

MACAW TAILS

THE MACAW SOCIETY
NEWSLETTER



CLAY LICK USE IN PERU..... 6

Bringing in the New Year

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What a great start to 2018 for the *The Macaw Society* - thanks to our wonderful supporters we had enough money to not only continue our research but also buy a brand new fridge! With a fresh new year comes new



Luigi (Ceiba nest) and Cerveza (Hugo nest) were eventually placed in Tapir nest after their time in the nursery.

challenges, but knowing that there are so many people who value this research gave us all fresh hope for the future. So, we all got stuck into work at 4am on New Years Day. After all, we still had four chicks at the research center to find homes for.

That morning when our veterinarian, Mabe Aguirre, went to the nest Tapir, she noticed that the chicks foot injury was getting dramatically worse. We think the injury was a result of a botfly that somehow died inside the little chicks tissue and got infected. We needed to take immediate action otherwise the infection would kill the chick.

Tapir 1 was taken back to the research station to become our 10th and final translocated chick for the season. It was named "Little Foot" and started its treatment right away under the care of our vet team. As he was the only chick in the nest, this gave us the opportunity to give Luigi and Cerveza a home. We moved them both in on the same day and the parents accepted them seamlessly. Hooray, another successful translocation!

In the first week of the New Year and we still had three chicks being raised in the research center: "T-Rex" (20 days old) "Gas" (23 days old) and "Little Foot" (23 days old). By January 8th, it was time for T-Rex to be released to the wild. The nest Gavilan only had one chick in it that was a similar age (22 days) and feeding well so, this was chosen as T-Rex's new home. (continued page 3...)

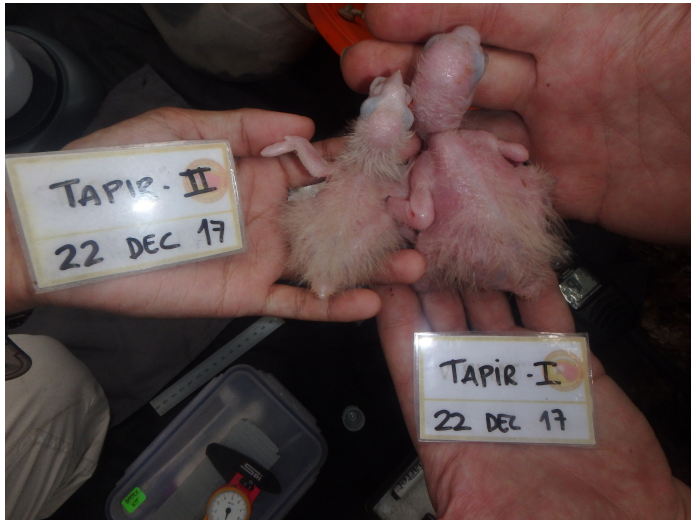
THE MACAW SOCIETY



Map of the macaw nests that The Macaw Society monitors in the forest adyacent to the Colpa Colorado

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To have the chance to raise T-Rex was an extraordinary experience. We did not bring him home as soon as he hatched because he was just 3 days younger than his older sibling. According to our research, he had a 75% chance of surviving. However, when he was just 10 days old it was clear he was not going to make it. So, we decided to rescue him. He was in very bad shape, extremely underweight, showing multiple signs of stunting but still with the desire to live.



Left, T-Rex (7 days old) and right, Little Foot (10 days old) during their time in Tapir nest, both showing early signs of stunting

T-Rex would have been impossible to rescue without the help and expertise of our macaw chick breeder expert, Mark Moore. Mark fed him every hour for the first 24 hours in our nursery. T-Rex doubled his weight in the first 30 hours under Mark's care and quickly stole our hearts - even more so than the chicks usually do. When we eventually placed him in his new home, we were happy for him but he was dearly missed.

Although the parents accepted him well, we found that over the next few days that he wasn't putting

Did you know ... ?

Guacamayo comes from two Quechua words, 'mayo' meaning river and 'guaco' meaning to cry. The name means 'The one who cries by the river' and represents the loud macaw calls ancient local sailors heard on their adventures along the Amazon river and its tributaries

on much weight because his begging response needed improvement. He needed more time to practice. Therefore, at 5am and 5pm every day for the next 10 days, we walked the 6 km to Gavilan nest to give our little T-Rex supplemental food. Over that time, he put on a lot of weight and perfected his begging response, allowing him to be fed from his parents effectively.

