

## Why are elephants vital to the ecosystem?

There are many unknown benefits that elephants bring to our ecosystem. They help with the maintenance in the savanna by breaking down trees and bushes. This causes new plants or specific plant species to grow in these savanna's to feed the herbivores of the savanna. They also dig up water holes, helping them hydrate themselves and others. They are huge providers for the ecosystems helping species varying from buffalo and zebras up to predators such as leopards and





Would I recommend our elephant Umngani for the breeding program? The answer to this is no I would not recommend her for the breeding program at the time for she is expecting her FOURTH CHILD!! She is expecting calf number four and as one would imagine it wouldn't be a good thing to put an already pregnant female in a breeding program since she is luckily already expecting to bring a new baby calf into the world. The soon to be mother already has three other calves 1 girl two boys that she looks after happily.

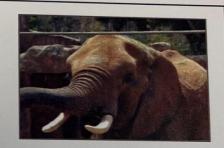
Question: Is Umngani recommended for the breeding program?

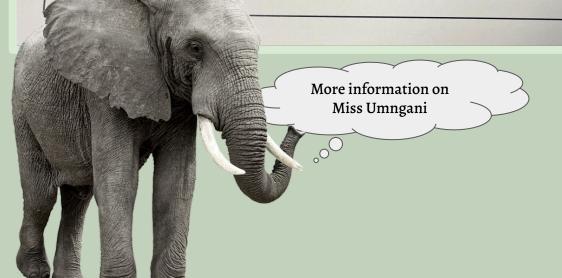


Jmngani tests started in December 2009 during this time she was 5490 lbs and she was around 19 years old. The samples were taken in lifferent months ranging from 1-8 months testing the amount of Progesterone (progesterone is a hormone which supports the reproductive system regulates the menstrual cycle as well as supporting pregnancy) she produced during that said month. This nelps researchers know whether the elephant is ready to enter a preeding program and to see when the elephant is most fertile for more chances of a positive.



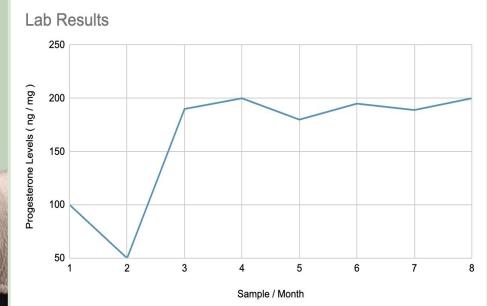
Umngani's name means "friend" in Siswati, an African dialect. Born in 1990, Umngani is a busy mom with three calves to look after, one daughter and two sons. She is very tractable for the keepers and knows many behaviors. She also has the longest tusks of all the females. (As of 8/14 Umngani weighed 6490 lbs.) Samples began Dec. 2009.





2	
	180
	195
7	189
	200

## Lab results and Graph / Chart

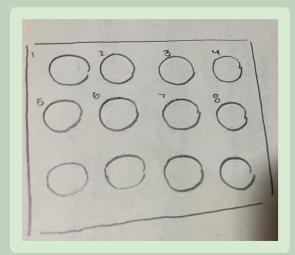




## African Elephant Endocrinology Standards

Color	Progesterone Amount ng/mg
	50
	100
	150
	200
	250

## Evidence / Results



The Evidence / Results show the elephants progesterone levels and how they grow and lower throughout the months. On the Line it shows how her levels start out normal and lower this could be she was not on her menstrual cycle/ not ovulating then it continues to spike up and stays around the say range (showing consistency). This consistently insist the female is pregnant during the duration of the tests being done. Each color is a different amount of the hormone.

**Final** Claim

goal of figuring out when the elephant is fertile further introducing her to a male and letting

