

# Annual reports 2018 - 2021



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# Executive Director

## Message from the Executive Director

I would like to start this message by thanking our friends, donors, volunteers, staff, and Board of Directors for all the support during these difficult years.

In the 33 years that I have served as Executive Director of ARCAS we have endured difficult times, but nothing has compared to these last years of the Covid pandemic and other global problems.

With the Guatemalan borders closed, we couldn't receive volunteers or students to attend our wildlife conservation courses, which traditionally have provided funding to cover much of our operating costs. Many of our donors were also affected by the pandemic and had to close or reduce their conservation programs.

Like the rest of the world, we are facing staff and resource shortages and as a result have not been able to present an annual report since 2017, and we are hereby presenting our accomplishments from 2018 to 2021.

However, despite these difficult times, I am proud to say that ARCAS was able to continue pursuing its mission, always prioritizing the health of the animals and maintaining our offices and programs. During this period, we were able to rescue more than 1300 wild animals.

Thanks to the creativity, perseverance and resilience of our staff and board, not only were we able to continue our regular wildlife rescue operations,

but we were also able to start some important new initiatives which we highlight in this Annual Report.

I am grateful to all the people, who gave me and my team their trust to lead ARCAS, a position that I have performed with pride, love and gratitude and most of all to be able to give something back to nature and to our magnificent endangered species.

*In the name of the animals that have no voice,  
THANK YOU*



Miriam Elena Monterroso  
**Executive Director**

# About us

## Annual Report **ARCAS 2018-2021**

ARCAS is a Guatemalan NGO established in 1989 to rescue, conserve and carry out research on wildlife, educate the Guatemalan public and visitors about the threat to biodiversity, assist in the administration of protected areas and promote sustainable community development and ecotourism. Despite the challenges posed during the last four years, we have been able to achieve some important goals.

In March 2021, we inaugurated the Center of Biodiversity Education (CeBio), a center to educate both Guatemalans and visiting tourists about illegal trafficking and other threats to the wildlife of the Maya Biosphere Reserve (MBR).

With the support of the German Aid Agency, GIZ, we initiated a very important program to monitoring the health of the animals of the MBR under the concept of One Health in order to generate a base line regarding zoonotic pathogens that exist in the Reserve. This is a project one of its kind in Guatemala with the goal of establishing a collection of at least 700 samples.

In Hawaii on the Pacific coast, we acquired a lease from the Guatemalan government for an area named Laguna de Palos, which consists of 22 hectares of pristine mangroves forests and lagoons, critical ecosystems for migratory birds, fish, and other wildlife.

We are also working to extend the Hawaii protected area 12 miles into the ocean, establishing the first marine protected area on the Pacific coast.

In 2018, we obtained usufructs rights from the Municipality of San Lucas for a piece of land in Cerro Alux Reserve. There we will be building our offices and will transfer the animals held in the central office where they will be able to enjoy larger enclosures, flight cages and beautiful, natural surroundings.

Finally, despite these difficult times, we partnered with friends and colleagues in the USA to form ARCAS USA, a separate non-profit entity with 501(C)3 status and its own volunteer board which has as its objectives supporting ARCAS and other wildlife conservation efforts in Guatemala and raising awareness in the US on the threat that wildlife trafficking poses to biodiversity around the world.

We hope you enjoy reading about everything we have been able to accomplish during these difficult last four years, and hope you can support us in continuing to fulfill our dream of seeing Guatemalan wildlife thrive and survive in freedom.



# Petén



CENTRO EDUCATIVO DE BIODIVERSIDAD-ARCAS

Although we opened to the public in 2020, we officially inaugurated the Biodiversity Education Center (CeBio) in March 2021.

Located on the grounds of our Rescue Center in Peten on the shores of Lake Peten Itza, the CeBio includes interpretive trails, exhibits of live, non-releasable animals, and interactive, virtual reality exhibits in a pavilion in the form of a Mayan temple.

Our augmented reality app guides visitors along the interpretive trail. The CeBio aims to educate visitors about the biodiversity of the Maya Biosphere Reserve and the threats to that biodiversity.

It allows visitors to learn about the wildlife rescue and rehabilitation work being carried out at the Rescue Center (just next door) while not interfering with that work.

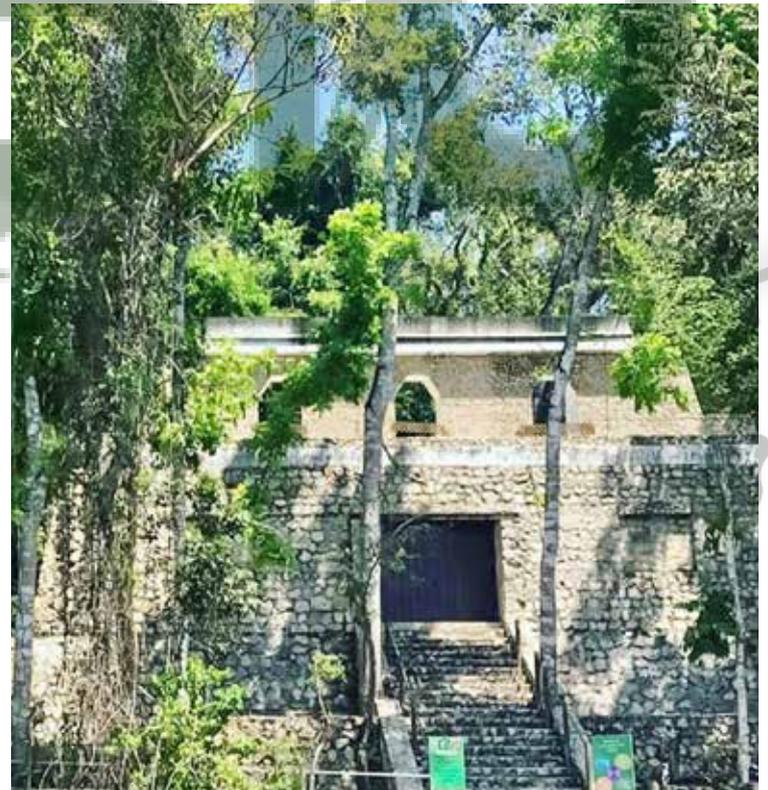
Since it opened, the CeBio has received more than 20,000 visitors, including students, tourists and conservation colleagues, greatly contributing to the financial self-sustainability of the Rescue Center.

For more information, please visit:

<https://www.facebook.com/search/top?q=cebio%20guatemala>

*Vice President of Guatemala, Guillermo Castillo cuts the ribbon during the inauguration ceremony of the CeBio together with UK Ambassador Nick Whittingham and ARCAS staff, board and colleagues.*





Our many thanks to the following donors for their support in the creation of the Biodiversity Education Center (CeBio)



# Wildlife Medicine and Conservation

ARCAS hosts nearly 100 veterinary students at 6 – 8 courses per year as part of its **Wildlife Medicine and Conservation** program.

Initiated in 2014, the program hosts students from the US and Europe who participate in two-week training courses held on the grounds of the Rescue Center in Peten.

There, they receive specialized training in clinical skills, improve their ability to perform procedures in field situations, provide comprehensive care in wildlife rescue and health, and gain knowledge about the challenges of combatting wildlife trafficking and conserving endangered species.

They work with such animals as spider monkeys, scarlet macaws, Amazon parrots, Morelet's crocodiles, Central American river turtles, kinkajous, coatimundis, pygmy owls and many more.

The veterinary program contributes to the financial sustainability of the Rescue Center, and has established the Rescue Center as a center of excellence in tropical veterinary medical training, making full use of the combined nearly 50 years of experience of Drs. Fernando Martínez and Alejandro Morales as well as that of Anna Bryant.

