

Thriving Parrots

✧ Thriving Planet ✧



Macaw Recovery Network
2022 Annual Report



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Cover Photo: Corey Raffel

Dear friend,

2022 was another fantastic year for MRN and that was made possible thanks to the incredible generosity of our supporters, the excellent guidance of our board and the great MRN team who are so incredibly dedicated. We completed our first year of tracking wild Great Green Macaw (GGM) fledglings, looking at survival and determining where families migrate after the nestlings have fledged. Our Scarlet Macaw (SM) and GGM flock in Punta Islita have produced more chicks and we are moving forward with efforts to reintroduce both species. Through collaborations, we dramatically increased the effort on counting Yellow-naped Parrots (YNP) and discovered the population is much larger than previously thought. The organization is now actively pursuing forest protection through land purchase and the development of the Sarapiquí Rainforest Reserve. The wheels are already in motion with big things coming in 2023. Protecting giant Mountain Almonds and other ancient trees for Macaws, and consequently the entire ecosystem, has far reaching implications, and we are excited to be doing conservation on that scale.

Over the last year the Women Rangers have gone from strength to strength and the depth of our mutual commitment has grown. It is wonderful to see these ladies doing so well with their nursery and to have taken the initiative to start an environmental education program with local kids. This year the network program also took off and we've found new ways to engage with partners and support conservation and conservationists in other countries, benefiting Macaws and parrots elsewhere in the Americas. Taking time to reflect upon our successes over the past year allows us to celebrate the great progress that we have made and that we plan to continue and expand in the future. I am incredibly honored to be part of everything we as one huge team have achieved.

Thank you for being with us on this journey.
With gratitude,

Sam Williams

Sam Williams, Ph.D.
Executive Director



Board of Directors

To complement the Costa Rican registered organization MRN grew in 2022 and formally registered as a public charity in the USA. This evolution means MRN is served by two Boards of Directors that are dedicated to collaboratively spearhead long-term conservation efforts to achieve our mission. We are proud to introduce you to both our Boards, as of March 2023.

Macaw Recovery Network Costa Rica

Mhairi McFarlane

2023 Chair, Nature Conservancy Canada

Tom Lewis, PhD

Vice Chair, MSC Biological Sciences

Dianne Forthman

Treasurer, Retired Educator,
Conservation Volunteer

Andrew Meuer

Secretary & Former Chair, Second Harvest
Inland Northwest

Laura Cruz

Sincronía Consulting

Judith Labelle

Conservation Law & Policy Specialist

Nathaniel Miller

National Audubon Society

Steve Milpacher

World Parrot Trust

Corey Raffel

Strategic planning, Parrot specialist

Macaw Recovery Network U.S.A.

Joseph Cavallaro

Chair, Retired Mission Controller NASA

Kathy Raffel

Secretary, PhD Social Welfare, Health Educator

Nathaniel Miller

Treasurer, National Audubon Society

Christian Freitag

Conservation Law Center

Matthew Kirchhoff

Retired Wildlife Biologist

"Over the years, I've volunteered with Dr. Sam Williams' projects-on Bonaire and in Costa Rica. I've seen first-hand, his knowledge of and passion for conservation. I've also seen first-hand the impacts of poaching and habitat destruction on several species. Working with the incredible MRN team gives me hope for the future and allows me to devote the skills I honed at NASA to my other passion-conservation."

Joseph Cavallaro, Chair MRN USA



Team



Dr. Sam Williams
Executive Director



Sarah de Groot
Director of Development



Luis Wachong Solis
Administrative &
Financial Manager



César Sánchez Morales
Bird Program Manager



Pamela Herrera Barque
Outreach Program
Manager



José Antonio Díaz Luque
Network Manager



Amy Clark



Maria Sol Delechuk



Javier Sánchez Espinoza



Ricardo Jimenez



Marta Figueroa
Matarrita



Fabio Castrillo Rojas

"Real change is impossible without collaboration, cooperation, and consensus." - Simon Mainwaring

Team



Carmen Davila Ruiz



Sandy Salas



Ruperto Quiros
Sanchez



Mario Jimenez Segura



Brandon Zuniga
Sequeira



Ted Tremain



Mauro Ulloa



Noelia Volpe



Carey Wentz

Special *thanks* to

Keats Lewis for her beautiful designs such as this Annual Report
WCN team for sharing their expertise
Jeffrey Worsham for his support on MRN's website
Stuart Goldstein for his ongoing pro-bono legal council
Professor Carl Jones and Professor Jim Groombridge for their council on program planning
Fernanda Hong for serving on the Costa Rica board as Secretary
Dr. Stephanie Lamb from the Colorado Exotic Animal Hospital
Sue Pasquine and Shanna Gebo from ZooTampa for sharing their bird husbandry and veterinarian expertise

We want to thank **Maricela Pizarro Porter** for leading our administrative needs for nine years, and more recently our habitat program. And we thank **James Alcock** for his dedicated bird care at the breeding center.

