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# Conservation News

A PUBLICATION OF THE AFA CONSERVATION COMMITTEE

## Saving Mexico's Wild Scarlet Macaws




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# Helping to Save the Wild Scarlet Macaws of Mexico



Nest Hatched Scarlet Macaw Chick





## A First in 2019

For the first time since the Chajul Station was built in the 1970s, a pair of scarlet macaws have occupied a man-made nesting box and have produced a chick. This is a very important step in the future conservation of the species as the parent birds were hand-fed at the station and released back into the wild. These "wild" macaws chose an artificial nest near the station instead of seeking out a suitable nesting site in nearby communities. Nests, and particularly the artificial nests near the compound, are easier to protect from local poaching, thus giving the chicks a higher chance of surviving and fledging a new generation directly into the wild.



Above: Rodrigo Leon inspects the first wild Scarlet macaw chick to hatch in an artificial nest box at the Chajul Reserve in southern Mexico

**Natura Mexicana's scarlet macaw conservation project is the only project in Mexico working directly with the last remaining wild scarlet macaws. There are several projects working with captive breeding pairs and doing soft release of offspring.**

## An Introduction to the Chajul Station

Along the Lacantún river in far southernmost Mexico, only a few kilometers from the border with Guatemala, a preserve of rainforest struggles to maintain its existence. This riparian forest is as threatened as the birds and animals that inhabit it. Once extending northward and almost the entire width of the Yucatan Peninsula, Mexico's Lacandon Jungle is fast receding in most areas, and completely gone due to agricultural interests in others.

A small, but important part of this jungle forest lies across the river from the small puebla of Boca de Chajul, in the Mexican state of Chiapas. While the people of Chajul work tirelessly to harvest mangos, red chili peppers, and corn to survive, the last of Mexico's scarlet macaws struggle to remain flying free in their native habitat. This part of the jungle is also home to howler monkeys, spider monkeys, jaguars, tapirs, tamandua anteaters, pumas, ocelots, margays, keel-billed toucans, collared aracaris, several species of trogons, and much more.



The Lacantún River of Mexico

**Your donations to the AFA Conservation Fund will help to publish additional news releases, buy equipment for AFA approved projects, and provide much needed supplies to those working in the field.**

## More about the Chajul Station

Not many people know about the important work that takes place at the Chajul reserve station. Observing or assisting with the projects requires an invitation from Natura Mexicana. Traveling to this station is not an easy task either. The easiest way to get there would be an airplane ride out of Mexico City to the city of Tuxtla in southernmost Mexico. Once in Tuxtla a good truck or four-wheel drive vehicle is necessary to accomplish the almost 7-hour drive to Boca de Chajul, several mountains away and across roads that, in some communities, would not really be called roads at all, but maybe paths.

The trip to Chajul takes you through two major towns, San Cristobal de las Casas, a great tourist town with much to see and do and also through Comitan, a city of approximately 150,000 and the only Walmart for many miles. But in between these two exciting destinations is seven hours of rough going on roads and elevations that are not for the faint of heart. Once you depart Comitan, there will be no commercial gasoline stations to be found, so make sure the tank is full, or the only source of fuel will be roadside fruit stands that also sell gasoline by the liter and use a cut-off Coke bottle to funnel it into the gas tank.



**Biologists must travel by boat from the town to the Reserve and Station**

The trip to the reserve seems to finally be coming to an end when the sign for Chajul is visible, but there is still another ten-minute boat trip up river before arriving at the station. There are no roads to take you to the reserve station and the only way to get there is by boat. On the opposite side of the river from the reserve station, the forest extends from Chajul out and into Guatemala. The boat ride itself can be exciting; lucky guests and biologists may see crocodiles sunning themselves along the shore, or many different types of birds or animals coming down for a drink in the hot sun.



**The Chajul station uses solar power and has no electricity from any outside source. (Bottom) Large solar panels collect the sun's energy during the day and stores it in batteries for nighttime use (Above)**

Once you get to the reserve, say goodbye to cell phone signals, internet, television, microwaves, hairdryers, or basically anything that uses a lot of electricity or requires a network. The reserve operates 100% on solar power stored in rooms full of batteries for nighttime use. Stoves and hot water heaters are all run by propane. Student rooms, well, all the rooms really, have no heat or air conditioning. But there is no shortage of fresh air coming through the screened window openings directly from the rainforest.

The Chajul station is pretty much self-sufficient and does not rely on outside energy sources. Potable water is brought in by boat as are groceries, and a staff cook and her assistants prepare traditional Mexican fare for the biologists, visitors, and any students who happen to be there doing research in the forest or along the river.





**Macaws visit the station often to drink water**

## Giving Back

# *How Can You Help?*

**By Rick Jordan**

For many of us, being around parrots is a must in our lives. If you are anything like me, you started out as a parrot-loving observer when you saw them in a pet store or at a zoo. Then you decided you had to have a pet parrot; thus, changing your life forever. From a pet owner, I progressed toward an interest in their biology and reproduction leading to several jobs managing large parrot collections, and eventually acquiring my own pairs of parrots for my private breeding program.

How to give back to wild parrots has always ticked in the back of my mind. Then, after some discussions with a few field biologists I realized that my "up close" study of eggs, chicks, and the mating practices of parrots is something that I could offer back as education and experience. I have assisted many programs from Spix's macaws, Lear's macaws, and kakapo, to scarlet macaws in southern Mexico. Showing a biologist how to feed or handle a baby parrot in person has made a huge positive influence on the survival of neonatal wild parrots.

For those that cannot simply pack up and run to a wild parrot habitat, there are plenty of projects that could use financial assistance for the supplies or equipment needed in the field. A summary of supplies needed at the Chajul station includes an egg incubator (in cases where nests are threatened or abandoned), a brooder for neonates or eggs that have to be removed from wild nests, a travel/car brooder/incubator for travel from nests to the reserve, and a good gram scales to document the progress of the chicks as they grow.

Please make a donation today to help the AFA supply these things to the scarlet macaw project. You can mail a donation to:
AFA, P.O. Box 91717, Austin, TX 78709, or go online to www.afabirds.org and make a donation through the website. Be sure to annotate your donation is for the scarlet macaw project.



**The American Federation of Aviculture Inc.**
**P.O. Box 91717, Austin, TX 78709**



# The Work at the Chajul Station

The actual work with the scarlet macaw began in 2000. For the first five years teams were gathering the facts contributing to the obvious decrease in the macaw population of southern Mexico and trying to formulate plans to intervene. In 2005 the biologists involved with the project began a more intensive management whereas they would assist wild nesting birds to successfully fledge their young into the native habitat. Through trial and error methodology they arrived at a more solid plan and by 2014 they had gathered enough data to put a plan into action. During this time, they observed:

1. Putting wire around the nesting trees did not work. Poachers could identify actual nesting sites being protected simply by finding the lone trees where biologists had placed wire enclosures near the tree base.
2. Cameras placed on or around the trees were also a failure and were often stolen or destroyed.
3. An attempt to hire local people to “guard” the trees and nests during the nesting season was abandoned as these guards were often threatened, causing them to abandon their assignments.