On the 12th of January it was time to get the last two chicks out of the research center and into wild nests. Gas was taken to nest Tigres, which only had one chick in it because the other egg laid was infertile. He was accepted very well and gained weight as expected. A happy ending for Gas!

Little Foot's foot had also improved and he was looking strong and healthy, so it was decided he would be taken to Ceiba nest. He would be our last translocated chick for the 2018 breeding season. So it was with mixed emotions. We took this last chick to his new home, happy that all the chicks had been saved and were safe with their new wild parents, relieved that our hard work had paid off and sad because it's always hard to say goodbye...especially to a macaw chick!



Mark Moore (left), our macaw chick breeder expert, Gaby Vigo (center), our research coordinator and Mabe Aguirre (right), our lead field vet. Three hands, three key pieces on our macaw chick translocation program.

Goodbye T-Rex

HATCHED: 26 DEC 17
NEST: TAPIR
CHICK 2
DIED: 29 JAN 18

The month ended on a sad note with one of our translocated chicks, T-Rex, and his adopted brother dying because of predation. On January 29th, we went to check on the nest as usual and we found it empty. According to our research from 18 years working in the forest surrounding the Tambopata Research Center, the chances of chick predation in a nest are very small (6%).

We were speechless. We found some claw marks on the outside of the nest, the PVC pipe, and also in the immediate branches of the nest tree.



The Tayra (*Eira barbara*) is part of the weasel family found in parts of South & Central America.






T-Rex and his adopted brother from the nest Gavilan. This photo was taken 8 days before they died.

We suspected the predator was a Tayra (*Eira barbara*), an opportunistic omnivore and expert climber.

T-Rex, even though you did not make it, what we learned from you, your recovery process and translocation will help us save other macaw chicks. You will be missed.

In that very same week, two other macaw chicks, were also predated from their nest, "Pflucker". In this case, a Crested Owl (*Lophostrix cristata*) is known to have used that nest for nesting in previous seasons. We think she is still around the area that may have been the predator.

Table 1: Showing a breakdown of the breeding season as of January 31st 2018 and how many chicks we are monitoring in their nests around TRC.

Macaw Species	Nest Name	# Chicks Hatched	Chicks Died	Nest Type	Tree Species	# chicks translocated	New Nest for translocated chicks
 Scarlet Macaw	Amor	2	1	 PVC	<i>Apuleia leiocarpa</i>	0	
	Gavilan	3	1		<i>Dipteryx micrantha</i>	1	Tigres
	Pukakuo	2	0		<i>Dipteryx micrantha</i>	0	
	Invisible	1	1		<i>Dipteryx micrantha</i>	0	
	Tigres	1	0		<i>Hymenaea courbar</i>	0	
	Pflucker	2	2		<i>Dipteryx micrantha</i>	0	
	Ceiba	2	0		<i>Ceiba pentandra</i>	1	Tapir
	Tapir	2	0		<i>Ceiba pentandra</i>	2	Gavilan & Ceiba
	Mandy Lu	2	0		<i>Dipteryx micrantha</i>	2	Back to Mandy Lu
	Franz	3	0		<i>Dipteryx micrantha</i>	2	Franz & Hugo
 Red & Green	Hugo	3	1	 Wooden	<i>Dipteryx micrantha</i>	1	Tapir
	Molinero	2	0		<i>Spondias mombin</i>	1	Back to Molinero
	Bill	1	1		<i>Apuleia leiocarpa</i>	0	
	Silver	3	3		<i>Dipteryx micrantha</i>	0	
	Stanford	3	1		<i>Dipteryx micrantha</i>	0	
	Intocable	3	1		<i>Dipteryx micrantha</i>	0	
	Vaginito	3	1		<i>Hymenaea courbar</i>	0	
	Ayahuasco	2	1		<i>Dipteryx micrantha</i>	0	
 Natural	Rojas	1	1		<i>Dipteryx micrantha</i>	0	
	Max	2	0		<i>Erythrina ulei</i>	0	
Summary of chicks up to 31 January 2018		43 Chicks Hatched	15 Chicks Died	Breeding Season 2018			

The chicks are growing up...