Our Mission

To protect and recover endangered parrot populations in the Americas.

Our Vision

A future in which parrots and their ecosystems thrive and coexist with local communities



Our Goals



Birds

A Great Green Macaw population in Costa Rica of 2,000 by 2050.
A Yellow-naped Parrot population in Costa Rica of 10,000 by 2050.



Habitat

Protecting nest trees & sequestering carbon through forest protection and restoration.



People

People living within the parrot's range and who have an indirect impact on parrots act in parrot friendly ways.



Network

The average status of endangered parrot species has improved by 2050.

Impact Summary



For the first time in our records, all three species with which we work are increasing in numbers!



100+ participants during GGM count across Costa Rica, Panama, Colombia, Ecuador, and Honduras



10 wild GGM chicks tracked with a radio collars



40 reports sent in through the Macaw-hotline



6 Women Rangers trained in habitat restoration and tree nursery management



3048 trees grown by Women Rangers



31 native tree species being cultivated



3 workshops developed by Women Rangers for local schools



25 local people joined habitat restoration activities hosted by the Women Rangers



5,000 km² (3,100 sq miles) of rainforest monitored through audio recorders



Birds

In 2022, MRN led the **world's first range-wide population census of the Great Green Macaw**, together with local partners. In doing so, we aim to significantly scale our impact and streamline recovery efforts throughout the **six countries** where these beautiful birds once flourished. The census had over 50 participants from 39 different organizations, covering **37 different roost sites** in Costa Rica, Panama, Colombia, Honduras and Ecuador. The results were promising, and in Costa Rica alone we recorded 500 sightings, the largest number of individuals to date. With a total of 608 individuals counted, this data confirms the species is extremely rare, and that the Costa Rican population remains the species' stronghold.

The best way to scale our impact across the species' range is through collaboration:

"Through participating in the census, we confirmed the presence of the Great Green Macaw, which wasn't recorded in the Paramillo National Natural Park in Colombia for over 20 years. We also connected and got involved with the local community. Thanks to MRN, we have a window of opportunity to act in favour of the conservation of the species, the ecosystem, and the people within. The journey is about to start!"
- Mónica Franco Gutiérrez, Horizon Conservation Colombia

Funded by Indianapolis Zoo among others, ten wild Great Green Macaw chicks were fitted with radio transmitters. This is the first time this technology has been used on the species. Findings suggest the survival rate to be between 70% and 75% after one year, but further research is needed. Field team leader Mario Jimenez, BSc, who spent countless hours tracking the wild birds across the difficult terrain, shares a special moment on his quest to find Lilo, one of the chicks that had gone missing:

"I saw four Great Green Macaws flying towards me. Suddenly they decided to perch in front of me in a Laurel tree about 50m(16 ft) away in a pasture. I lifted my binoculars and had a good look at them. I was in shock when I realized who was right in front of me. It was Lilo with her parents and sibling! I can't put into words how wonderful that moment was, I even cried a little from happiness. Can you imagine the feeling? To be looking for a missing Great Green Macaw chick in a huge and densely forested area, and she decides to come to me! That was something remarkable for me! Lilo was in a perfect condition, so skillfully foraging high up in this tree. I quickly confirmed it was Lilo by checking the receiver. At that moment a single thought entered my mind; *I was made to work with this amazing species!!*"

-Mario Jimenez

Fun Fact

Great Green Macaw fledglings continue to follow their parents and beg for food even when they can forage for their own food, and the parents are beginning a new breeding season.



Birds

In addition to the “Big Year” for Great Green Macaw, we **participated in a census of the critically endangered Yellow-naped Parrot across Costa Rica**. Never conducted at such a large scale, we partnered with researchers from Universidad de Costa Rica, University of Texas A&M University, University of New Mexico and were supported by countless park rangers, biologists, and bird enthusiasts.

