

Warming climate means red deer rutting season arrives early

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Wild red deer on the Isle of Rum, which were featured in the BBC TV series *Autumnwatch*, are rutting earlier in the year, a study shows.

Scientists believe the annual rutting season on the Isle of Rum could be changing because of warming spring and [summer temperatures](#). The study shows that the rutting and calving seasons are now up to two weeks earlier on average compared with 30 years ago.

The research was based on a 38-year study of the ecology of [red deer](#) on the Isle of Rum and used annual records of breeding success in more than 3,000 individually recognisable deer.

Scientists at the Universities of Cambridge and Edinburgh, who maintained the long-term research, say this provides rare evidence that warming temperatures are affecting the behaviour of British mammals.

Dr Dan Nussey of the University of Edinburgh's School of Biological Sciences, who took part in the study, said: "Although many kinds of plants and animals are known to be reproducing earlier, evidence that this is happening in large mammals is very unusual. However, we still do not know exactly what is causing these changes in the timing of the deer's annual cycle. Much more work is needed to understand whether similar changes are taking place in deer populations elsewhere, and what the implications of such changes will be."

Professor Tim Clutton-Brock of the University of Cambridge's

Department of Zoology, who maintained the long-term research on Rum for 35 years and initiated the project, said: "Long term studies that can track the life histories of individuals have a crucial role to play in measuring the effects of [climate change](#) because they can identify the reasons for changes in survival and breeding success. The continuation of long-term studies like the one on Rum is crucial if we want to fully understand the consequences of [climate warming](#) for wild [animal populations](#)."

Sarah Bentley, SNH operational manager in West Highland, said: "The Isle of Rum National Nature Reserve has been a key centre for wildlife research for many years, particularly in relation to deer. We are very pleased to be supporting this latest study on the island. It provides further evidence of how climate change is impacting on wildlife. There may be implications for deer and their management in future and we will continue to work with the researchers to consider these."

More information: The paper 'Advancing breeding phenology in response to environmental change in a wild red deer population' is published today in the 14 January 2010 edition of the journal *Global Change Biology*. [onlinelibrary.wiley.com/doi/10 ... 86.2010.02382.x/full](https://onlinelibrary.wiley.com/doi/10.1111/j.1365-3113.2010.02382.x/full)

Provided by University of Cambridge

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