Participants from the Purdue University College of Veterinary Medicine showing how to restrain a parrot.



If you are interested in participating, please visit our website at:  
<https://arcasguatemala.org/arcas-veterinary-student-program/>

# Scarlet Macaw Releases

Each release represents years of preparation and work for ARCAS.

In 1994 it began its macaw breeding program, and after years of research and experimentation, it managed to fledge its first chick in April 2004. It has since successfully bred 66 macaw chicks.

The macaws are captive bred with confiscated, non-releasable parents, and because they are raised by their parents, they are less imprinted on humans and less likely to seek them out on release.

They are also given thorough ethological and medical screenings prior to release to make sure they are ready to adapt to the wild and will not introduce diseases into native populations.

Depending on the funding available, a number of the birds are fitted with satellite transmitters and are tracked to evaluate their success in adapting to the wild.

The scarlet macaw is a flagship species of the Maya Forest, a species threatened with extinction as a high-value target of the illegal wildlife trade. Its wild population in Mexico, Belize and Guatemala is estimated at only 300-400 individuals.



July 6 2019, ARCAS carried out its second scarlet macaw release, setting 13 individuals free in the Sierra del Lacandón National Park.

This follows its first release of 9 macaws in 2015.

For videos of these releases, please visit ARCAS's YouTube Channel:

[www.youtube.com/watch?v=RQLHxtcMSXg](http://www.youtube.com/watch?v=RQLHxtcMSXg)



Our many thanks to our colleagues and friends at Defensores de la Naturaleza (administrators of Sierra del Lacandon), the Cincinnatti

Zoo, CONAP and the Harvest Caye Conservation Foundation for their support for this program.



*The dream of seeing scarlet macaws flying free over the green forests of the Sierra Lacandon is after so many years...*

*a dream coming true!*



# Wildlife Releases

Before

After



Before and after rescued animals  
at the ARCAS Peten Rescue Center



Before and after rescued animals at the ARCAS Peten Rescue Center

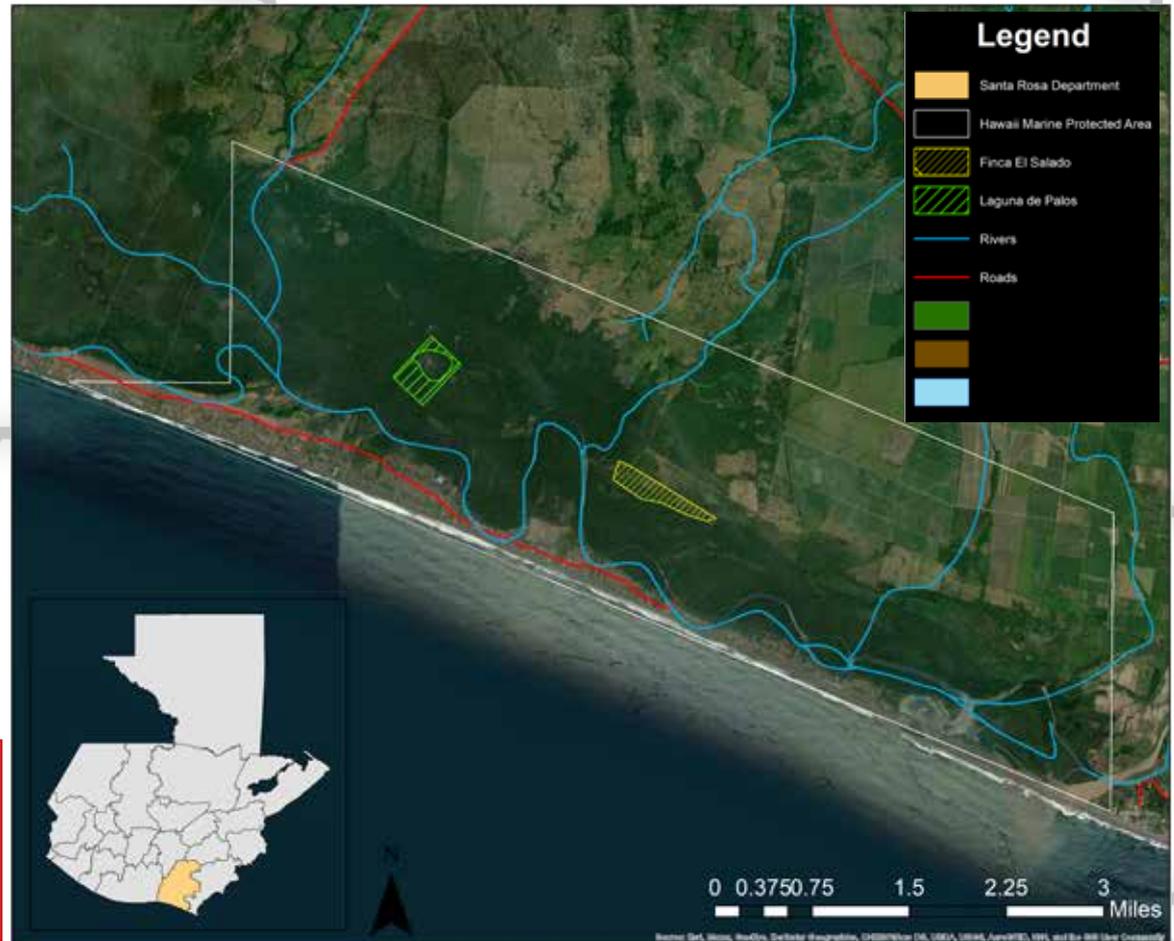


Hawaii

# Hawaii Marine Protected Area

ARCAS continues its journey consolidating the Hawaii Multiple Use Area (AUMH), a 4000+ hectare protected area that includes some of the most important sea turtle nesting beaches and mangrove wetlands in the country, as well as 7 marginalized fishing communities.

Together with CONAP, and the Wildlife Conservation Society, it is updating the Technical Study to extend the AUMH 10 miles into the ocean, establishing the first marine protected area on the Pacific coast of Guatemala.



In 2020, ARCAS led efforts to form the Local Executive Council, a multi-institutional board tasked with advising and managing the AUMH.



Executive Council

# Improvements To The Hawaii Park

Thanks to the generosity of the Sea World & Busch Gardens conservation fund and the Bamboo Project of the Taiwanese Mission and the Ministry of Agriculture we have been able to make some much needed improvements to the installations of the Hawaii Park.

We built two new sea turtle hatcheries, a rehabilitation tank for marine fauna, a researcher's house, a volunteer house, and an iguana enclosure, and were able to make much needed repairs to our yellow-naped amazon flight enclosures.

The hatcheries and visitors' house promote the use of bamboo as an alternative to the logging of mangrove.

Our many thanks to these donors, as well as to the #Columbus Zoo, as well as to the local communities that collaborate with ARCAS in the conservation of the sea turtle and other marine fauna of the area.

## IFAW-DISNEY

Our many, many thanks to the generosity of for their support in the construction of new holding enclosures and flight cages at the ARCAS central office and at the Hawaii Park, improving the welfare of the confiscated animals we receive.



Researchers house



Hatcheries and rehabilitation pools



Inauguration of Hatcheries



# Sea Turtle And Wildlife Rescue

The Covid pandemic negatively affected our sea turtle conservation activities at the Hawaii Park as we could no longer rely on the support of volunteers and for several months, the beaches were closed.

Year	Number of sea turtle eggs incaubated
2018	34,077
2019	42,151
2020	9,246
2021	11,500

Number of eggs buried at our Hawaii Hatchery from 2018 to 2021.