Community involvement was, at best, difficult with the pressure put on local inhabitants. In some cases, there was pressure from narcotics traffickers as well, and eventually using local people to guard nests or provide information about poaching became too dangerous for all involved.



**Scarlet macaws tend to choose lone trees for nesting. They are easily spotted flying to and from the tree, making them targets for local poachers**



**Poachers often drive nails into the trunk of tall trees, so they can use them to hold ropes steady as they work their way up the tree’s trunk**

**Every year 500,000 hectares of Mexico’s tropical and subtropical rainforest is destroyed for agricultural endeavors. Because of this there are over 285 vertebrate species now threatened with extinction in Mexico alone.**



**Much of Mexico’s rainforest is being converted to oil palm plantations to meet a growing demand for palm products**

In 2019 it was decided to only pull second or subsequent wild-hatched chicks from nests for hand rearing. The biologists mapped out locations of nesting trees and allowed one chick to stay with the parent birds to be fledged. By the time the 2019 nesting season reached its peak, 100% of the chicks left for parent rearing were poached or missing.

It is clear that poaching, either for the local trade or international market, is the number one threat to the continued existence of the scarlet macaws in the region. Pulling chicks shortly after they hatch and rearing them at the station to be fledged back into the wild has proven to be an effective way to increase the wild population and therefore must be the foundation management plan for the species. It is difficult to get an accurate assessment of how many wild scarlet macaws still fly free in Mexico, but the station has fledged over 100 birds, many of which still visit the reserve. It is interesting to note that some of the fledged birds have visited the station with mates, and later some have even brought their chicks to the reserve. Biologists at the station record the bands and sightings of any scarlet macaws that visit so they can assess the overall population in the area.



## Clearing the Forests

Here a huge section of the rainforest has been cleared to make way for the growing of red chili peppers. The villagers grow, harvest, and dry the peppers for local use and shipping to foreign markets.
In the background a Ceiba tree estimated at nearly 500 years old looms close to the edge of the progressive clearing.



After the almost brutal trip to get there, a kind of peace descends over those visiting the station. Sitting in a chair on the open patio style “dining area/presentation area” the forest swallows the reserve from all sides. The only walkable grassy areas are those between the bunk houses and the kitchen buildings on the reserve.
Immediately after arriving it is easy to see why this place is so different from most biologist’s stations. At most times of the day the calls of wild scarlet macaws can be heard in the distance, or if it’s a particularly hot, dry day, the birds may actually be drinking from a water tub placed in one of the trees in the middle of the station grounds. They are not tame birds! Although they may not fly off when approached, no one, not even the biologists who have fed them and fledged them can pick them up or touch them. Make no mistake about it, these macaws are wild, but with a small difference: they know there is water at the station and they know it is safe to come down.



**Chajul Station, Mexico**

# Evaluating Nesting Sites

By Rick Jordan & Janice Boyd PhD

One would think with a big river nearby that scarlet macaws would be lined up on the shores drinking. But interviews with the resident biologists tells us they have never seen a scarlet macaw sitting on the ground along the banks or shore. In fact, other than at the station, seeing a scarlet macaw at all will be with field glasses as they are always high in a tree, or high in the air circling above. The macaws do not come down to backyard gardens, corn crops, mango crops, or virtually any “easy” food source that is known to those that study them. They are feeding in the trees in the forest or in the remnants of the forests across the river. If they fed on agricultural products, they would be easy to trap as adults, thus making nest poaching unnecessary.

The day can begin early when there are active nests to be checked. A chart of nest locations is kept and rated for several key points.

1. Has that site been used before by scarlet macaws?
2. Was the pair successful in fledging a chick?
3. Is the tree easy enough to climb or in an area in danger of poaching?
4. Has a pair been actively entering the nest lately?

Once nests are evaluated, a plan to climb and see what is happening inside the tree hollows is made. If a climb is needed, equipment must be loaded and taken to the boats, then offloaded and taken by truck to the site. Those that climb usually know the day before if they will be needed.



**Travel to the wild nests is often several hours by boat and then by truck, making for a very long day**

# Evaluating Nests near Chajul (Con't)

Nests where eggs are present are simply recorded as such and left alone. Candling eggs can be difficult while hanging from climbing equipment, so it is easier to wait the needed 4-week time period to see if chicks hatch, rather than evaluate the eggs themselves. If a chick or more are present, the decision to leave them, or to pull one or all of them is made by the team. If pulled, the chick will be raised by hand and incorporated back into the flock that visits the station to be taught the lifestyle in the local forest.

After a long day of climbs, nest evaluations, site visits, and talking to local townsmen about possible sightings, biologists head back to the station to have a late meal and regroup for the next day. The trees surrounding the station are often rife with loud howler monkeys or noisy spider monkeys that seem to go on all night long.

If there is a day when a climb is not necessary, and time is spent doing record keeping or other work at the station, it gives one the opportunity to see the varied wildlife that often comes out of the forest and into the open to be seen. Spider monkeys, howler monkeys, guans, curassows, mot mots, tanagers, toucans, two species of amazon parrots, blue morpho butterflies, agoutis, scorpions, hummingbirds, chachalacas, and so many other species are common visitors or are only a few feet into the forested areas. Students come from all over Mexico and other countries to work on projects here where they can be close to their study subjects. The station is home base to many PhD students trying to make a difference in the way humans utilize the planet, and the way humans manage wild animals or preserved lands.



**Biologists must risk their lives daily to climb trees and evaluate nests. Decisions whether to intervene or not are based on many factors and are not made lightly.**






**The remnants of the Montes Azules Biosphere Reserve lie in the State of Chiapas, Mexico. The Chajul station and reserve lie within this reserve and are very near the border with Guatemala.**

**Wild scarlet macaws can be found in both countries and together they are working to save the last of this species in its habitat. It is interesting to note that wild birds have been known to fly across the northern tip of Guatemala between the reserve in Montes Azules and the Calakmul reserve.**

**The Chajul station is located at the very southern tip of the Montes Azules Reserve, on the Lacondona river, sometimes called the Chajul river.**

# What is Different and Important About the Chajul Station and Natura Mexicana?

There are several projects now underway in Mexico with the aim to try and restore the scarlet macaw to its native range. Xcaret, a Disneyesque theme park in southern Mexico, is also doing their part to restore scarlet macaws to the wild. They are undertaking a huge and responsible program of conditioning and releasing captive-bred birds back into the habitat. As well, there are smaller groups attempting to do the same thing with captive-bred birds. These programs are very important as they will finally cement the long and weakened relationship between breeders and conservationists; birds born in captivity will fly free and breed, producing a new generation of wild scarlet macaws in a habitat where their ancestors once flew.

