



14 August 2019

Press release

Is she or isn't she?

Zoo Berlin is getting ready to welcome a new panda baby

Newborn pandas may be tiny, but their birth is a very big deal. The pregnant mothers, too, have to put up with a lot – altered hormones, changes to the uterus, lack of energy. Since Zoo Berlin's panda pair mated this April, a range of examinations have been conducted on Meng Meng (6) to find out whether she is pregnant. Initial results have buoyed Zoo Berlin's hopes of welcoming a new panda baby this year.

Meng Meng's altered behaviour hinted at a pregnancy, and ultrasound images and hormone tests have since provided extra reason to expect a panda baby in a few weeks' time. "Once the embryonic diapause is over and the foetus starts to develop properly, panda mums become lethargic and stop eating," says Zoo and Tierpark Director Dr Andreas Knieriem. "That is the time when the fertilised egg implants itself in the uterus. This is how Meng Meng is behaving right now, but that's not our only evidence – ultrasound images and hormone tests also point to a successful insemination." The renowned Leibniz Institute for Zoo and Wildlife Research (IZW) is conducting regular examinations. Because Meng Meng has been well trained, it was no problem to perform regular ultrasound scans on her. In the meantime, however, her lethargy and lack of appetite have affected her willingness to cooperate, meaning that further tests are only possible on an irregular basis. Before she lost her appetite, Meng Meng was eating voraciously: she has put on around 15 kg since the spring, bringing her weight up to 96 kg. This behaviour is also typical of panda mums-to-be.

Prof Thomas Hildebrandt, head of the Reproduction Management department at IZW, explained: "The most recent test on 14 August showed that Meng Meng's ovaries are activated, her uterus is much larger, and a small bulge is visible that could be one or two embryos. Although phantom pregnancies are relatively common in giant pandas, at the moment we are around 85 percent sure that Meng Meng is actually expecting."

Hormone levels are the third sign of pregnancy. For several weeks, veterinarians have been taking regular urine samples to check Meng Meng's hormones. The results of these tests are also promising: "The amount of the pregnancy hormone progesterone in Meng Meng's urine has increased considerably," says Dr Jella Wauters, a hormone expert at IZW. "Now we are



observing her prostaglandin levels. These reach a high level during pregnancy, and a sharp increase shortly before the birth will trigger labour.” While all the other findings could be a sign of a phantom pregnancy, only an actual pregnancy would bring about an increase in the prostaglandin metabolite PGFM.

After consulting with IZW, Zoo Berlin is now preparing for a birth at the Panda House. The happy event is expected to take place in late August or early September. This week, reproduction experts from China will be returning to Berlin to lend their support.

Background:

Germany’s only giant pandas have lived at Zoo Berlin since summer 2017. In April 2019, Meng Meng and Jiao Qing (9) were introduced for the first time and were able to mate. Otherwise, giant pandas are strictly solitary animals, and females are only fertile for a period of around 72 hours each year. To increase the likelihood of pregnancy, Meng Meng was also artificially inseminated. Current estimates suggest that globally there are just 1,860 adult pandas living in their natural habitat. The giant panda is therefore classified as “Vulnerable” on the Red List compiled by the International Union for Conservation of Nature (IUCN). If Meng Meng is indeed pregnant, this will be the first-ever panda birth in Germany. The cub or cubs would then spend two to four years in Berlin before moving to China.