Margenau, L. L. S., M. J. Cherry, K. V. Miller, E. P. Garrison, and R. B. Chandler. Monitoring partially-marked populations with camera and telemetry data. Ecological Applications. *In Review*.

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nimble Folder

We provide the NIMBLE code for conducting the two-stage SMR model with autoregression on the detection parameters and density. Note: The unmarked analysis within the manuscript is implemented in NIMBLE, while the marked NIMBLE code is provided as supplemental information and was scripted post-analysis and manuscript completion.

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File list

`marked_nimble_AR1.R`
`unmarked_nimble_AR1.R`

Description

`marked_data.RData` – Model development for fortnight detection parameter estimates from camera and telemetry data for the female marked deer population on the Bear Island Unit. An autoregressive model is implemented on the detection parameters. Model and data are formatted for MCMC sampling in NIMBLE. Use this model in conjunction with `marked_data.RData` file in the data folder

`unmarked_nimble_AR1.R` – Autoregressive unmarked model for camera data for the Bear Island Unit. Implementation of unmarked (stage two) SMR model using the NIMBLE MCMC sampler. Use this model in conjunction with the `unmarked_data.RData` file in the data folder.