

# TURNING ON IMPORTED STAGS

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OVER THE recent past we have had several requests for information regarding the possibility of getting stags imported from the northern hemisphere in November to breed next rut<sup>4</sup>i.e. April in New Zealand. Assuming the stags are over 12 months old it should be possible to stimulate activity by manipulating the light/dark ratios that they are exposed to.

Red deer are short day breeders — they require short day stimulation following a period of long days in order to turn on their reproductive system (see Fennessy and Dratch 'TDF' 24, p.20). Therefore, with a bit of playing with lights, we should be able to convince the stags it is time to go to work.

At the time they are sent to New Zealand, the stags will have had about 20 weeks of short days in the UK (from late June to mid-November) and will be right at the end of the rut.

In New Zealand they will experience a rapid switch to long days as they spend till mid-December in quarantine.

However, day-length starts to decline from the summer solstice (December 21) and this means that there are insufficient long days to reset the stags day-length detecting mechanism. The stag must be exposed to supplementary light until his antlers are cast.

The next step is to switch the stag back to short days to stimulate reproductive development. In order to do this quickly, it is better not to just rely on the natural decrease in day-length at this time. After the start of this short day stimulation it can be expected to take at least two months for the stag to produce good semen.

Probably the simplest way to manipulate day-length is to run stags every night into yards where the lighting

can be controlled. The yards will need to be naturally dark, have fairly powerful electric lighting such as strip lights and be well ventilated, especially if a small pen in the yards is to be used.

During late December and January, the stags should be run in every evening and the lights kept on to provide a total of about 16 hours light and 8 hours dark per day (e.g. lights off at 10 p.m. and on at 6 a.m.) until all imported stags have cast their buttons.

After casting, the lighting should be switched to go to about 8 hours light and 16 hours dark (e.g. into the darkened yards at 5 p.m. with lights turned on the next morning at 9 a.m.).

Based on this schedule the stags would be expected to cast their antlers in late December—early January and clean them in early March. They should be ready and willing by early April to mate with your hinds.

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