In addition to its regular sea turtle and mangrove conservation efforts, ARCAS Hawaii is increasingly becoming a wildlife rescue center, receiving injured or confiscated marine and terrestrial wildlife from the southeast Pacific coast of Guatemala.

In 2020 and 2021 we received:

- 5 stranded olive ridley, green and hawksbill sea turtles,
- 2 tamanduas,
- 2 raccoons,
- 1 tree porcupine,
- 5 brown pelicans,
- 2 white pelicans and
- 3 dolphins.

(Please see "Animals Received by ARCAS" in the Annex).



Olive ridley hatchlings scurrying down the beach into the Pacific



Treating a rescued white pelican



With the support of the Ocean Conservancy/International Beach Clean Up/#TeamSeas, ARCAS carried out beach cleans ups in Hawaii and other points along the Pacific coast. However, this is just addressing the symptoms of the problem, the real problem is demand, so please:

***Don't buy one-use plastic products!!!***

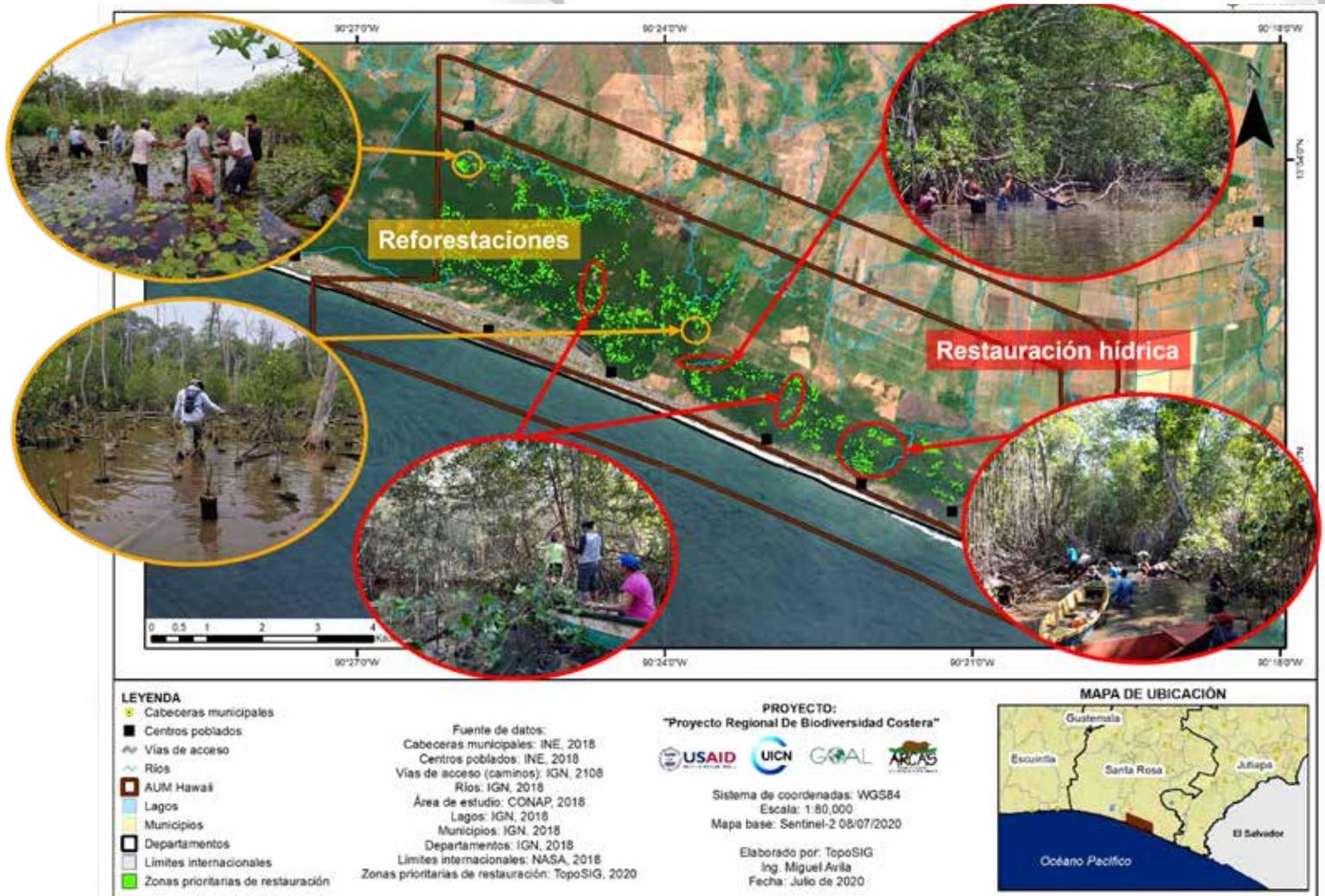


This Pacific green sea turtle was brought to the Hawaii Park in a weakened, dehydrated state. During the following days spent in the rehabilitation tank, she defecated three plastic bags. She was later released, but the threat of plastic pollution remains.



# Regional Coastal Biodiversity Project

With the support of the Regional Coastal Biodiversity Project of USAID/IUCN, in 2020 and 2021, ARCAS elaborated a map of restoration priorities for the Hawaii mangroves, restoring more than 5 kilometers of mangrove waterways and experimenting with the use of elevated beds to insure the survival of seedlings. It established 12 permanent monitoring sites, and management plans were developed for key species of mammals, birds and fish.



In conjunction with the Executive Council of the AUMH, a logo and branding manual for the AUMH was developed, as well as field guides for mammals, birds and fish. With these monitoring and restoration activities, the communities of the Area benefited from training for young people and adults, data collection and through direct work, activities which were also supported by the Palo Alto Rotary Club and FUNDAP.



In 2021, we launched our educational and ecotouristic workshops and tours at the Hawaii Park, focusing on marine fauna (cetaceans, sea turtles...), the mangrove ecosystem and birdwatching.

If you are interested in participating, contact us at cell number **(502) 4060-4039** or **[directorhawaii@arcasguatemala.org](mailto:directorhawaii@arcasguatemala.org)**



A humpback whale breaching  
in front of the Hawaii Park



An olive ridley sea turtle nesting  
on the Hawaii beach



## Whale- And Other Watching Tours

## Elephant seal

In January 2021, the beaches of the Hawaii area were visited by a very unusual and large visitor: a southern elephant seal (*Mirounga leonina*). ARCAS staff were initially alerted by colleagues in El Salvador of the presence of this the largest non-cetacean marine mammal.

ARCAS staff monitored the pinniped (estimated to weigh approximately 500 kgs) and educated the public to give it sufficient space and not try to force it back into the water or pour water on it. It hauled out every afternoon to spend the night on the beach as it swam its way north, eventually crossing into Mexico.



Photo: María de Flores

# Sea Turtle Population Monitoring

ARCAS continues its nearly 20 years of sea turtle population monitoring and research. This is the only long-term data set on the marine resources of the on the Pacific coast of Guatemala. Among its main results are:

- ✓ The population trend of the olive ridley sea turtle (*Lepidochelys olivácea*) is increasing. Our nesting crawl count program has determined that nesting density at the Hawaii site has increased from 906 crawls in 2003 to 2,431 crawls in 2021.
- ✓ Olive ridley nesting density on the Pacific coast of Guatemala is much higher in the southeast than in the southwest.
- ✓ At the national level, the numbers of eggs rescued and incubated per year have increased from 46,000 in 2003 to 598,653 in 2019, largely due to sponsor-a-nest programs by the private sector (hotels, ecotourists, vacation home owners...).
- ✓ In 2021, 24,754 successful nests were laid on the beaches of the Pacific for a total of 2,293,701 eggs.
- ✓ The nesting of the leatherback turtle remains scarce, with 0 - 4 nests per year reported on the Pacific coast.