But the group of biologists from Natura Mexicana and the Chajul Station are working to save a great percentage of the very last WILD scarlet macaws in Mexico. A species that has been taken down to almost unrecoverable numbers now has a chance with human intervention and protection of its final nesting areas. Nesting areas along the Usumacinta and Lacantún rivers are all in danger of being poached. Scarlet macaws are notorious for nesting in lone, tall, Ceiba trees, often located in the middle of agricultural land. This makes them a prime target for poaching of nestlings. Unassisted, it appears that nearly 100% of the nests will fail to produce a wild chick that fledges and flies free in Mexico.

What the biologists in Chajul do is locate and monitor the nesting sites of the free flying wild birds. Once a nest is identified, that nest is evaluated on its potential to be poached. Some nests are poached when the chicks are as young as one week in age, but most poachers will take chicks that are older and more apt to survive under less than optimal conditions as they are transported and sold. Team members from Natura Mexicana climb the trees, count and assess the eggs for fertility, evaluate health of chicks, band the chicks, or remove chicks that are in high probability of being poached before fledging. Even nests found on private property are in danger of being poached; sometimes a land owner can be paid to protect the nests, but this is not always an option. If chicks must be removed from the nest, a strict protocol of rearing and returning them to the wild flock is followed and has now proven itself successful through multiple generation wild-hatched and fledged offspring. Birds that have been reared by the biologists have flown off with the group that visits the station, and have nested successfully, bringing their own chicks back to the station and its daily watering spot.

It is important to support the work being done at the Chajul Station because once a species goes extinct in its native habitat, often another species expands or moves to occupy the niche that was once theirs. Even though the release of captive-bred birds is working in many areas of the World now, saving the last of a species in its original habitat should be priority at all costs. Some may argue that “human intervention” is not natural and should not be part of the equation to save a species, but remember that humans are, for the most part, at fault to begin with. Once the scarlet macaw is back on its feet in the southern part of Mexico, it can, and hopefully will, expand its habitat in all directions through successful nesting and fledging of young.

## Recent Taxonomic Changes to the Scarlet Macaw

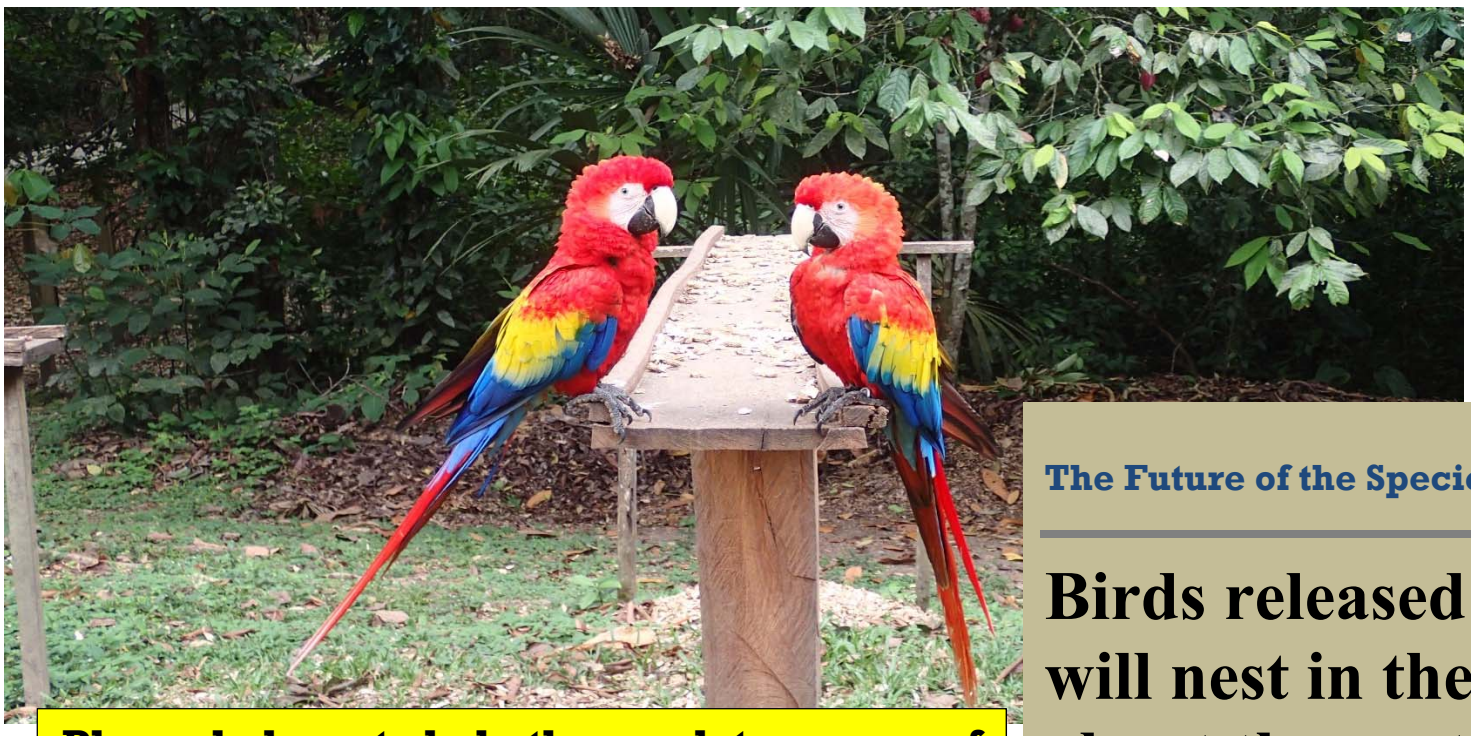
Historically the scarlet macaw was known as a single species described as *Ara macao*. Pet owners and breeders alike realized there were, at minimum, two very different races or subspecies of this bird. Breeders often offered birds for sale labeled as “Central American scarlet macaws or South American scarlet macaws” in an effort to differentiate the two types most commonly found in the trade.

In the 1990’s taxonomists agreed there were substantial differences between those birds found in Central America and those originating from South America. Furthermore, there also seems to be a third or even a forth “type” that appears to be a mixture of the two.

Specimens from South America were noticeably darker in color and had green dots on the feathers of the upper wings. Those specimens collected in Central America were lighter in color, often longer in overall length, had larger areas of yellow on the wings, and had blue dots on the upper wings.

Eventually the two subspecies were defined. Central American scarlet macaws were given the taxonomic name of *Ara macao cyanoptera*, while those in South America were named *Ara macao macao*, making the southernmost form the nominate form or type.





**Left and Above: The scarlet macaws of southern Mexico are of the *Ara macao cyanoptera* form. The blue dots on the yellow wing patches are obvious even from a very young age**

**Please help us to help the scarlet macaws of Mexico. Donate to the AFA Conservation Fund for 2019. Go to www.afabirds.org**

### The Future of the Species

## Birds released at the station will nest in the wild and bring about the next generation of Scarlet macaws in Chiapas

# A Word About Poaching

As members of a society where poaching and the sale of wildlife is not an everyday thing, or an accepted way of life, it is often difficult to understand why someone would ever do it. Until someone actually sees the difficulties that families must overcome in some poverty-stricken areas of the World, an attitude that it is "simply not acceptable" to poach is an easy one to assume. The truth of the matter is that poaching wildlife can provide a significant portion of a household's income in many of the small towns in southern Mexico. Scarlet macaws are probably one of the easier animals to poach in the Lacandon forest. The forest is home to many animals that are in demand on the international market. Sometimes animal "products" are easier to supply than live animals. So, shooting and selling the claws of jaguars, ocelots, margays, or pumas becomes profitable but these animals are becoming so rare that this income cannot be counted on.