With improved practices and more count points compared to the previous year’s census, **a more accurate population size was confirmed**. 2,300 individuals were counted, nearly twice as many compared to the previous census. We are cautiously optimistic about what this means for the species, but we are carefully analyzing the data to better understand fluctuations in population size over the past decades and its meaning for the long-term survival of the species.



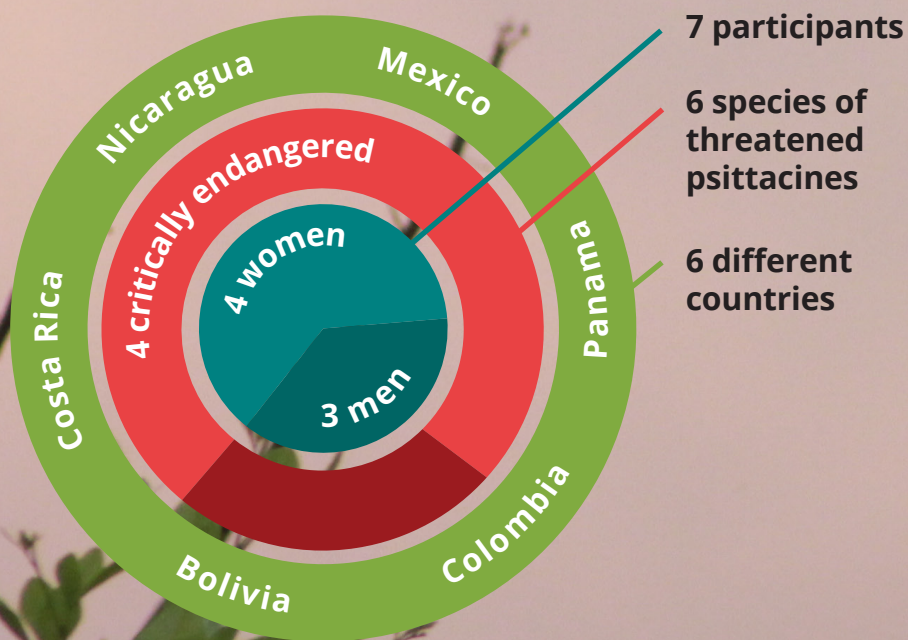
Birds

The field team in Punta Islita obtained impressive data on the dispersal and breeding of the reintroduced Scarlet Macaw (SM) population in Punta Islita. A total of six wild chicks hatched and fledged, another record set. In addition to studying nest activity, there was an increased participation by the local community who actively reported observations throughout the season.

The combined data on the presence or absence, and survival and seasonal migrations, improve the ability to estimate population size. It also helps predict the population recovery or decline over time, which in turn helps guide effective conservation management for the species to recover and thrive

Parrot *Mastermind* Group

As part of the Network Program, the first Parrot Mastermind group was formed and met bi-monthly. MRN brings together conservationists from across Latin America to form a peer to peer mentoring group that supports the professional and personal development of participants. Reaching beyond just the sharing of technical expertise, the Mastermind group aims to help conservationists be effective and sustainable for long term impact.



A Future for Conservation

During the 20th century, 54% of Costa Rica's forests were lost, primarily for conversion to cattle pastures and to farmland for crops. In the Alejuela Province, the heart of the range of the GGM in Costa Rica, loss of forest land was even worse, with only 30% of the forest remaining in 1984. A slight increase in forest cover, to 35% (Jadin et al., 2013), has occurred since then. Unfortunately, much of the remaining forest land is fragmented into small parcels or is otherwise unsuitable as GGM habitat.

Studies confirm that the Great Green Macaw heavily relies on the Mountain Almond Tree, which provides the majority of its food and nesting sites. Extensive harvesting for its hard wood has resulted in the Mountain Almond being endangered." In 2022 the IUCN placed the protection of the species high up on their agenda and we are hopeful this will help in our efforts to return these giants towering high above the canopy, sheltering thousands of animal and plant species. Although it takes many years for an Almond tree to mature, this is a giant step to slow down the decline whilst we plant seedlings to ensure these purple crowning giants become a common sight again.

