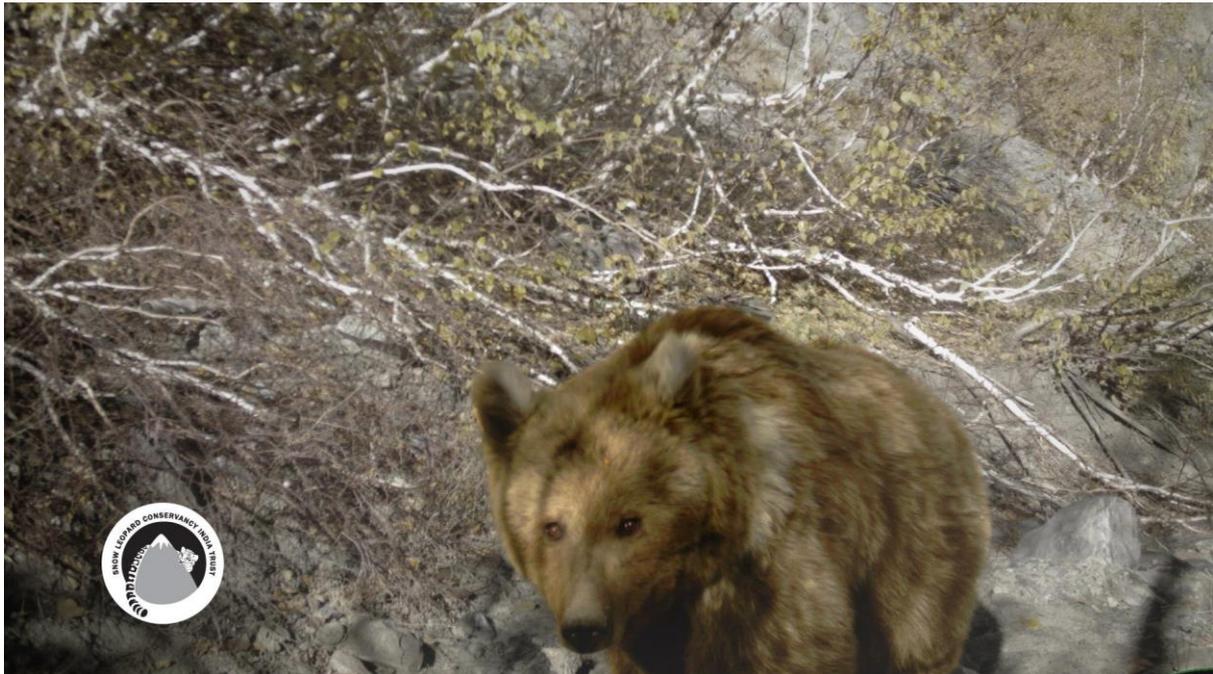




BEAR CONSERVATION

The sense of touch: a hidden skill of Himalayan brown bears

By Kirti Chavan - Researcher at The Snow Leopard Conservancy India Trust



Himalayan brown bear

Glass is probably one of the most elegant man-made materials. Be it a smooth, stylized wine glass or artistically moulded glass art, glass in any form is always pleasing to the eye. But witnessing broken glass is likely to transport your imagination to scenes of a violent nature. The sight and sound of shattering glass have been used as a dramatic metaphor in many movies to show violent action or to represent the angst of a character.

The breaking of glass, however, is not always as dramatic or as violent, in fact, at times it could be a very subtle act and one can actually sleep through such an incident. This is exactly what happened in one of the remote villages of Zaskar, Ladakh, the trans-Himalayan region of India. I literally slept through the entire time a Himalayan brown bear was trying to make its way inside the house, breaking through a glass window. I woke up only when a neighbouring household raised the alarm as they saw the bear running into their field.

I along with my colleague stepped outside the house to inspect and saw two juvenile bears scouring around in the fields, occasionally standing up on their hind legs, perhaps wondering 'why do these humans look in distress?'

After making a lot of sound by beating tin cans and flashing torchlights at the bears, the villagers turned to us to see if we were okay. In minutes we understood the reason for their concern. One of the villagers took us back to the house where we were staying and showed us the window. The glass was broken and we could see claw marks on the wall. One of the bears had been trying to climb inside the house, in through the window of the room that we were sleeping in. It was quite an experience to imagine what was happening a few minutes earlier.



Broken glass

Even now, when I narrate this story to my friends, the only thing they want to know is, how did I not know that the bear broke the window? To tell you the truth, I am a light sleeper and wake up at slightest of disturbance. In this situation, however, the bears have adopted a technique of breaking the glass windows without hurting themselves and making any sound. I understand that bear paws are heavily padded but are very sensitive to detect ground features. I have seen videos of bears negotiating tricky slopes and cliffs not relying on sight but only on what they can feel. I imagine the

bears would stand up against the wall placing front limbs against the wall and pushing gently to detect weak spots. As soon as they touch the glass, they can probably sense this particular surface will give way when applied enough pressure, not to shatter but just to crack and gently slide open.

For the next 21 days after this incident, I paid special attention to all sites where the bears have broken windows and have observed how the glass panes were broken. It appears to be an intelligent strategy of push, crack and slide open rather than bang, shatter and scatter.

I am part of the Himalayan Brown Bear project which is initiated by the Snow Leopard Conservancy India Trust (SLC-IT). This project was started with an aim to study and mitigate the rise in human-brown bear interactions in Zanskar, Ladakh. In India, the human-brown bear interactions have only been observed in high pasture land when the herders take their livestock for grazing. The incidents of the brown bears coming into the villages and raiding homes of people in search of food is a fairly new phenomenon.

My interest in Himalayan brown bear began when I came across a report of a brown bear breaking into a house digging a hole through the wall. The bear had initially tried to break in through the window but as it was unable to squeeze in between iron beams. It probably tried to push the stone wall and discovered a weak spot just below the window. The bear started to take out one rock at a time and make entrance big enough for it to enter the kitchen and eat away the goodies.



The repaired wall with the part removed by the bear highlighted

Another interesting incident reported from an unidentified source in Tibet is of a young bear with its head stuck inside a plastic container, running around blindly. The video footage shows local people trying to catch the bear to get its head out of the container. However, the bear kept running away from people and ended up on a small cliff. This part of the video was the most intriguing to me, the bear was able to negotiate the steep cliff without being able to see anything. It was totally relying on its sense of touch to traverse the small but steep cliff. Finally, the bear did manage to get itself away from the cliff on more stable ground. Imagine yourself blindfolded and left on a steep rocky surface and then using touch as your only source of input you are to navigate yourself to safety.



The young bear in Tibet

There are many studies carried out on the bear's sense of smell but it looks like their sense of touch is pretty awesome too.

My study of the Himalayan brown bears has only begun and it will take a while to understand the amazing feat these animals are capable of.

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Published by Bear Conservation 22 May 2019