

Pandas – the ten day countdown starts



Tian Tian

It looks as though the date is now set for panda activity of the mating kind....

EdinburghZoo say that giant pandas Tian Tian and Yang Guang are likely to meet for the 2013 breeding season 'imminently'.

The Royal Zoological Society of Scotland (RZSS) have announced that scientific testing has identified the important hormonal crossover in progesterone and oestrogen in female giant panda Tian Tian which now shows that she is probably about 10 days away from her 36 hour fertile window, perhaps even less.

Iain Valentine, Director of Giant Pandas for RZSS, explains:- "It was really evident first in Tian Tian's behaviour that she was experiencing or about to experience hormone changes and that the important crossover was here. Her behaviour altered dramatically immediately before, she became very grumpy, went off her food and became a little temperamental. This was backed up by the scientific results when they came back from the Centre for Integrative Physiology at the University of Edinburgh and Chester Zoo – who both analyse samples of Tian Tian's urine collected twice a day, each and every day.

"Based on these behavioural changes and hormone testing, we are now able to predict that the important 36 hour breeding window when both pandas are likely to meet is imminent. Scientific results alone would suggest the day is just less than 10 days away, however as Tian Tian's behavioural changes are coming in so strongly we cannot rule out that the key 36

hour window may be much sooner. Every individual giant panda is different and this is only the second time Tian Tian has come into season in Scotland, so it is difficult to make a precise prediction at this stage. The next steps are to continue behavioural observational and hormone testing to confirm when the annual window has arrived.”

“When the 36 hour window is here Tian Tian and Yang Guang will meet several times to have the opportunity to mate and then, as Tian Tian finally ovulates and her hormones fall off, artificial insemination will also take place.”

This year Edinburgh Zoo is combining both natural and assisted reproduction methods. This follows the best practice methodology adopted by other panda-keeping zoos around the world and gives our giant pandas the best possible chance of success. It is also the technique that aligns most with the multiple mating strategy that giant pandas adopt in the wild.

The expert team of RZSS look forward to being joined shortly by specialists from around the globe to share their expertise and learning which they will apply to giant panda breeding.

If Tian Tian does fall pregnant, it will be July or the first half of August when Edinburgh Zoo experts are able to tell by using ultrasound scans. The majority of giant panda cubs are then born at the very end of August or beginning of September.