In general, the people poaching scarlet macaws are being taught generation after generation how to do it and how to profit from it. Fathers teach their sons how to climb trees and when to take nestlings. They teach them how to hand feed the chicks and what to feed them to keep them alive until the "buyer" collects them. Most of the poaching is not done for an individual who might want a few birds for their collection or as pets; often the buyer is a person working for a shipper or exporter supplying the trade in Europe, South Africa, Southeast Asia, or, not as common as a decade ago, the United States. The demand for the large red macaws is high in some countries that still allow the importation of wild birds. It is easier to stick a few scarlet macaw chicks into a shipment of other "legally" moved birds where documents and papers assign them a false origin or possibly even a false species name.



**Poaching and wildlife smuggling is a "way of life" for some families. Here, a group of Red-lored amazon parrots are being taken out of their native country in a zip up luggage bag. Many will die before they arrive to their destination – Photo courtesy of Kilma Mansu, Brazil**



## Poaching Con't

So how can poaching of young scarlet macaws be stopped? Following the example set in the Caribbean islands by a brave man named Paul Butler, the answer may lie with educating the young children of the area to have respect and pride for their native birds. Prior to his arrival and work in the islands it was common practice to raid the nests of island amazon parrot species and offer the young nestlings to international traders. Using education, pride, public awareness, and political clout, Mr. Butler has made a huge difference in the poaching situation on several islands and with several very endangered island amazon species. This approach may be the answer in southern Mexico as well, but funding and government involvement will be necessary to change a tradition that has been carried down from generation to generation; a tradition that is no longer sustainable and certain to lead to the extinction of the scarlet macaw in Mexico.

## We Can Make a Difference

Natura Mexicana has its work cut out for it. The conservation of macaws, crocodiles, tapirs, jaguars, margays, ocelots, peccaries, toucans, blue morpho butterflies, and so many other species requires huge funds, and many hands to accomplish. The reserve stations along the last of the forest cost money to maintain as well. This is not even considering transportation of the biologists to and from the stations, trucks to accomplish nest inspections or relocations of wildlife, equipment, supplies, and veterinary care. The final tally for a project so large is astounding! Sadly, funding for conservation in Mexico has been cut in the past two years. Biologists now find themselves seeking grants from other countries such as the United States to accomplish small portions of their mission. Funding under the United States Endangered Species Act is already assisting scarlet macaw conservation in Guatemala, and hopefully will be extended to this reserve in 2020.

But the small things, the things that make life easier for the biologists and for the birds themselves can be funded on a local or more intimate level. Even such things as syringes, vitamin supplements, hand feeding equipment, gram scales, surgical equipment, medical tape and so many other things can be provided by avicultural groups; these items will make a huge impact on the success of the mission.



**Right: Although the station is primarily concerned with scarlet macaws, occasionally a local townsman will bring a "found" amazon or others to the biologists to be raised and set free in the reserve.**

In 2020 a more aggressive method of thwarting poaching must be taken. Chicks must be removed from any nest in danger of being poached, and chicks must be taken at a younger age, possibly the removal of eggs will be necessary in extreme cases. This means the team will need better brooding equipment, better incubators, and virtually all the other supplies needed to take on neonatal care of wild-born scarlet macaws.

A list of items needed immediately in order to make the 2020 breeding season more productive include an Inca egg incubator and an Inca brooder. The team has requested the Inca based on its worldwide dependability and the reputation of the company itself. This brand is also being used in Peru to save wild scarlet macaws at the Tambopata reserve. A new and more dependable gram scale would make their life easier as well, syringes, thermometers, digital camera equipment and more is needed at the Chajul station for this upcoming breeding season.

The American Federation of Aviculture Inc. will accept donations on behalf of this project; a goal total of $5000 has been established that will allow the AFA to buy all of the more expensive equipment and have it shipped directly to the biologists working at the station. To make a donation to this cause, simply send a check or money order to the AFA and write "scarlet macaws" in the memo block. Donations can also be made online at www.afabirds.org, be sure to put the words scarlet macaws in the note at checkout.



**In addition to supplies, field biologists must be taught how to perform some health evaluations, how to hand feed chicks, how to incubate eggs, and much more. Last year a team of U.S. citizens with experience in captive parrot management went to the Chajul station to assist the biologists working there. From Left to Right: Rodrigo Leon, Rick Jordan, Janice Boyd PhD, Dr. Sharman Hoppes DVM, inspect a nestling removed from a wild nest for evaluation.**



## The Importance of Captive Breeding Specialists in Conservation

Studying parrots in the field with a pair of binoculars and a note pad can only yield so much information. The investigation of nests, weighing or candling of eggs, and evaluating live wild chicks gives us only a small piece of the whole picture about a parrot species. This is one of the reasons that it may take many years for a biologist to become a seasoned expert on a given species, and to fully understand the problems facing a diminishing population.

Captive breeders, on the other hand, have an actual hands-on training opportunity with every species they keep. From the moment a bird is acquired, through the pairing of that bird with a mate and onto their eventual reproduction, a captive breeder or keeper can document the day to day life and biology of a bird or species. Blood values are easily assessed, incubation times and methods can be observed, and even chick hatch weights and growth progression can be documented. Consider the many things a captive breeder may have a close-up experience with that cannot be learned through binoculars or daily observation of wild birds.

It seems a no-brainer that those that keep a species in captivity, breed it, study it, and document it, should help field biologists to have a timelier study of any given species. But this has not always been the case. During the decades of wild-bird capture and importation to the United States and other countries, field biologists, conservationists, and captive bird owners were at odds. Perhaps it was the emotional pull that parrots have on us; or simply the blame game. Conservationists and field personnel blamed the “desire” to have a pet parrot for the demise of all wild parrot species. Although the international pet trade did take its toll on wild flocks, the causes of population declines is complicated and often not due to only one activity. In most cases, capture for pets, habitat reduction, nesting site competition, local poaching, or even predator increase in the habitat were all factors leading to the reduction in various parrot species. This became evident when studying species that were not prominent in the pet trade such as Lear’s macaw, Spix’s macaw, St. Vincent’s amazons, imperial amazons, and many more. Eventually, after the US stopped all importation of wild-caught parrots for the pet trade, the groups interested in parrots began to see each other as parrot enthusiasts instead of the cause of all wild parrot population declines.

