

THREE SIKA DEER *CERVUS NIPPON* RECENTLY HUNTED IN THE EMILIA-ROMAGNA'S AREA OF <A.C.A.T.E.R. WEST> QUESTION THE MANAGEMENT OF ITALIAN *CERVUS ELAPHUS* POPULATION

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SUMMARY

The European Red deer (*Cervus elaphus*) population of ACATER West¹ management unit (northern Appennines, Emilia-Romagna) is the target of censuses since 2009, and under hunting plan since 2012. In February 2011, a deer was tentatively identified as <Sika deer *Cervus nippon*> (CASE 2) and after several attempts of trapping it was finally shot by the Provincial officers in March 2012, in the same locality where it was observed one year before. The details of the event, involving an adult male of 72 kg weight, have been reported in a poster presented at the VIII National Congress of Teriology (ATIt, Piacenza, 9-11 May 2012), where the case was described as the first in Italy. Only after the meeting a previous case was brought to our knowledge, having occurred in October 2010 in the province of Bolzano (CASE 1) also concerning an adult male of 73 kg. A second Sika deer (CASE 3) was hunted in Modena, in October 2012, at the same site of the previous killing; also this time it was an adult male weighing 113 kg. After these cases an investigation has started in order to identify farms or detention sites of Sika deer from which the specimens could have escaped. The survey, particularly challenging and often frustrating, has excluded recent escapes from Sika farms of the Emilia-Romagna, Marche, Lombardia and Liguria regions. However 3-4 specimens escaped in 1999 from a farm in the mountains of southern Emilia-Romagna region. A variable degree of hybridization between Scottish Red deer (*Cervus elaphus*) and Sika deer has been reported in several European areas, therefore, additional concern for the <ACATER West> Red deer population derives from the existence of potential hybrids of *Cervus elaphus* x *Cervus nippon* purchased in Scotland and bred since 40 years in central Italy and Emilia Romagna, some of which have escaped from captivity and settled near the site of the Sika deer shot. Morphological variability due to potential hybridization and degree of introgression may make difficult to distinguish between Sika and Red deer. Consequently, it was proposed to the Emilia-Romagna Region and Modena's Province the implementation of an information sheet (made with the coordination of ISPRA) concerning the morphological characters of *Cervus nippon* and its similarities and differences with *Cervus elaphus* and *Dama dama* (Fallow deer), with the aim of raising awareness in the volunteer staff in charge of biometric monitoring at the checking stations. The circulation of information has in fact contributed to alert several hunters and volunteers of <ACATER West>, with interesting feedbacks and rising questions regarding cases deemed suspect or doubtful. Among these, could be the CASE 4 of a Sika deer hunted in January 2014 in the province of Parma, about 30 miles far from Modena's site, but still included in the same <ACATER West> management unit. As in the past, the animal was an adult male, weighing 123 kg. The collaborative attitude of the hunters allowed to start collecting samples for genetic tests aimed at determining if the three Sika deer so far shot were pure species or hybrids. Additional tests will determine whether some apparently pure European deer shot may in fact derive from introgression from Sika or not. The genetic surveys based on microsatellites analysis, in cooperation between Czech and Italian laboratories, are in progress.

CASI ACCERTATI

CASO 1 – BOLZANO, OTTOBRE 2010

PESO vuoto: 73 kg

NB: ambedue le stanghe di 4 punte, con mediano in posizione apicale (forca) (fig. 1)

CASO 2 – MODENA, MARZO 2012

PESO pieno: 72 kg ALTEZZA garrese: 99 cm LUNGHEZZA garretto: 44 cm

COLLO circonf.: 42 cm ROSA SX circonf.: 15,5 cm ROSA DX circonf.: 15 cm

STANGA DX lungh.: 62 cm STANGA SX lungh.: 64 cm

NB: ambedue le stanghe di 4 punte, con mediano in posizione apicale (forca) (fig. 2)

CASO 3 – MODENA, OTTOBRE 2012

PESO pieno: 111 kg

NB: ambedue le stanghe di 4 punte, con mediano in posizione apicale (forca) (fig. 3)

CASO 4 – PARMA, GENNAIO 2014

PESO vuoto: 123 kg

COLLO alto circonf.: 57 cm ROSA SX circonf.: 19,8 cm ROSA DX circonf.: 19,4 cm

STANGA DX lungh.: 79,5 cm STANGA SX lungh.: 80 cm

NB: ambedue le stanghe di 4 punte, con mediano in posizione apicale (forca) (fig. 4)



CASO 1



mantello invernale cioccolato CASO 2

mediano quasi all'apice



CASO 3



CASO 4

specchio anale bianco



elmo



Area ghiandole metatarsali chiara

Coda lunga