2007 bear genetic monitoring in Trentino: outcomes

identified on August in Val Genova (western Trentino).

23 bears detected in the province of Trento and neighbouring regions during last year.

The genetic monitoring of the brown bear local population is performed by Forest and Wildlife Service of Autonomous Province of Trento, with the technical backing of National Wildlife Institute and support of Adamello Brenta Natural Park. As for 2007 genetic monitoring was carried out according to opportunistic samples collection; only the area of Adamello Brenta Natural Park was interested in systematic samples collection (hair traps). As a matter of facts since 2006 it was chosen to carry out systematic monitoring on alternate years in the whole area steadily attended by bears, also with the aim to reduce costs and employed resources. Opportunistic monitoring, based on random finding of hairs and scats, produced in any case a lot of information. 23 different genotypes have been detected during 2007 (Jurka, captured, not included). Some more bears could be present although not identified according to genetics. About these 23 animals, 10 are males, 12 are females and for one of them sex is unknown (it is a cub born in 2007). All Jurka's son, born in 2006, have been detected: two males, JJ3 and JJ5 settled in Switzerland and Val Camonica (Brescia province) and the female JJ4

6 animals at least (all of them are young males) carried out long movements, roaming also on territories out of Trento province (typical behaviour for bears). Besides mentioned JJ3 and JJ5 one further bear roamed in Switzerland, two more moved to South-Tyrol in the border area between Val d'Ultimo and Val di Non; another one seems to be settled in the area of Monte Baldo (Verona province). Probably are then 17-18 the bears presently roaming in Trentino.

Taking into account also the longest movements carried out by the young males during 2007, the small bear population in the central Alps is presently distributed on an area of over 5000 Km², even if the zone occupied by females is much smaller (1100 km²) and completely included in western Trentino.

The litters detected in 2007 have been two, with three cubs totally (since 2002 at least 13 different litters and 27 cubs have been recorded thus). Age structure of the bear population is the following: 9 adults (7 females and 2 males), 11 young (4 females and 7 males) and 3 cubs (1 female, 1 male and 1 undetermined). "Young" are males aged 1-5 and females aged 1-3.

12 bears are missing since 2002: 4 dead, 1 captured and 7 not detected since at least two years. They represent 33% of the total theoretical population: an important number, however according to main bibliographic references concerning other European bear populations.

For the first time since 2003 the average age of bears grew, showing a good survival rate of cubs born in 2006. By the other side the total minimum number of bears detected is bigger than in 2006 (23 vs. 22), in spite of the low reproduction recorded last year (expected, because of the low number of reproductive females in 2007).

The general overview shows a population that is still slowly growing, even if small and far from the definitive success.

FOREST AND WILDLIFE SERVICE AUTONOMOUS PROVINCE OF TRENTO (I)