Persian Leopard Photographed in Armenia

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n 9 March 2005 at 01:54, one of our TrailMaster® camera photo-traps placed on the Ernadzor trail in the Meghri region of southern Armenia (38° 57' 01" N, 46° 27' 04" E at an elevation of 1115 m) captured a large and healthy Persian leopard *Panthera pardus saxicolor* (Fig. 1).

The area where all photo-traps were set up is located on the Meghri ridge to the north of Nuvadi village in the extreme south-east of Armenia close to the border with Iran. This is the first picture of a wild adult and resident Persian leopard in Armenia and in the Caucasus, not counting the recent pictures of a young leopard from Georgia (see www.persianleopard.com).

This event was in no way due to luck or coincidence - indeed, it was predicted. In late January we received a call from our fellow Nuvadi villager Mukuch Boyajyan who claimed that he had seen many fresh snow tracks of a leopard in the mountains. The movements were very intensive and accompanied with frequent and deep scrapes. As January and generally mid-to late winter is the breeding season for the leopard in the Caucasus, we supposed that these signs might indicate mating behaviour. There was no doubt that this was an opportunity not to be missed, so as part of our ongoing leopard research project, supported by the People's Trust for Endangered Species (PTES, UK), a couple of days later the second author was already on site.

That field trip, lasting 18 days (27 January to 13 February 2005) provided us with plentiful information confirming the presence of leopards in the Nuvadi area: tracks and scrapes in snow, dirt and clay, fresh scats, two carcasses of freshly killed and eaten bezoar goats *Capra aegagrus* (ca. two- and 3.5-year-old males), clumps of leopard hairs on a Christ's thorn (*Paliurus spina-christi*), and bark scratched off trees. The scats consisted mostly of wild boar (*Sus scrofa*) hairs and Indian crested porcupine (*Hystrix indica*) quills. It was clear that two animals, a male and a female, were roam-



Fig. 1. The Persian leopard photographed on the Meghri ridge in southern Armenia (Photo A. Malkhasyan, I. Khorozyan and M. Boyajyan).

ing around. The male's tracks were big (pad width 8.5-9 cm, track length 11.5-13 cm, outer toe distance 11.5-12 cm), while the female's were smaller (pad width 7 cm, track length 10.5-11 cm, outer toe distance 9.5-10 cm). On 3 February on Mt Ernaqar, Alexander Malkhasyan heard a low-pitched rasping call which lasted about one minute.

All signs of leopard presence were recorded by GPS and documented in field diary. The scats were collected for fecal bile acid thin-layer chromatography to confirm their leopard origin. The hair sample was also taken away for future DNA analysis to determine the animal's species, sex and individual identity.

Inspired by this success, we planned another trip, involving the WWF Caucasus Programme Office in Armenia. This time, Alexander Malkhasyan spent the first 14 days of March on the Meghri ridge tracking, recording all signs of leopard presence, collecting fecal samples and setting up four TrailMaster® camera photo-traps on different trails where the leopards were constantly moving through. Again, there was no doubt that two animals used the territory as their tracks were clearly of different sizes (see above). Their scrapes were very common and some

of them had urine marks on the ground. The smell from marked stones, mainly at trail intersections, was rather that of an unclean zoo cage, not pungent cat-like. This time, we have also collected from the barbed wire net of the abandoned orchard a hair sample of a presumably female leopard that, according tracks and scats, has killed, dragged and eaten a foal. This hair sample is also intended to be used for DNA analysis.

This photograph is the only one at the moment in Armenia, as photo-trapping falls beyond the scope of our ongoing project and we do not implement it now.

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