On average, Scarlet macaw chicks leave the nest when they are 86 days old. Many of the translocated chicks are now about halfway to fledging age which means the majority of their brains, muscles and bones have developed. They are starting to grow feathers and definitely looking more like chicks and less like aliens. If you compare these pictures to those in our last newsletter, you can see how fast they have grown!



PERUCHO

HATCHED: 15 NOV 17
NEST: MANDY-LU
CHICK 1



AROHA

HATCHED: 21 NOV 17
NEST: MANDY-LU
CHICK 2



PANCHO

HATCHED: 28 NOV 17
NEST: FRANZ
CHICK 1



WALKER

HATCHED: 6 DEC 17
NEST: FRANZ
CHICK 3



MARIO

HATCHED: 8 DEC 17
NEST: MOLINERO
CHICK 1



LUIGI

HATCHED: 11 DEC 17
NEST: CEIBA
CHICK 1



CERVEZA

HATCHED: 11 DEC 17
NEST: HUGO
CHICK 3



GAS

HATCHED: 20 DEC 17
NEST: GAVILAN
CHICK 2



LITTLE FOOT

HATCHED: 16 DEC 17
NEST: TAPIR
CHICK 1

Clay Lick use in Peru

The sights and sounds at the Tambopata clay lick at dawn are truly something to behold. Up to eighteen species of macaw, parrot and parakeet fly in their hundreds from around the jungle to the red-brown cliffs rising above the river. It seems almost like a social occasion as they perch next to each other waiting for the bravest to fly down to the exposed clay lick.

It is a risky thing to do after all. Once the shelter of the canopy is gone, the brightly coloured parrots are an obvious target for hungry predators. For an animal to expose itself in such a way there must be a very good reason.

And so there is. Eating clay (or geophagy) is vital for the health of parrots in this area of the world. In tropical forests in the Madre de Dios area, heavy seasonal rains quickly wash sodium from the soils, leaving plant life lacking in this important mineral. Clay licks, however, are the exception.

Research shows the sodium levels in these hard clays are typically 40 times higher than in plant food in the surrounding jungle.

Sodium is essential for brain, bone and muscle development, as well as muscle contraction and fluid regulation. It is not surprising therefore that clay lick use in Tambopata increases during the parrot breeding season. Research shows that it is particularly high in December and January when parents are feeding their new hatchlings. So, if you are planning to come to Tambopata to see some geophagy in action - now is the time!

Did you know...?

Monkeys, peccaries, deer, brazilian porcupine, parrots and parakeets have all been seen practising geophagy here. In other parts of the world even humans have been recorded eating soil!



Liz Palpay Photography

Three different species of macaw feeding at the clay lick in Tambopata, the Scarlet Macaw (*Ara macao*) the Red-and-Green Macaw (*Ara chloropterus*) and the Blue-and-Yellow Macaw (*Ara ararauna*). Studies have shown that Amazon clay lick soils typically contain 40 times more sodium than the macaws plant food found in this jungle.

Meet our field leader:

Liz Paipay Villanueva

Liz has been working in the Tambopata National Park for almost 12 years in various roles ranging from guiding to managing lodges and finally becoming the field leader at the Tambopata Macaw Project. She is an avid wildlife lover and has a deep respect for the jungle and for the macaws she works with. She feels extremely lucky to be able to work in such a beautiful and pristine environment saying 'the Amazon is known as the lungs of the Earth and to be able to contribute to such an important place is an honour'.

'The field leader role is challenging but rewarding. During the breeding season we can have up to 25 volunteers at any one time, 50 chicks to look after and 44 nests to monitor, as well as recording the clay lick use and macaw, parrot and parakeet census data. It's definitely busy ensuring all the jobs get done, the chicks are cared for and everyone is safe and happy. Most of the time the day-to-day running of things goes pretty smoothly but there can be a few hiccups along the way.'

'One of the best things about this job has got to be seeing the chicks that we have helped fledge from their nest. This happens rarely but it is an amazing



Liz "Pai", our field leader holding one of the chicks from the previous season. She has been an important part of the project over the past three years.

thing to experience. Last year I actually saw two chicks fledge from their nests on two separate occasions. Both were from the same nest and happened only a few days apart.