This new era of cooperation has led to huge leaps in progress in field biology and the conservation of parrots. Captive enthusiasts began to work with field personnel, training them, providing insight to certain behaviors or needs, and sharing important information such as blood values, neonatal growth rates, and reproductive statistics. It is not unusual to see a parrot breeder on the team of biologists working to save a species in the wild. Veterinarians, breeders, pet owners, and hobbyists have joined the fight to keep wild birds flying free.







**Biologist Sebastian Arriaga looks on as Rick Jordan holds a wild Scarlet macaw chick for veterinary examination and microchip implantation near Chajul, in the state of Chiapas, Mexico**

## Are Wild Scarlet Macaws Still Smuggled to the United States?

Pet owners and breeders in the United States have, for decades, been accused of buying or “ordering” wild parrots from poachers and smugglers. Citing the US/Mexico border as an easy route for smugglers, accusers have assumed that most parrot enthusiasts would jump at the idea of an inexpensive, albeit illegal, specimen of the parrot they desire. This is simply not the case. In fact, many, if not most, parrot lovers in the US would make a call to the authorities if offered known illegal parrots.

It is true that during the 60’s and possibly up through the 80’s in the United States, there were many amazon parrots, smaller conure species, and even macaws smuggled across the border and offered for sale to US citizens. Illegal birds were often less expensive than captive-bred birds, and even more often, they were ill or in poor health due to the conditions of the trip. But the days of high-volume smuggled parrots being rushed into the US are gone. With education organizations working tirelessly to inform US consumers about smuggled parrots, the market for such contraband has been greatly reduced. It is important to note that the only parrot anti-smuggling poster found on the US/Mexico border, actually hanging in the customs offices, was printed and distributed by the American Federation of Aviculture, Inc. back in the early 1980’s.

Today many of the scarlet macaws in the United States are a mix-matched creation and no longer really fit into any subspecific taxonomy. This is partly due to the limited availability of breeding stock that took place after scarlet macaws were listed on CITES Appendix I. Although most breeders did try to find the “correct” subspecies to pair with birds they had, at that time there was no official delineation between the types. Ads for mates usually included the words “Central American scarlet macaws” or “scarlet macaws with large yellow bands on the wing”. This was the standard when choosing mates for birds in captivity at that time.

Because the mixing, even if by accident, took place, a vast majority of the scarlet macaws in the US today would not be suitable for breeding programs where offspring are intended to be released back into the wild. It is interesting to note that few if any smuggled birds are coming to the US these days. There are sufficient numbers of “scarlet” macaws to meet the demands of the internal trade, whether for pets, breeders, exhibit, education, or zoological purposes.

**<u>Left:</u> Biologist Rodrigo Leon learns the proper technique of inserting a microchip locator by practicing on a chicken breast**



Slash and burn land clearing for agriculture and home sites is the most difficult obstacle to overcome for conservationists in southern Mexico. Here an ancient Ceiba tree has been toppled and burned on the edge of the remnants of a once monumental forest.



Some days as many as 20 or more wild (previously released) Scarlet macaws come by the station for a drink of water. Although they are not afraid of humans, they will not allow anyone to touch them or handle them.



The staff of the Chajul station are a devoted group of Mexican citizens trying to conserve the remains of the Lacandon Rainforest and its inhabitants. The scarlet macaw project is one of several programs that use the station as a work base. Conservation programs working from the station are also gathering data on tapirs, jaguars, cougars, margays, ocelots, anteaters, and others. From Left to Right: Rodrigo Leon, Diego Noriega, Sebastian Arriaga, Fiorella Ortiz Rosas, and Paulina Arroyo Gerala

**Your donations to the AFA Conservation Fund will help to publish additional news releases, buy equipment for AFA approved projects, and provide much needed supplies to those working in the field.**

## Coming Up: A Brief History of the AFA's Conservation Project Support

## About this Publication

This publication came about because of the difficulty of avicultural groups identifying legitimate conservation efforts in the field. Bird clubs and other groups often have funds to donate to conservation, but it is not always easy to find a way to get the money to them, or to determine which groups are permitted and are legally doing work in other countries. It is equally important that clubs choose conservation projects that are "aviculture friendly", or at the very least, are not lobbying to have pet parrots made illegal in our homes.

Unity in our avian community can come about through mutual understanding of what both interest groups are doing, and how and why it is being done. Pet owners should support those *in situ* conservation projects working to restore habitat, replenish wild populations, and educate local people on the importance of their work.

The AFA conservation committee will continue to review and support conservation groups in the field and publish their findings. Any organization wishing to have a review or overview published in Conservation News should contact the AFA committee at: Conservation@AFAbirds.org.

## A Brief History of AFA's Conservation and Research Assistance to Important Avicultural Projects

Over the past 40+ years, the AFA has sought out important avicultural projects and has provided varying levels of support. A short list of some or the most notable projects appears below.

- Bees and nesting cavity removal research
- Investigation of wild parrot complete blood counts and causes of death in Tambopata
- Wildlife Conservation Society Scarlet macaw chick survivability research in Guatemala
- Prevention protocol to protect parrot nest boxes from colonization by Africanized bees
- Lear's macaw corn subsidy program, Brazil
- Mexican amazon nesting and survey project with partner Loro Parque and others
- Tambopata nest box project
- Red-fronted macaw conservation with Asociacion Armonia, Bolivia
- Project Abbotti, conservation of the recently rediscovered Abbotti cockatoo, Indonesia
- Spix's macaw project, captive propagation in Brazilian zoos
- Nesting ecology of the Slender-billed conure
- Proventricular Dilatation Disease research at Schubot Exotic Bird Health Center, Texas A&M University
- Puerto Rican parrot reintroduction project
- Cuban parakeet artificial nest project with Loro Parque
- Breeding ecology of the Bahama parrot
- Status and conservation of the Cape parrot in southern Africa
- Ecology and breeding biology of the Yellow-shouldered amazon on Margarita, Venezuela
- Preliminary study of the impact of hurricane Gilbert on the psittacine population of the Yucatan
- Macaw conservation in Belize and Honduras
- Study of the El Oro parakeet (*Pyrrhura oresi)*
- Determination of the Hyacinth and possible Glaucous macaw in Argentina and Paraguay
- Genetics of the Puerto Rican parrot
- Support for the Centro para la Conservacion de los Psitacidos Mexicanos
- First workshop on the management and conservation of macaws in meso-America
- Halfmoon conure breeding consortium US
- Tracking of seasonal movements of the Great Green macaws of Costa Rica and Nicaragua
- Awarded over 40 different grants for avicultural study or disease research between 1982-1993

**Know of a project that should be highlighted in our next publication? Contact the AFA Conservation Committee at Conservation@AFAbirds.org**



Did you know the Crimson-bellied conure is now established in US Aviculture due to a cooperative breeding program under the oversight of the AFA?



**Photo by Rick Jordan. The Spix's macaw, now extinct in the wild, is alive and well in**



## Want to Learn More About Aviculture and Conservation?

The American Federation of Aviculture Inc. has developed a two-tier educational program presented online. This program is available to all members of the AFA for very minimal costs. The courses, called Fundamentals of Aviculture I and II, are presented in a read and quiz format, and are totally self-paced. No teachers, no books, no traveling to school, simply sign up, sign in and begin learning.

