

## Aztai does it again!



**Tsagaan**



**Shonkhor**



**Saikhan**



**Devekh**



**Zaraa**



**Khashaa**

In a near repeat of the winters of 2008-2009, Aztai has taken a very long sortie. This time, he appears to have walked further than we have ever documented in the two years we have known him...

He traveled to the northern edge of the rugged mountains over about 5 days time, before turning around and heading almost at a trotting speed to the core of his home range. He seems to have covered more than 75 km (nearly 50 miles) in just under 2 days. He appears to have crossed terrain that inhabits people, mines, and that is criss-crossed by roads. What is most astounding is the pace at which he traced his way back to his home range core while taking rest for just a few hours. What was his motivation for the long walk and why the 'rush' back to his core? So interesting to continue watching the behaviors and patterns of these cats.

Shonkhor, part of this long-term study since April of 2009, seems to be sticking close to what we can call his new home range. It is becoming a regular feature of late for Shonkhor to cross over the wide valley running between the Toson Bumba Mountains and the Tost Mountains to patrol the area all the way to the south until reaching the edge of the steppe. In the past one month, he has also visited the western-most border of all of his historic location points and patrolled the small rugged mountains to the west. However it is notable that after each of these expeditions he has returned to the core area within at least 5-10 days.

Tsagaan, a third male within the long-term study and who we have known since February of 2009 has also been to the eastern limits in the last month, though he visited that area almost 15 days before Aztai did. Interestingly, in addition to these expeditions, he has also spent time with both Khashaa and Tenger (and Zaraa who continues to remain with Tenger, who we believe is her mother). In what we learn from the latest uplink from Tsagaan, his locations are in the southern badlands, almost overlapping directly with those of Zaraa and Tenger, but separated temporally by 15 days.

Zara and Tenger are moving so close to each other that at times locations from only one of them can be seen on the map. Unless one looks specifically for the location of Zara, it seems as if there are significantly fewer uplinks from her as compared to those from Tenger. Interestingly enough though, she did lag behind by about 3 km on the 27<sup>th</sup>, but joined her mother within a few hours.



Photographs of Tenger not available. Aztai shown on right.

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Khashaa has been an interesting cat to monitor. Ever since we began receiving movement locations from her in September 2010, she has been patrolling within a relatively small area of only about 40 sq. km. Within that area, she has made some successful hunts and has met with Tsagaan on at least one occasion which we interpreted by the overlap of both time and location from their collars. As we shared with you before, it appears that Khashaa and Tsagaan remained only meters apart for an extended period of time!

Once Orjan and Elin went to observe the site, the surprising data points were confirmed.

***Khashaa and Tsagaan had shared a meal of ibex at the highest point of the tallest mountain in their overlapping home ranges! That was the first time we have ever noted such behavior.***

These six snow leopards with successfully active collars represent an equal number of both sexes and are presenting us with incredible insight into the ecology of snow leopards. The two other cats in the study still wear the older style collar which does not transmit consistently, so we don't have accurate data for them. The new Vectronics collars are by far the best that have ever been used on snow leopards. Their rate of uplink ranges between 62-86% for the different individuals and we have seen no distinct rate of deterioration as was observed with the previous collars used until April 2010. It is possible that the varying pattern of terrain use by individuals may have some bearing on the rate of successful uplinks, though this is only a hypothesis as it is too early to say with confidence.

Sumbe, our camp manager is currently in the field installing motion censored cameras that will record movements, behavior and demographic details of snow leopards as well as ibex that use the habitat. Nadia, research student and staff member from Mongolia, is in the field to study the attitudes of local communities towards wildlife. She will compare them in areas where community-based conservation programs are active vs. areas where no such initiative is being implemented. Nadia is doing the field work as part of her MS dissertation with the Wildlife Institute of India under the scholarship sponsored by WCN. Orjan, our research associate for the project, is in Sweden and plans to return to the field in the month of April. He is healthy and completing coursework while in Sweden. We are currently busy identifying individuals from the camera trapping session done in the summer to create a detection-non detection matrix of individual snow leopards for population analysis using mark-recapture modeling. Results detailing the adult snow leopard population in Tost-Toson Bumba mountains should be out within a couple of weeks followed shortly by those done using sign based occupancy.

We are glued to our emails following the movements of all of our cats in the days to come and I am sure there will be some of us already making a wager or two predicting their movements. We shall send you the next update shortly, with some more exciting news from the field.