If you have any questions, please contact us at [cmuccio@arcasguatemala.org](mailto:cmuccio@arcasguatemala.org) or visit the publications page of our website:

<https://arcasguatemala.org/who-we-are/arcas-publications/>.



Dany Cante, our data collector in Hawaii, marking an olive ridley nesting crawl. In addition to collecting valuable data, the monitoring program offers much-needed employment to local residents preventing migration to the north.



Thanks to the following current and past donors to the sea turtle monitoring program.





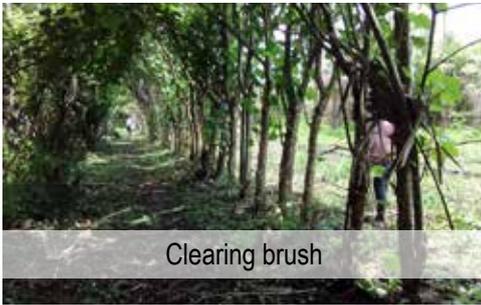
Rotulo interpretativo



Matiliscate tree that survived a bush fire



Cutting a fire break



Clearing brush



Latest advances of the reforestation of El Salado



Volunteers reforesting

## EL Salado

ARCAS continues to consolidate El Salado, its 25 hectare wildlife reserve on the northern edge of the Hawaii mangroves. Our many thanks to the following organizations that have supported the purchase and reforestation of the reserve over the last 10 years. It is really starting to look like a real forest, and the swarms of mosquitos help to keep illegal logging and poaching to a minimum. Our many thanks to the organizations that have supported the purchase and reforestation of the reserve over the last 10 years.



# PROBOSQUE

ARCAS has worked on its own behalf as well as with local community groups to enlist areas of the mangrove forests of Hawaii in the government's forestry incentive program, Probosque. This program, managed by the National Forestry Institute, is considered a model for the region, offering financial support to reforest or conserve forests throughout Guatemala.

These forestry concessions protect mangroves, a critical habitat that provides a range of environmental services to local communities including protection against storms and other effects of climate change, nurseries for fish and shrimp, and wood for construction. For more information visit [www.inab.gob.gt](http://www.inab.gob.gt)

**ARCAS has registered 25 hectares in El Salado and 22 hectares in Laguna Los Palos in Probosque and is working to register an additional 375 hectares.**





## The mangroves of Hawaii



# COLORES



ARCAS continues its leadership in COLORES, an innovative project to protect the 400 Yellow-naped amazons (*Amazona auropalliata*) estimated to remain on the Pacific coast of Guatemala.

The greatest threat to the yellow-naped amazon is poaching for the illegal wildlife trade. It is highly sought after by poachers, traffickers and consumers for its advanced ability to imitate the human voice and other sounds.

COLORES carries out parrot-monitoring and nest protection, environmental education, enforcement and public outreach at seven "hotspots" where significant populations of the parrot exist, primarily in the southwest sector of the coast.

With the support of the One Earth Conservation and the Wagmore Foundation, it developed a teacher's guide and coloring book on the yellow-naped, and the American Bird Conservancy supported enforcement activities and production of anti-trafficking posters and billboards.

During the 2021 IUCN congress in France, the yellow-naped parrot was uplisted to Critically Endangered on the Red List (one step short of Extinct). COLORES data and the case study produced by ARCAS, One Earth Conservation, and WCS ([www.arcasguatemala.org/.../Estudio\\_de\\_caso\\_trafico...](http://www.arcasguatemala.org/.../Estudio_de_caso_trafico...)) were used in the evaluation of the status of the parrot in the region.



In addition to its participation in COLORES, ARCAS is the point organization in Guatemala for the Loros Sin Fronteras coalition, a regional effort dedicated to reducing demand for parrots as pets. [www.facebook.com/LorosSinFronteras](https://www.facebook.com/LorosSinFronteras)



This parrot was found entangled in rope and hanging by its feet from a palm tree, with its concerned partner flying overhead.

COLORES staff and workers from the Las Margaritas farm managed to climb the tree and release it.



Despite its endangered status, the poaching of this parrot continues. In February 2021, we lost a great defender of the yellow-naped, *Pedro Viteri*, who was ambushed by poachers while they were robbing a nest on his farm, La Gracia. Is a COLORES hotspot and has a protected area where there are some of the last populations on the Pacific coast of Guatemala of such threatened animals as the puma, the tayra and the white-tailed deer. For more information, visit: [www.lostinamou.com](http://www.lostinamou.com)



Pedro Viteri



Central

# Natural Disastres and Animal Welfare

## FUEGO VOLCANO VOLCAN DE FUEGO

ARCAS worked to rescue and treat animals affected by the June 3, 2018 eruption of the Fuego Volcano. Over 1000 domestic, farm and wild animals were rescued and/or evaluated. At right, Monica Giron of the Animal Welfare Unit of the Ministry of Agriculture is rescuing a cat that was found in an abandoned house.



Though most of the rescued animals were domestic pets and farm animals, ARCAS also received abandoned parrots and other wild animals.

In these disaster relief activities, ARCAS benefited from the support of the IFAW/Disney Conservation Emergency fund, as well as the collaboration of the Animal Welfare Unit, Animal Defenders International and other friends.



# Animal Welfare

ARCAS Executive Director Miriam Monterroso participated in the formulation of the Animal Welfare Law, for the first time giving Guatemalans de legal mechanism by which to lodge a criminal complaint in the case of animal cruelty.

She also assisted in the creation of the Ministry of Agriculture's Animal Welfare Unit, tasked with insuring that both wild and domestic animals are treated in the most humane manner possible according to international standards.



**¡DENUNCIA EL  
MATRATO ANIMAL!**

## Circus Cat Rescue

The newly-declared Animal Welfare Law prohibits the use of animals in circuses.

As a result, several circuses turned over their collections of lions and tigers to CONAP, who was not prepared to handle such large and dangerous animals.

ARCAS supported Animal Defenders International (ADI) in the care and transfer of 17 of these lions and tigers to sanctuaries.

In January 2020, the tigers were sent to Big Cat Rescue in Florida and the lions to an ADI sanctuary in South Africa.

For more details, visit the ADI Facebook page:

[facebook.com/search/top?q=animal%20defenders%20international](https://facebook.com/search/top?q=animal%20defenders%20international)



One of the tigers marking its territory in a holding pen



Members of ADI, ARCAS and the Animal Welfare Unit, as well as the British Ambassador, Nick Whittingham visiting the holding enclosures for the felines.

*Many thanks for their assistance in the purchase of the ARCAS Wildlife Rescue-mobile!*

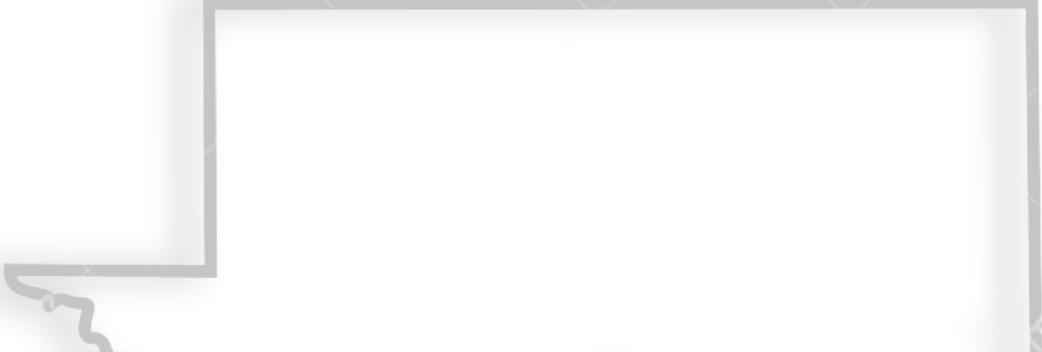


*Thanks to the support of IFAW-Disney, ARCAS was able to assist in the outfitting of the Unit with capture equipment, kennels, veterinary medicines and other equipment needed in the rescue and transfer of animals suffering abuse.*

The Wildlife Rescue-mobile will be used for the rescue, transfer and release of confiscated animals at the central offices, and between the Hawaii site and the COLORES project. Below, ARCAS staff getting ready to release rehabilitated wild animals in the Yaxha Park in the Maya Biosphere Reserve.