The Fundamentals of Aviculture I course is presented in nine chapters:

- The Basics
- Practicing Aviculture
- Scientific and Taxonomic Classification
- Basic Anatomy
- Reproduction
- Housing Birds in Captivity
- Detecting Illness in Your Birds
- Illness Prevention
- Parrot Behavior

The Fundamentals of Aviculture II course is more in-depth, and is presented in fifteen chapters:

- Wild Bird Conservation
- Research before Aviculture
- Basic Avian Genetics
- Breeding, Keeping, and Nesting
- Breeding Stimuli and Seasons
- Other Breeding Topics
- Artificial Incubation Techniques
- Intermediate Hand-rearing Parrots
- Avicultural Issues in a Modern World
- There is More to Aviculture Than Parrots
- Basic Avian Bacterial and Fungal Microbiology
- Disease Issues: Past and Present
- Avian Emergency Care
- Exotic Birds in Captivity
- A Discussion About Enrichment

Enrollment in the FOA courses is easy, go to www.fundamentalsofaviculture.com and create a sign-in name and password. The price structure for current AFA members is $45 for FOA I and $75 for FOA II. Nonmembers can sign up for membership during check out.



**Above: Yellow-naped amazon parrots were once one of the most commonly internationally smuggled parrots. They are now endangered throughout most of their natural habitat. Left: Lear's macaw has made a dramatic recovery in the wild. Once numbering as low as 200, the current population estimates are near 2000.**

***Please help the AFA to continue its work to Save Parrots and other birds…https://www.AFAbirds.org***

# How Do Bird Clubs Know if a Conservation Project is Legitimate?

With so many different conservation projects taking place in various locations around the World, it is often difficult to decide which ones are worthy of a club's financial support. Clubs are often in a unique place to raise funds through auctions, raffles, and bird marts, but they need to distribute funds properly to operate within the parameters of their non-profit status under the IRS.

There are many smaller projects working to rehabilitate, breed, release, or protect the various species of parrots and other birds in danger of extinction. Some of these projects are simply a group of people that are concerned, collecting money and doing their best to make a difference. The problem with these "unofficial" groups is there is room for foul play with funds. It is wiser for clubs to choose groups that have some type of formal structure, and those that have taken the time to register under some governmental control or oversight. This, at least, provides some type of official recognition of a club's donations, and may thwart possibilities of mismanaging of donated funds. Of course, this is not always an easy task.

The IRS has some very specific rules about donating "non-profit" funds to non-U.S. based organizations. In some cases, the donation will not be considered "tax deductible" for club members or the club itself, if the rules are not followed.

Many organizations operating outside of the United States are known as NGOs or Non-Governmental Organizations. This basically means they are not fully funded by the government; some of them can apply for government assistance through grants, but it is not the main funding for their operations. In countries where this NGO status is recorded or is part of an application process, it is easy to verify legitimacy. But some countries, such as the U.S., do not have an official NGO registration except for attendance to CITES meetings, and non-profit status through the IRS. At least these two qualifications can be verified before donations are made.




**Rarely seen in the wild, a Tapir walks a dry creek bed in search of food**



## Want to Help Other Mexican Species Through Natura Mexicana?

The biologists at the Chajul station work directly for Natura Mexicana. Natura is a Non-governmental conservation organization devoted to the recovery of several species now fighting against extinction in the Lacandon rainforest area of southern Mexico. One of the important aspects of their big cat program is to set up wildlife cameras, determine the number of cats in a given area, and work with local farmers and ranchers to "pen" domestic animals, as well as create a notification system as an alternative to shooting wildlife. Poaching of these beautiful animals, either for live specimens, or for parts, hides, teeth, or skeletons. is still common. The wildlife cameras cost nearly $800 U.S. each and over 100 of them are in operation at any given moment. The biologist in charge of the big cat, tapir, and large animal education program is Paulina Arroyo Gerala. She would be delighted to chat about her important work. You can reach her by email at mailto:paulina@naturamexicana.org. Anyone wishing to donate funds to this important program is encouraged to contact her as well. The forest tapir is being driven near extinction and is now very rare in the wild. They travel in small herds, mainly at night, in search of food. Paulina has managed to catch many on night vision wildlife cameras and is eager to share her films with anyone that might be interested. She has films of tapirs, jaguars, margays, ocelots, anteaters, and others on YouTube.

**Join the American Federation of Aviculture, Inc**
**Go to: http://www.AFAbirds.org Today!**

**Email: AFAoffice@AFAbirds.org**

**Supporting Captive Breeding & Conservation for over 40 Years**

# A Look at the Indonesian Parrot Project

## The Mission of the Indonesian Parrot Project

The conservation of endangered Indonesian cockatoos and parrots in the wild.

Our Mission is to help to conserve Indonesian cockatoos which are endangered in the wild, through actions both in the field (*in situ*) as well as those 'at home' (*ex situ*).

**Conservation through *in situ* field work**:

Reduce the trapping, smuggling, transport, and sale of wild cockatoos: this involves collaboration with both governmental and other non-governmental organizations

Rehabilitate confiscated cockatoos and other psittacines confiscated by authorities from smugglers. In selected cases, release these cockatoos back to the wild of their homeland

**Scientific Studies**: Carry out relevant scientific studies (such as census or breeding analyses; observation of nest behavior; analyses of food requirements) necessary for care of the cockatoos. These should result in published, peer-reviewed scientific data useful to help others to conserve these birds. Such studies offer avenues for collaboration with other scientists

**Ecologic Studies**: Obtain needed information about the local ecology of the cockatoos and parrots which will be transmitted through publications, our newsletter and our website.

Conservation through *ex situ* work:

**C-A-P** (Conservation-Awareness-Pride Program) designed to teach children of various ages about their own cockatoos and parrots; why they are important and should be conserved; and build pride in them

**Economic Development for the local residents**: Provide alternate means of sustainable income to villagers, who in turn will protect the cockatoos from trapping. These include:

- Hire of forest wardens to find and follow up over time (from blinds or safe distances) the presence of active nests
- **Support women's cooperatives**, which in turn will earn profit (and pride) through the local making of arts and crafts, and organic farming, and harvesting of mangrove
- **Hire local guides**, porters and have our guests stay in the homes in the local community bringing revenue to the people and the village through our ecotourism program

**Avian Resource**: Serve as a general source of information concerning Indonesian cockatoos and their conservation, and related topics.

***"To suppose that animals first entered the human imagination as meat or leather or horn is to project a 19th century attitude backward across the millennia. Animals first entered the imagination as messengers and promises."***
**J. Berger, *About Looking***

**Right: Moluccan cockatoos in the wild**




# The Strange Relationship Between Headhunters and Cockatoos

As one of many parrot conservation organizations on this earth, we all face major challenges when working in the field. With the goal of protecting and conserving parrots in the wild we learn how to deal with government officials, local communities, trappers, natural disasters, the illegal trade, corruption and cultural differences.

