode structure** – *E. Cooch, E. Cam & H. Caswell*

- 15:20 – 15:45 **Investigating the population dynamics of California spotted owls without marked individuals** – *D. MacKenzie, M. Seamans, R. Gutierrez & J. Nichols*
- 15:45 – 16:10 Break
- 16:10 – 16:35 **Estimating survival and reproduction in a biennially breeding seabird with uncertain and unobservable states: model comparisons and impacts of climate and longline fisheries** – *C. Barbraud & H. Weimerskirch*
- 16:35 – 17:00 **Structural equation modeling of mark-recapture data: assessing costs of reproduction on survival in blue tits** – *S. Cubaynes, C. Doutrelant, V. Grosbois, P. Perret & O. Gimenez*
- 17:00 – 17:25 **Adjusting age at first breeding of albatrosses and petrels for emigration and study duration using Bayesian statespace CMR models** – *P. Dillingham, G. Elliott, K. Walker & D. Fletcher*
- 17:25 – 17:50 **Towards a vertebrate demographic data bank** – *J.-D. Lebreton & S. Devillard*
- 20:00 Conference dinner
Honorary talk – *K. Burnham*

Saturday, 19 September

Software session – chaired by J. Hines & R. Choquet

- 9:00 – 9:25 **RMark: an alternative approach to building linear models in MARK (or... 'MARK without the &^@##*^@# design matrices...')** – *J. Laake, E. Rexstad & E. Cooch*
- 9:25 – 9:50 **From NOREMARK to MARK: software advancements for estimating demographic parameters using mark-resight methodology** – *B. McClintock & G. White*
- 9:50 – 10:15 **Towards built-in capture-recapture mixed models in program E-SURGE** – *R. Choquet & O. Gimenez*
- 10:15 – 10:40 **Modeling occupancy using program PRESENCE** – *J. Hines*
- 10:40 – 11:00 Break
- 11:00 – 12:00 Discussion about next analytical meeting
- 12:30 – 13:30 Lunch
- 13:30 – 19:00 **Short course: An introduction to structured decision making and adaptive resource management** – *chaired by E. Cooch*
- 20:00 Dinner

Sunday, 20 September

Wildlife session – chaired by F. Spina

- 9:00 – 9:10 **Opening and introduction – F. Spina**
- 9:10 – 10:10 **An overview of the dynamics of exploited populations – J.-D. Lebreton**
- 10:10 – 11:10 **Adaptive management of wildlife harvest – J. Nichols**
- 11:10 – 11:40 Break
- 11:40 – 12:40 **From population ecology to policy and planning: the role of integrated population monitoring – S. Baillie**
- 13:00 – 14:00 Lunch