The first was when I was with Dylan Whitaker, the 2017 field leader. He was climbing up the nest tree and there was a Scarlet macaw at the nest entrance. We thought it was one of the macaw parents but

when Dylan got closer he realized it was a chick. About four meters before he reached the nest, the macaw chick started to get a bit nervous and we could see it poking its head in and outside of the nest as if it was thinking about what to do. All of a sudden it launched itself from the entrance, taking a leap of faith from the nest, 25m above the ground and out into the unknown jungle beyond. One of the parents was close by and flew down right behind the chick. It was amazing to witness it all, including the parental response as its chick fledged and flew out into the forest.'

'The second chick I saw fledge last season was also from the nest Sue. B. As the younger chick had already fledged a few days earlier, we were going back to check the weight of the older chick. We also wanted to check that the parents were still in the area. These chicks need parental care for up to one year after they fledge so if one chick has already fledged it is important for us to check the parents are returning to the nest, waiting for the second chick to leave the nest.'



A Scarlet Macaw chick still being fed by one of its parents' a few months after fledging from the nest.

'When we arrived we saw the parents in a nearby tree which was a relief. Next up, we needed to get the chick down and weigh it. One of our volunteers climbed up to the nest and sent the chick down to me below. He was very light when I weighed him. At around 750 grams I knew he would fledge very soon. I sent him back up to the climber and as soon as he was returned to his nest the mum flew in with a loud squawk. She seemed rather annoyed at the chick for still being in the nest. All of a sudden the chick appeared in the entrance, lunging forward out of the entrance every so often with an uneasy look on its face. It seemed his mum had had enough of waiting around and he was literally being pushed out of the nest. His toes were wrapped tight around the bottom of the entrance as he held on for dear life while being nudged from below.'

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'This not-so-gentle encouragement from his mother continued as the climber reached the bottom of the tree. We watched for about five minutes while we put our equipment away, but nothing happened. He seemed determined to remain right where he was. After a few more minutes the mother left the nest calling loudly.'

'Well, we thought that was the end of it and were just about to walk away when low and behold, he launched himself from the nest and flew to a nearby tree, landing upside down with one leg clutching the branch. He took a few moments to lift himself upright and remained there calling softly. We were a little worried his parents wouldn't see him, when out of nowhere came his dad, flying over and landing next to him. He started preening him furiously and we knew he was in good hands. We shared a few happy tears and left the area with huge smiles on our faces. It was a pretty special thing to see and one I will never forget.'

The case of the hidden chick

Stanford is one of the natural nests that a Red-and-Green Macaw couple has been nesting in for the last five years. The nest hollow is very deep and there is no way we can get the chicks out to measure or weigh them. To track their growth the climbers must attach a camera to 1m pole to take photos of the chicks at the bottom of the nest.

We knew that there were two chicks in the nest in early December that were doing well. On the 10th of January, our climbers came back from Stanford and told us that only one chick could be seen in the photos. We also knew from last year that the chicks have a little hiding place at the bottom of the nest, so over the next few days we sent more climbers up the tree to take more photos and double check that the second chick has gone. All of the photos that came back definitely only showed one chick in the

nest. Poor Stanford 2 must have been predated. We sadly updated our records - he would be the 11th chick that had died this season.

On the 19th of January, the climbers went back to Stanford to take photos of the last remaining chick. This time around they must have got the perfect angle on the camera to show the hiding place because low-and-behold, look who appeared from behind Stanford 1!



This is what you see when you check Stanford nest. A natural cavity 2 meter deep. The question is: is there one chick or two?



Stanford 2 peeks out from behind Stanford 1 in his little hiding place at the bottom of the nest.

Stanford 2 was alive and well! The nest must have eroded even more creating a deeper place to hide away from the selfie stick and camera. The funny thing is, this exact thing happened last year with Stanford 2 'reappearing' in front of the camera after a few weeks. These Stanford chicks are certainly cheeky and very evasive. We've got to keep an eye out for them next year to be sure.

Thank you,
from the whole team at
Tambopata



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