Since 2001, the Indonesian Parrot Project has been successful with our projects in Maluku, Papua and Java. However, a new project has come under our radar and it is something we never could even have envisioned if we tried. For the past two years we have received small grants from the Critical Ecosystem Partnership Fund (CEPF) to help the Huaulu tribe which are former headhunters. Yes headhunters. They have a very complex society. We are now dealing with a group of people that are facing extinction as well as their relationship with the Moluccan cockatoo which also is diminishing in numbers.

Valerio Valeri, an anthropologist lived with the Huaulu from 1971 to 1973 stated, "*One does not have to stay long in Huaulu before one hears the world maquwoli, "taboo," as I think it should be translated. A child seizes a fruit and brings it to his mouth; his mother raises her voice in alarm and warns: "Tepi, ia maquwoli," "Don't it is taboo." A worried old woman looks at her fingers, spying the process of leprosy, and wonders aloud if her condition is the consequence of having eaten at some point in her life the spotted cuscus combined with shrimp or bird meat combined with the larvae of a beetle, both of which combinations, she says are taboo. A cricket jumps inside a house at night and people scramble to put all the lamps out and to cover a pregnant woman, screaming excitedly: It is very taboo!"*

For the Huaulu, headhunting was a ritual activity rather than an act of war. A tribesman would take a single head to celebrate a young man coming of age and the heads were highly prized. Other reasons for headhunting included capture of enemies as slaves, looting of valuable properties, intra and inter-ethnic conflicts, and territorial expansion. These activities ceased in the late 1990's.



## Indonesian Parrot Project
## Headhunter's Con't

There are three small villages hidden up in the mountains and the total global population of the tribe is under 425 people. These are a nomadic people who would relocate every 20 years but have been forced to stay in the same location for closer to 50 years. No one wants them. They only eat forest food and the forest is hunted out. They do not speak the Indonesian language. The women do all the hard labor and the men hunt in the forest for food. For example, if the men kill a snake, they will eat first, then give food to the young boys, and if there is anything left the women and girls will eat. The women live in small huts separately from their husbands and only enter the main hut for sexual relations. The entire village is starving. The women and children mostly subsist on chicken eggs. Currently they actively trap Moluccan cockatoos to sell and to eat. Several men were arrested recently for trapping 14 cockatoos from Manusela National Park. After the arrests were made of the perpetrators, the rest of the men in the village threatened the lives of the National park rangers and anyone who would come to the village. Since the cockatoos were wild and recently trapped, after medical testing they were released back into the park.

The Huaulu do not eat cultivated food. That is taboo. The animal companions of the Huaulu consist of three species— the dog, the cat and the chicken— and any individual wild animals which could be raised as a pet which could include cuscus and birds – parrots.
These animals are taboo, "if we feed them it is taboo to feed on them" However, this principle has different implications depending on whether the animal which is habitually fed belongs to a species that is viewed as intrinsically wild. An additional qualification of this principle concerns birds. The Huaulu regularly trap cockatoos and lories which they keep in their homes till the birds die, are sold and because they are wild, are eaten.




After headhunting ceased the tribe needed to find a replacement to honor the ritual of manhood. That is where the cockatoo came into the picture. The Moluccan cockatoo is the symbol of a man. The brightly colored crest of the bird is symbolic of the phallus. Currently, when a boy becomes of age a cockatoo is trapped and eaten. Our goal is that the people would trap a cockatoo, take a feather and release the bird. Obviously, we are trying to change this behavior, but it is very difficult in a society as complex and remote as the Huaulu. This is cultural challenge that has us stymied. The village would like an ecotourism program, however our attempt at this in 2017 was not successful as our guests were not comfortable in the village. We are continuing our efforts and through training and workshops we are hoping to put a better program in place this year.

**The status of the Moluccan cockatoo**

In October of 2016, the Moluccan cockatoo (*C. moluccensis*) was listed as vulnerable on the IUCN red list with a population of 6,600 to 10,000 individuals. This species was historically found on Seram, Ambon, Saparua and Haruku in South Maluku, Indonesia. It is no longer seen on Saparua and Haruku, and it may only survive at one area on Ambon, leaving almost the entire population on Seram. It was once common there but has suffered significant declines, remaining only in Manusela National Park and E Seram.

Population numbers have been little researched, and ones that have been done report widely different results. By the 1980s these birds were being unsustainably trapped for the wild bird trade, with an estimated 74,509 individuals having been traded between 1981 and 1990, on top of other human interference.

Manusela National Park is located on Seram island, in the Maluku archipelago of Indonesia and covers a whopping 1200 miles. It is made up of coastal forest, swamp forest, lowland and montane rainforest ecosystem types. Mount Binaiya at 9,400 feet, is the highest of the park's six mountains. On Mount Hatu Saka, near the coast of Saleman-Sawai, it is the Goa Hatusaka cave, currently the deepest vertical cave in Indonesia at almost 1400 feet.

A new line transect study will be funded in 2019 -2020 to get an updated census on the cockatoos. It will be carried out from the four villages in the park Manusela, Ilena Maraina, Selumena and Kanike. We will bring in a biologist who will hire and train a member from the local community (for safety purposes) and together they will conduct the surveys. A line transect study includes a diverse set of protocols with important distinctions between them. ... Most line transect protocols require the observer to estimate the perpendicular distance to each bird detected, and consequently allow the calculation of detection probability as a function of distance from the transect.



A Moluccan cockatoo investigating a nest hole



Visit the Indonesian Parrot Project online at:
https://Indonesian-parrot-project.org