*thank you!*



## New ARCAS Publications

Check out these new publications on the ARCAS publications page:

<https://arcasguatemala.org/who-we-are/arcas-publications>

- ✓ Are trends in Olive Ridley sea turtle (*Lepidochelys olivacea*) nesting abundance affected by El Niño Southern Oscillation (ENSO) variability? Sixteen years of monitoring on the Pacific coast of northern Central America, Daniel Ariano-Sanchez, et al, 2020, 12pgs
- ✓ COLORES Newsletter/Boletín, 9-2021
- ✓ Estudio de caso sobre el tráfico ilegal del Loro Nuca Amarilla (*Amazona auropalliata*) en Guatemala, Colum Muccio, Guatemala, Octubre 31, 2019
- ✓ Guía para maestros sobre loros de Guatemala, J.C. Cantú, S. Méndez, M.L. Sanchez, C. Muccio, O. Ericastilla, L.K. Joyner, Guatemala, 2019
- ✓ Alejandro Morales, Ximena Sibrián, and Flor Dinorah Porras “Survey of Beak and Feather Disease Virus (BFDV) in Guatemalan Neotropical Psittacine Birds,” *Journal of Avian Medicine and Surgery* 35(3), 325-332, (30 September 2021). <https://doi.org/10.1647/20-00042>

# ARCAS Boards

## ARCAS Guatemala

Thanks to the support of our dedicated Guatemalan Board of Directors for their valuable time, financial support and expertise, but most of all for sharing their passion for wildlife conservation and environmental justice. Although our board members work full time in their own fields and serve on ARCAS board ad honorem, they have dedicated the time to formulate strategic and annual plans, and ensure that projects are approved with efficiency and little bureaucracy.

Our many thanks to our Guatemala Board of Directors:

### ARCAS Guatemala Board

- **President** Julio Enrique Piedrasanta
- **Vice President** Roberto Monterroso
- **Secretary** Juan Francisco Junior García
- **Treasurer** Jairo Bosbelí Rodríguez
- **Board member** Alvaro Samayoa Tercero
- **Board member** Jose Rodrigo Llarena Greñas
- **Board member** Michael Bostelmann

## ARCAS U.S.A.

Thanks to the support of friends, family and donors in the US, in 2019 ARCAS Wildlife Rescue and Conservation Association was established as a US 501(C)3 non-profit with the goal of supporting ARCAS and other wildlife conservation efforts in Guatemala and educating the US public about illegal wildlife trafficking.

If you need to write off your donations on your US taxes or would otherwise like to contact ARCAS USA, please let us know.

Our many thanks to our US Board:

### ARCAS U.S.A. Board

- **President** Amy Gotliffe
- **Vice president** Miriam Monterroso
- **Secretary** Cindy Johnson
- **Treasurer** Alvaro Samayoa
- **Board Member** Rodrigo Roesch
- **Board Member** Jamie Monterroso
- **Board Member** Candace O'Brien

Telephone: (502) 7830-1374 (Phone/Fax) (502) 7830-4273  
E-mail: [info@arcasguatemala.org](mailto:info@arcasguatemala.org)  
[www.arcasguatemala.org](http://www.arcasguatemala.org)

# COVID

ARCAS depends on its volunteer, ecotourism and veterinary training courses to support its conservation programs, and the Covid pandemic has hit these programs hard.

It has also hit many of our institutional donors who have had to close or reduce their conservation programs. However, the pandemic has not stopped wildlife trafficking and we continue to receive confiscated and rescued animals.

Our staff has felt the stress of an increased workload, a reduction of funding and volunteers, as well as the need to take precautions to avoid infection.

Several of our staff members have become infected, but, luckily, all have recovered. However, we have lost several friends from sister institutions, of whom we would especially like to honor those mentioned below.

- Julio Madrid
- Oscar Roberto de Paz
- Marco Antonio Palomo Garrido
- Jose Horacio Ramirez Perez
- John Howard Ferguson, Jr.
- Elfriede de Poll
- Ryan Williams
- Williamson Gómez Castillo
- Luis Garcia Gamboa
- Marvin Letrán Velásquez
- Filiberto Martínez Pimentel
- Margarita J. Johnson
- Carmen Cigarroa
- Abraham Humberto Estrada Urzúa
- Aquiles Hernández
- Williamson Estuardo Gómez
- Mygdalia García

To make up for funding shortfalls due to the pandemic, we have we have increased our effort in on-line fundraising platforms such as GlobalGiving, Amazon Smile, Benevity and 1% for the Planet.

We have also benefitted from the institutional support of the Rainforest Alliance, the USAID Regional Coastal Biodiversity Project, The Humane Society International and the Palo Alto Rotary Club.

However, though these funding sources have helped, they don't cover our operating expense and we have not been able to return to pre-Covid funding levels, but we are confident that we will emerge from the Covid pandemic stronger than ever.

We have adopted all the necessary hygiene protocols, and are ready to continue on our journey, braced to meet the larger challenges that faces us: climate change and biodiversity loss.



## Illegal Wildlife Trade



The illegal wildlife trade is not only a threat to the biodiversity of the planet but is also incredibly cruel and wasteful. In May 2020, 18 Red-lored Amazons were found dead and discarded along a road leading from Peten to Guatemala City.



# ARCAS in numbers

# ARCAS Results For **2021**



Animals rescued by  
ARCAS (Hawaii, San  
Lucas and Peten)  
**403**

Animals released by  
ARCAS (Hawaii, San  
Lucas and Peten)

**87**



Number of sea  
turtle eggs rescued  
and incubated at  
the Hawaii Park

**11,500**

Number of sea  
turtle nests  
documented on  
the Hawaii beach  
**2,431**



Visitors to the  
Biodiversity  
Education Center,  
Peten  
**18,206**



Number of  
hectares under  
protection

**4,201**

Number of scarlet  
macaws bred  
in captivity for  
release

**2**



Number of volunteer  
contributed to ARCAS  
wildlife conservation  
efforts 2018-2021  
**526**



Participants in  
Wildlife  
Medicine and  
Conservation  
course, Peten

**13**

# ARCAS Results For **2021**

## Peten

Year	Number Of Volunteers	Volunteer Days
2018	208	2,704
2019	147	2,058
2020	30	1,020
2021	64	1,399



