Giant pandas travel back to China

The UK's only pair of giant pandas left their home at Edinburgh Zoo on Monday to board a flight back to China – after exactly 12 years in the Scottish capital.

Yang Guang and Tian Tian — also known as Sunshine and Sweetie — arrived in Edinburgh on 4 December 2011 as part of a ten year loan arrangement that was later extended.

The black and white bears, hailed for their "incredible impact" in transforming millions of people into lovers of nature, will now spend their "twilight years" in their homeland.

Yang Guang, followed by Tian Tian were transported from their enclosure in specially made travelling crates, by forklift truck and loaded onto the back of an articulated lorry along with bundles of bamboo at 8.30am.

Keepers who have looked after the animals for up to 12 years said a final goodbye before the zoo's star attractions made the 15 minute journey to Edinburgh Airport to board a midday China Southern flight to Chengdu in southwest China, 5100 miles away.

The animals' departure marks the end of an era at the zoo. Now 20 years old, their lives — including the annual attempts to produce an historic panda cub in Scotland — captured the imagination of millions of people.

David Field, chief executive of the Royal Zoological Society of Scotland (RZSS), the wildlife conservation charity that runs Edinburgh Zoo, admitted he would have loved to keep the pair, but said it was "very important culturally for the Chinese that pandas spend their twilight years back at home".

He said the RZSS would "keep informed about how our wonderful pandas are getting on", while the zoo will eventually bring in another "exciting" species.

Mr Field added: "With more than a million species at risk of extinction and our natural world in crisis, Yang Guang and Tian Tian have had an incredible impact by inspiring millions of people to care about nature.

"Although the pandas will be missed, in their wake we have the opportunity to help protect a new species through our expertise in conservation science and research, public engagement here in Scotland and in the wild by working with global partners."

Yang Guang and Tian Tian arrived in Edinburgh as part of an initial ten-year arrangement with the China Wildlife Conservation Association (CWCA), under which the RZSS paid the Chinese an annual "donation" of one million dollars — around £750,000. The RZSS later negotiated a two year extension to the end of this year.

Perhaps the biggest disappointment is that the pair will return to China without having any offspring. Tian Tian, the female, produced twins prior to coming to Scotland, but attempts at natural breeding and artificial insemination since 2013 have failed. Yang Guang was diagnosed with testicular cancer in 2018, and was later castrated.

Breeding attempts were cancelled in 2020 due to the Covid pandemic and, while there were high hopes of success in 2021 by artificial insemination, no further attempts have been made. Mr Field said recently that the pair appeared to be a perfect match when they arrived in 2011, but the animals just didn't click, adding that "if it was Tinder, perhaps Tian Tian wouldn't have swiped right if she had the choice".

Dr Kirsten Wilson, reproductive scientist at the University of Edinburgh, who monitored Tian Tian, said: "What we know now about pandas is that mate choice is really important... When females have a line up of panda males in front of them, when they can choose, they are proven to be more likely to be successful at having babies.

"In this situation we had one female and one male, there was no choice and if they naturally just don't get on then they just don't get on."

Yang Guang and Tian Tian were last on show to the public on Thursday and have spent recent days in training for their flight. They have eaten and slept in their travelling crates so that they feel they are flying "in their beds".

Precise details of their departure were kept a closely guarded secret for security reasons, until the last minute.



4/12/2023 Picture Alan Simpson

Pandas Yang Guang and Tian Tian leave Edinburgh Zoo after 12 years to go back to China.

The animal VIPs were accompanied on their flight by familiar faces including RZSS senior animal keeper Michael Livingstone and veterinary surgeon Dr Stephanie Mota, who were able to check on them and provide water, bamboo and other snacks during the flight.

Mr Livingstone, who will spend several days in China with the animals to help them settle into their new home, said: "It's an emotional day for us keepers that have been fortunate enough to care for Yang Guang and Tian Tian over the years.

"It has been the highlight of my career to work with this amazing species and I will definitely miss them.

"I'm lucky enough to be travelling on the plane with them to China to help them settle in and I think it will be nice for them to hear a familiar voice as they get used to their new home."

He added: "We will have access to the pandas the whole flight so we will continuously check them and feed them bamboo so they can eat as much as they want, and treats like carrots, apples and honey.

"We'll stay with them for a few days (in China) to see how they settle in and be familiar faces for them. It's normal for animals in zoos to move around but we've worked so closely with these two individuals for so long that I think it will be quite emotional. I feel very lucky and privileged to be able to take them back to China."

Darren McGarry, Head of Living Collections at RZSS, who accompanied the pair from China to Scotland 12 years ago, said: "I know we will all miss Yang Guang and Tian Tian here at the zoo.

"In early next year I'll be visiting them in China to see how they are settling in. It has been a privilege to work with giant pandas for over a decade and I am proud of everyone who has played a part in the pair's story at Edinburgh Zoo.

"We have learned a lot about giant panda reproductive cycles which will help to save the species in the wild."

Professor Simon Girling, Head of Veterinary Science at RZSS, said: "Yang Guang and Tian Tian are two lovely characters and we've got to know them really well.

"I've been working with them since they arrived in 2011 and went over to China to see them before they came to Edinburgh.

"Although it's sad to see them go, through scientific research by our expert veterinary and keeper teams, working alongside the University of Edinburgh, we have made a significant contribution to our understanding around giant panda fertility, husbandry, and veterinary care — which has been of real benefit to efforts to protect this amazing species in China."

Prof Girling said the failure to produce an historic panda cub in Scotland was disappointing, but revealed important discoveries had been made thanks to research of Tian Tian during her failed pregnancies.

He said: "The species is clearly endangered so there is a need to preserve the species by breeding in captivity. It is disappointing that we were not able to successfully breed Tian Tian but that was never the be all and end all.

"We think we've cracked how long the gestation — the actual true pregnancy of the panda — is. We now think it's 42-54 days. Before it had often been quoted that the pregnancy period was 100 to 180 days because they do delayed implantation, but the actual point at which the embryo implants and develops we think is 42-45 days and that had never really been recorded before."

He added: "We also did a lot with refining anaesthetic techniques so we've got a really good anaesthetic that now panda centres around the world are using.

"We believe that a lot of the research and conservation that we've done here has significantly improved the prospects for panda conservation going forward."

There are currently no plans to bring new pandas to Edinburgh, but Mr Field refused to rule it out in the future and insisted he would welcome talks.

He said: "What a wonderful opportunity (that would be). Sadly it's not our decision — it would be a decision of Chinese colleagues in the CWCA.

"But they are wonderful animals. We have got a great deal of

knowledge which we will continue to share and work with the CWCA and, well, who knows? Perhaps.

"They've been incredible. Could there be another chapter? I wish there were more pandas coming. There are no plans to bring pandas back, but it's 'never say never'. I'd be delighted to have discussions."



4/12/2023 Picture Alan Simpson

Alison Maclean (left) who has looked after the pandas for 12 years has a word with Pandas Yang Guang and Tian Tian linside their crates as they prepare to leave Edinburgh Zoo after 12 years to go back to China.



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Pandas Yang Guang and Tian Tian leave Edinburgh Zoo after 12 years to go back to China.