# Scarlet Macaw Conservation at the Tambopata Macaw Project

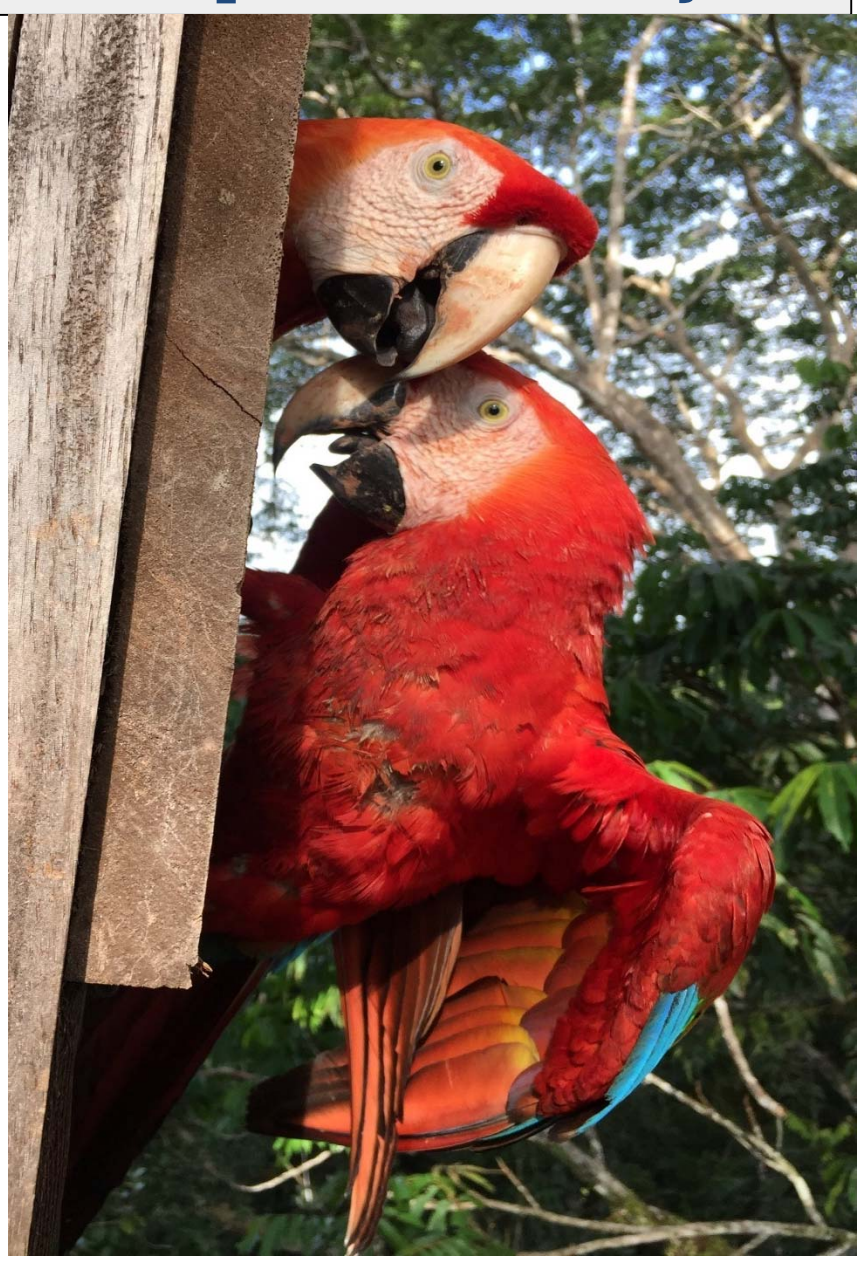
**Written by: Greta Hardy-Mittell**. It's a wild world in the rainforests of Peru's Madre de Dios region. On the ground, the carcass of a baby sloth—the remains of a harpy eagle's meal— sits a few steps away from a tapir taking a rest in a creek. At the river, families of capybaras frolic in front of cliffs full of parrots eating clay, until the rare jaguar comes by to scare them all away. And in the trees, multiple species of monkeys enjoy sunset snacks side-by-side, as couples of scarlet macaws guard their nests right next door.

Tourists at the Tambopata Research Center "ooh" and "ahh" at sighting any of these creatures and more. But for a group of researchers at TRC, that last species gets all of the attention.

For the past thirty years, the Tambopata Macaw Project has studied wild scarlet macaws in this incredibly biodiverse pocket of the Amazon rainforest. Scientists, veterinarians, and volunteers from all over the world have flocked to TRC's lone building the heart of the jungle: an ecotourism resort which doubles as home base for the project. Their research has yielded dozens of papers, ranging in topic from macaws' clay lick use to nesting habits to foraging behavior, all of which have informed conservationists in their quest to protect the scarlet macaw. Now, the project is going one step further by hatching a plan to save parrot chicks all over the world.

**Twenty years ago, Donald Brightsmith, director of the project and professor in the Schubot Exotic Bird Health Center at Texas A&M University, began monitoring the development of macaw chicks.**

As he and his crew picked up where project founder Eduardo Nycander left off, climbing trees and installing cameras to observe macaw nests, they began to document a complex cycle of life and death. While macaw parents lay three to four eggs, they focus their care and limited food on their oldest two chicks, leaving the rest to starve. So, in 2017, Gabriela Vigo, the project's coordinator and Brightsmith's wife, decided to do something about it.





**Above: Peruvian scarlet macaws defend their artificial nest box. Photo by Greta Hardy-Mittell. Left: Scarlet macaw chick taking its first glance of the outside world. Photo by Liz Villanueva Paipay**

For Vigo's PhD at Texas A&M, she has launched a study on macaw chick relocation. Her goal is to give each one of her subjects a loving home. After removing third or fourth chicks from their nests before they can starve, then feeding them at TRC for about two weeks, she finds them "foster nests" with parents who are already caring for chicks around the same developmental stage, but, crucially, don't have too many mouths to feed. With a little help from Vigo and her crew, these parents treat their new chicks as if they had hatched from their own eggs—all the way until the chick has fledged. It may sound miraculous, but it works.

Once Vigo has finished writing about her success for her PhD, she hopes that other parrot conservation projects will adopt her technique. This method of increasing chick survival rate could prove particularly useful in areas with struggling populations or high poaching rates. Currently, such projects will often rescue chicks and raise them by hand until fledging; Vigo's study could be a game changer for decreasing labor and increasing rates of survival—even saving species from the brink of extinction.

Back at TRC, the research will continue, from clay licks to macaw chicks to whatever question Vigo and Brightsmith ask next. We hope that you will be wondering right along with them.

**To support this important conservation work by making a donation, please visit https://vetmed.tamu.edu/macawproject/help-us/, or contact mailto:proyectoguacamayo@gmail.com.**

**To learn more about the project and its volunteer opportunities, visit https://vetmed.tamu.edu/macawproject/**

**Ecotourism Works!**
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**Top Left: An inquisitive scarlet macaw released into the Tambopata Reserve. Top Right: Volunteer Mark Moore of Hill Country Aviaries, Texas, feeds a wild scarlet macaw nestling. Left: Don Brightsmith, PhD, Gabriela Vigo, and daughter Mandy Lu pose with scarlet macaw chicks being reared at the Tambopata Reserve Center.**

Want to submit an article for the next issue of Conservation News? Contact the AFA Conservation and Research Committee at (conservation@afabirds.org).

This issue of the AFA Conservation News was made possible with donations by the Parrot Fund (Janice Boyd, PhD), and Rick Jordan. Future issues will be dependent on donations from people like you. Please help us to continue our mission to educate and communicate the important work being done in the field to save the very parrots we all love. Make a donation today to the AFA Conservation and Research Fund through our website: https://www.AFAbirds.org, or by mailing your donation to: AFA, P.O. Box 91717, Austin, TX 78709.

If you would like a full-color, printed copy of this newsletter, send $10.00 to: AFA Conservation Fund, P.O. Box 91717, Austin, TX 78709. Proceeds from printed copies benefit the fund and will help to publish future news releases, as well as support important projects through the AFA Conservation Fund.

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**Your donations to the AFA Conservation Fund will help to publish additional news releases, buy equipment for AFA approved projects, and provide much needed supplies to those working in the field.**

**Yes, I want to help the AFA Conservation Fund to assist conservation programs working to save birds in the wild.**

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