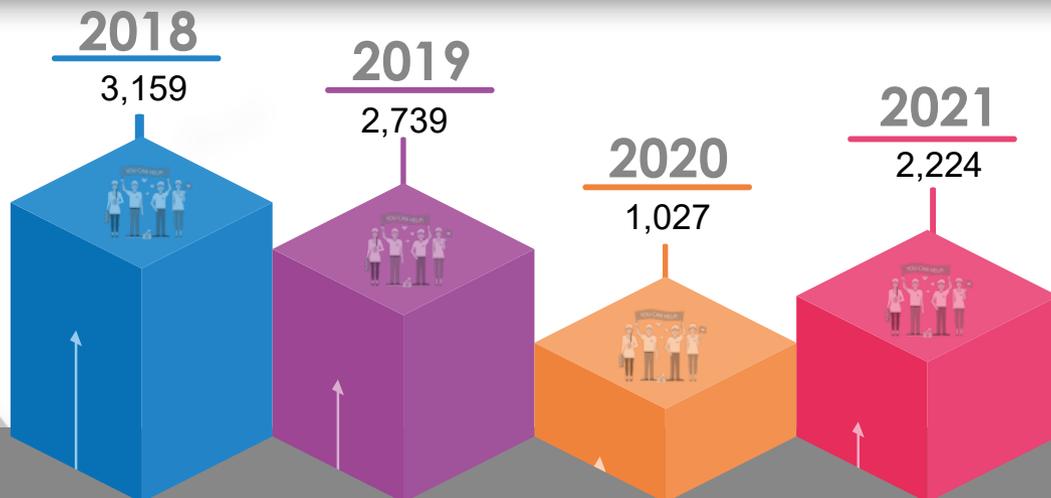
## Hawaii

Year	Number Of Volunteers	Volunteer Days
2018	17	455
2019	34	681
2020	1	7
2021	25	825

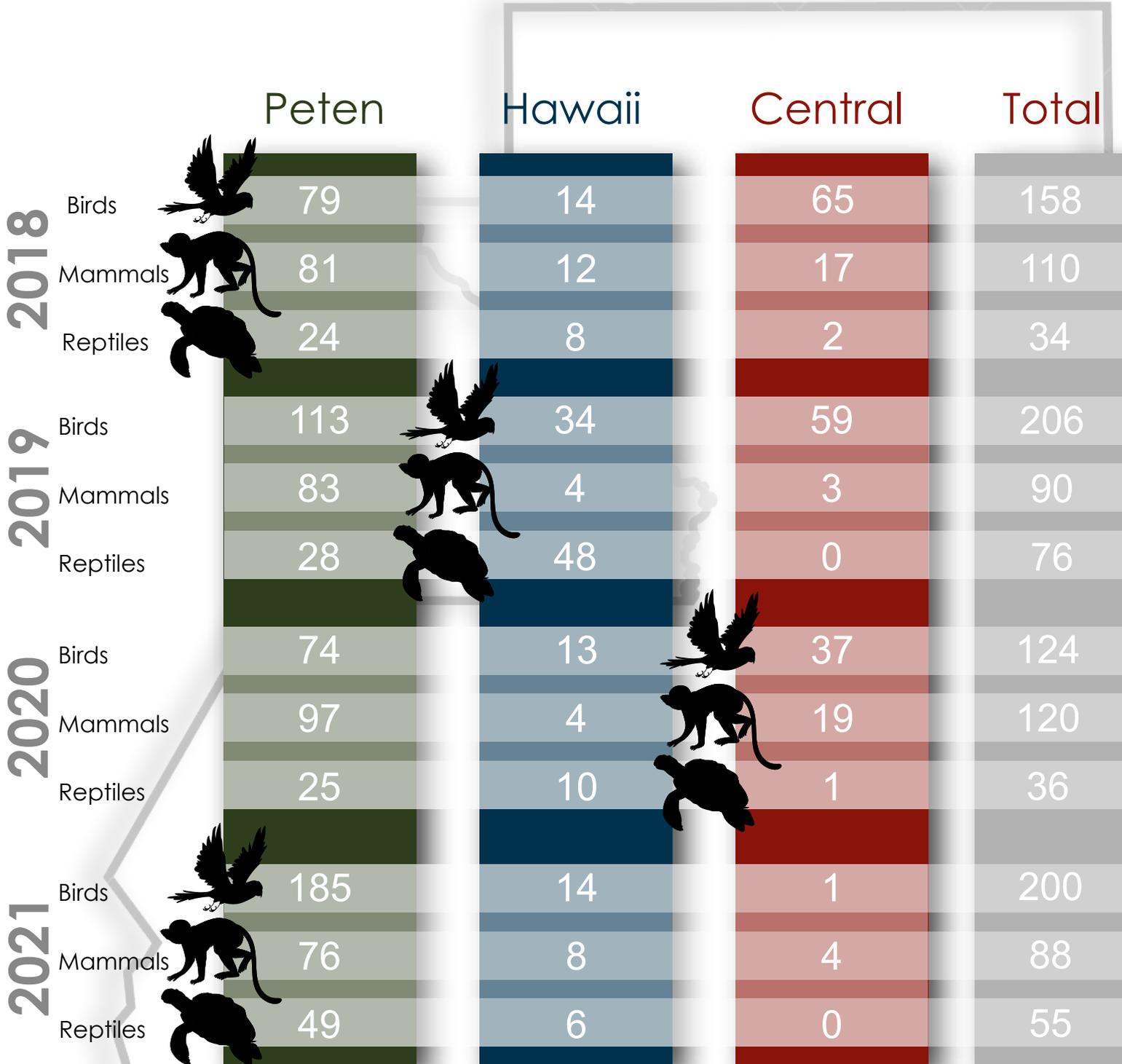


## Total Volunteer Contribution Peten And Hawaii

Year	Number Of Volunteers	Volunteer Days
2018	225	3,159
2019	181	2,739
2020	31	1,027
2021	89	2,224

# ARCAS Volunteers, 2018 - 2021

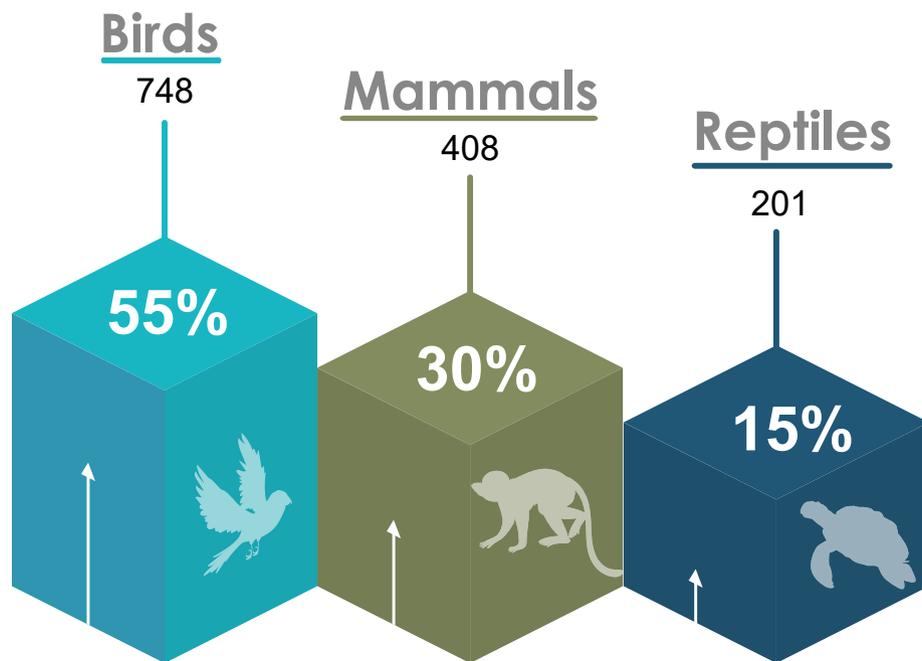


Includes animals confiscated, donated or rescued by ARCAS staff, and animals born in captivity

# Animals Received by ARCAS **2018-2021**

# Total animals received by ARCAS 2018-2021

	Peten	Hawaii	Central	Total
Birds	451	75	222	748
Mammals	337	28	43	408
Reptiles	126	72	3	201
Totals	914	175	268	1,357



