

Capture and chemical immobilization of roe deer (*Capreolus capreolus*) in SW Spain

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The Andalusian Roe Deer Reference Station (*Consejería de Medio Ambiente – Junta de Andalucía*) started up two years ago as a centre for conservation, breeding and re-stocking of this species in Andalusia. Furthermore, one of its objectives is to promote studies about the Andalusian roe deer ecotype and to develop protocols for its optimal management.

The Reference Station features a natural enclosed area for roe deer conservation and breeding, found in Alcalá de Los Gazules (Cádiz, SW Spain). This facility has an area of 15 ha, divided up into various fenced-off zones. The roe deer live there in semi-freedom with a natural habitat that offers shelter and food.

In the period 2005–2006 eight (8) roe deer living in this area were captured with the aim of marking, measuring and taking biological samples. A standard methodology for capturing and handling roe deer was set to obtain the maximum information with the minimum health risks for the captured individuals.

Permanent box-traps with automatic closing, where roe deer come to feed over the year, result to be the safest capture method for roe deer in the enclosure. After testing several anaesthetics, the use of medetomidine (domtor®) in doses of $85 \pm 30 \mu\text{g} / \text{Kg}$ and isoflurane resulted to be the best way to immobilize the roe deer during the necessary time for their manipulation. Reversion of this anaesthetic takes about 15 minutes and allows the release of the deer into its habitat in 45 minutes after completing the capture. The present study shows the results of anaesthetizing of ten individuals of Andalusian Roe Deer. Several physiological parameters were measured during the capture, and the increase of temperature was detected as one of the relevant risks related to stress from capture.