'Friendship' groups could help flamingos stay in the pink study

theguardian.com/science/2020/apr/14/friendship-groups-could-help-flamingos-stay-in-the-pink-study

The sight of tens of thousands of flamingos flocking together to create a huge pink cloud may be one of the wonders of the natural world but research suggests that within these vast congregations, individual birds form intimate, long-lasting friendship groups.

A five-year study of captive flocks in Gloucestershire has found that flamingos spend large amounts of time with specific close "friends" in groups of up to four or five.

The report says that some of these friendship groups appear to avoid others they do not get along with. No loners were spotted but some individuals, dubbed "social butterflies" by the researchers, did flit from group to group.

It has long been known that gatherings of flamingos in the wild, which can number up to 2 million individuals, are complex social structures. It is also known that the birds have very different individual characteristics.

Some are pushy and aggressive, barging their wayinto the middle of the best feeding areas, while others are quieter, feeding around the edge and trying to not get in other flamingo's way. But there are many mysteries, including how long pairs stick together.

Scientists from the University of Exeter studied about 350 birds, comprising four species, at the WWT Slimbridge wetland centre. The researchers have not yet been able to establish how long pairs mate for but did spot consistent friendship groups.

Dr Paul Rose, a zoologist and ornithologist, said: "Our results indicate that flamingo societies are formed of long-standing friendships rather than loose, random connections.

"Flamingos don't simply find a mate and spend their time with that individual. We see pairs of males or females choosing to hang out, we see trios and quartets that are regularly together.

"Flamingos have long lives - some of the birds in this study have been at Slimbridge since the 1960s – and our study shows their friendships are stable over a period of years. It seems that, like humans, flamingos form social bonds."

Previous studies have found strong social networks in species ranging from zebra finches to red junglefowl. The vastness of flamingo groups in the wild means it is hard to study individuals or groups.

For the Gloucestershire study, ringed birds were photographed between three and four times a day to establish which were sticking together. The friendship groups identified contained between two and five individuals and were inevitably both male and female.

The study examined flocks of Caribbean, Chilean, Andean and lesser flamingos at the wetland centre. The flocks varied in size from just over 20 to more than 140.

It found that seasons affected social interactions, with more bonds forming in spring and summer – the breeding season. But the health of the birds did not seem to matter. They maintained their groupings even if one of them was not in tip-top condition.

Rose said sticking together in smaller groups could help the individuals find food, keep an eye out for predators and know when the whole flock was about to move.

He believes the same sort of social groupings identified at Slimbridge would happen in the wild and understanding the birds' inter-flock relationships could help conservation work.

More immediately it may inform how flamingos in captivity are cared for. "When moving birds from one zoo to another, we should be careful not to separate flamingos that are closely bonded to each other," he said.

The findings <u>are published</u> in the journal Behavioural Processes.