Totals in numbers **2018-2021**



Common name  
Nombre común

Scientific name  
Nombre científico

Total

## Birds/Aves

White-fronted parrot/Loro frente blanca	<i>Amazona albifrons</i>	137
Red-lore amazon/Loro frente roja	<i>Amazona autumnalis</i>	101
Yellow-naped amazon/Loro nuca amarilla	<i>Amazona auropalliata</i>	56
Ferruginous Pygmy-Owl/Buho pigmeo	<i>Glaucidium brasilanum</i>	54
Mealy parrot/ Loro Real	<i>Amazona farinosa</i>	33
Mottled owl/ Buho café	<i>Ciccaba virgata</i>	30
Scarlet macaw/Guacamaya Roja	<i>Ara macao cyanoptera</i>	25
White crowned parrot/Cotorra corona blanca	<i>Pionus senilis</i>	24
Keel-billed toucan/ Tucán real	<i>Ramphastus sulfuratus</i>	24
Aztec parakeet/Perica	<i>Eupsittula astec</i>	24
Orange-fronted parakeet/ Perica señorita	<i>Eupsittula canicularis</i>	22
Chachalaca	<i>Ortalis vetula</i>	22
Brown pelican/ Pelicano café	<i>Pelecanus occidentalis</i>	11
Green parakeet/Chocoyo	<i>Psittacara holochlorus</i>	11
Collared aracari/ Tucancillo	<i>Pteroglossus torquatus</i>	9
Great horned owl/Buho cornudo	<i>Bubo virginianus</i>	9
Golden-fronted woodpecker/Carpintero frente dorada	<i>Melanerpes aurifrons</i>	9
Northern potoo/Pajaro palo	<i>Nyctibius jamaicensis</i>	7
Tucaneta esmeralda	<i>Aulacorhynchus prasinus</i>	6
Black-bellied whistling duck/Pijije	<i>Dendrocygna autumnalis</i>	6
Peregrine falcon/Halcon peregrino	<i>Falco peregrinus</i>	5



Due to space constraints, we are not able to list every species we received at ARCAS's rescue center, but below is a list of the principal species we received in 2018-2021.

# Inventory of animals **2018-2021** consolidated by species

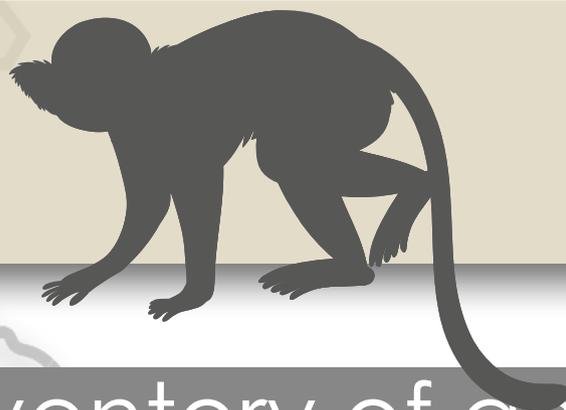
Common name  
Nombre común

Scientific name  
Nombre científico

Total

## Mammals/Mamíferos

Howler monkey/Mono saraguata	<i>Alouatta pigra</i>	60
Opossum/Tacuazin	<i>Didelphis marsupialis</i>	51
Geoffroy's spider monkey/Mono araña	<i>Ateles geoffroyi</i>	35
Squirrel/Ardilla	<i>Sciurus Sp.</i>	34
Oso hormiguero	<i>Tamandua mexicana</i>	33
White-tailed deer/Venado cola blanca	<i>Odocoileus virginianus</i>	32
Coatimundi/Pizote	<i>Nasua narica</i>	32
Raccoon/Mapache	<i>Procyon lotor</i>	21
Grey fox/Zorra Gris	<i>Urocyon cinereogenteus</i>	14
Margay/Tigrillo	<i>Leopardus wiedii</i>	12
Collared peccary/Coche de monte	<i>Pecari tajacu</i>	9
Mexican hairy dwarf porcupine/ Puercoespín enano peludo mexicano	<i>Sphiggurus mexicanus</i>	9
Coyote	<i>Canis latrans</i>	7
Kinkajou/Micoleon	<i>Potos flavus</i>	6
Jaguarundi	<i>Herpailurus yagouaroundi</i>	5
Central American red brocket deer/Venado cabrito	<i>Mazama temama</i>	5



Inventory of animals **2018-2021**  
consolidated by species



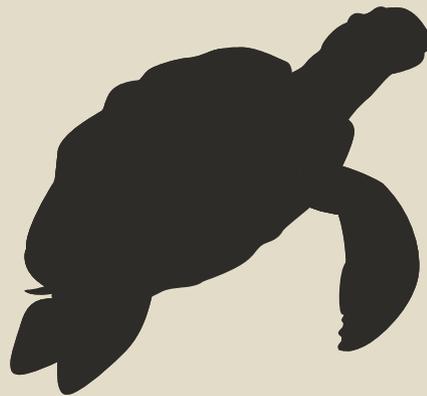
Common name  
Nombre común

Scientific name  
Nombre científico

Total

### Reptiles

Boa/Mazacautá	<i>Boa constrictor</i>	38
Spectacled caiman/Caimán de antojos	<i>Caiman crocodilus</i>	23
Morelet's crocodile/Cocodrilo moreleti	<i>Staurotypus triporcatus</i>	20
Green iguana/Iguana verde	<i>Iguana iguana</i>	18
Central American River Turtle/Tortuga casquito	<i>Dermatemys mawii</i>	9
Mesoamerican slider/Tortuga jicotea	<i>Trachemys venusta</i>	9



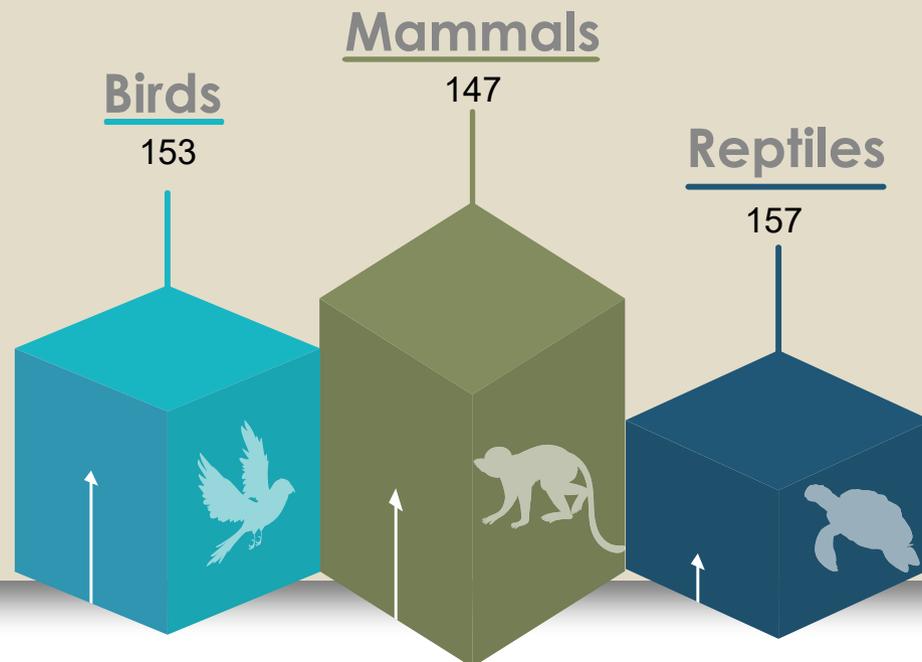
Inventory of animals **2018-2021**  
consolidated by species

# Petén Wildlife Release And Relocation

Unfortunately, many of the animals that ARCAS receives are either in poor health and die in quarantine, are injured, or are ex-pets, accustomed to humans and can never be released back into the wild. It is often cited that only 1 in every 8 wild animals poached and trafficked arrive alive at their destination, but the truth is no one really knows.

However, some rescued animals can be successfully rehabilitated and released. Reptiles are the easiest; birds and mammals often need years of rehabilitation. A spider monkey, for example, can take 6 years between passing through quarantine, the formation of a viable troupe and the various stages of rehabilitation, and finally, release.

The following is a summary of the 457 animals released or relocated to an appropriate sanctuary or reserve by ARCAS in 2018 – 2021.



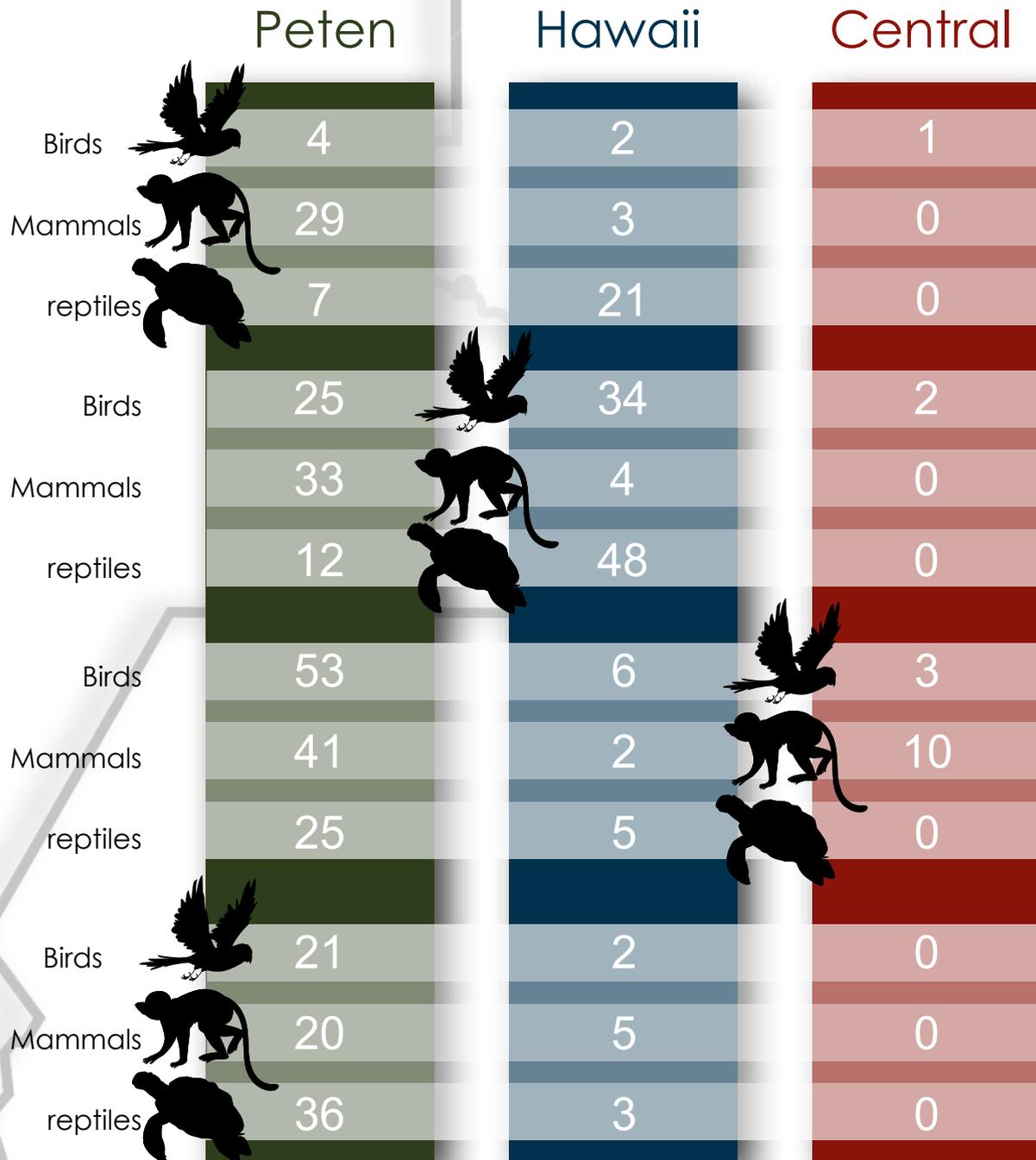
## ARCAS Petén Wildlife Releases 2018-2021

2018

2019

2020

2021



2018

2019

2020

2021

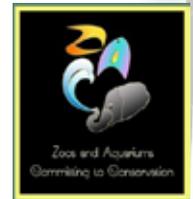
# ARCAS Wildlife Releases 2018-2021

## Total Income and Expenditures, ARCAS 2018 – 2021

	2018		2019		2020		2021	
	<i>Dollars</i>	<i>Quetzals</i>	<i>Dollars</i>	<i>Quetzals</i>	<i>Dollars</i>	<i>Quetzals</i>	<i>Dollars</i>	<i>Quetzals</i>
Total Income	915,766	6,776,669	441,566	3,355,908	316,751	2,407,280	443,810	3,372,956
Total Expenditures	730,064	5,402,470	421,559	3,203,850	349,751	2,655,057	426,447	3,241,000
Total operating expenditures	355,855	2,633,322	354,797	2,696,456	287,730	2,186,746	338,474	2,572,402
Total project expenditures	374,209	2,769,147	66,762	507,394	62,022	468,311	87,973	668,598
<b>BALANCE</b>	<b>185,702</b>	<b>1,374,199</b>	<b>20,007</b>	<b>152,059</b>	<b>-40,109</b>	<b>-323,701</b>	<b>17,363</b>	<b>131,956</b>

# Friends And Donors





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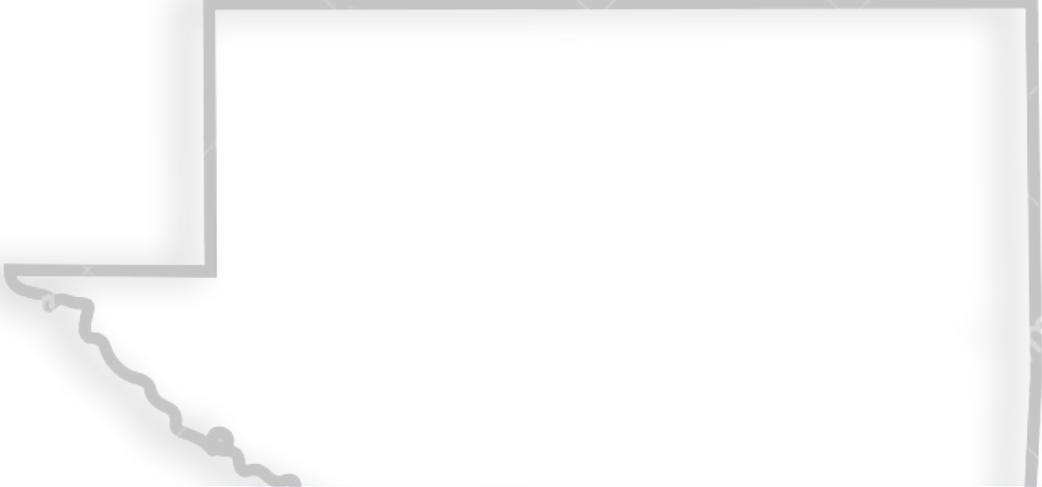
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