Mountain Almond Tree

Scientific name: *Dipterix panamensis*
Height: 40m (130ft)
Interest for Macaws: nesting & food
Time of food availability: October-March
Current state: endangered because of its hard wood

Guava

Scientific name: *Inga spectabilis*
Height: 30 m (100ft)
Interest for Macaws: food
Time of food availability: April-June
Current state: common

Crabwood

Scientific name: *Carapa nicaraguensis*
Height: 30m (100ft)
Interest for Macaws: nesting & food
Time of food availability: July, August
Current state: common

Yemeri

Scientific name: *Vochysia ferruginea*
Height: 40m (130ft)
Interest for Macaws: nesting & food
Time of food availability: Sept-Oct
Current state: common

Titor

Scientific name: *Sacoglottis trichogyna*
Height: 50m (165ft)
Interest for Macaws: food
Time of food availability: October
Current state: critically endangered because of its hard wood

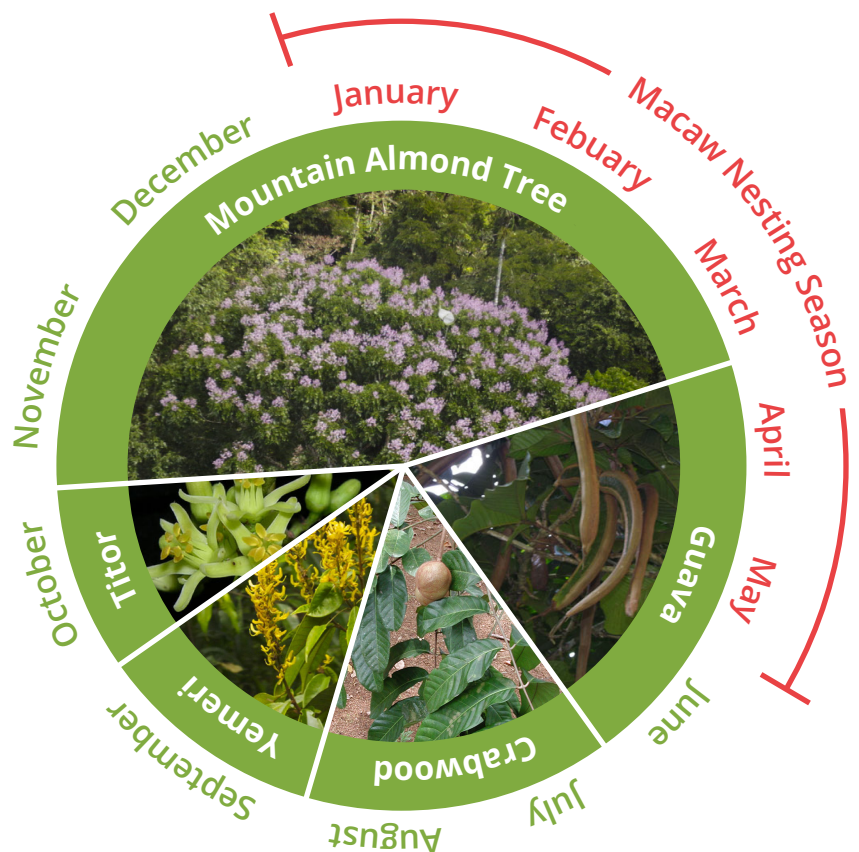


photo source <https://sura.ots.ac.cr/florula4/index.php>

People & Habitat

Central to the long-term scope of our Parrot and Habitat Recovery programs are local communities. [The Women Rangers, who became involved with MRN when they lost their jobs during the COVID pandemic, continue to make great strides for Great Green Macaws.](#) Supported by our Pamela Herrera, the six Rangers officially inaugurated “Casa del Titor” nursery, named after an important tree species for the Macaws that is very difficult to germinate. The native tree nursery, located in the women’s hometown of Boca Tapada, currently houses over 3,000 plants consisting of 31 different species that are important for the Great Green Macaw. Many of these trees are also endangered in the wild. The official opening was a major milestone not only for MRN, but for the Rangers themselves who described the experience like getting a new house.

Safeguarding a future means bringing along the next generation, so they too care about Parrots, the habitats they coexist with, and equipping them with practical solutions to ensure they won’t all disappear forever. Through developing and facilitating indoor and outdoor workshops, the Women Rangers inspire local school children about the magnificent parrots and the tropical rainforest they inhabit. A project that is sowing the seeds for potential future Rangers, in addition to germinating those seedlings in the nursery!



“Building and inaugurating the Casa del Titor Nursery has been as important to me as if I had been given a house as a gift. I saw the nursery project as a very distant dream, but seeing it come true fills me with enthusiasm”.

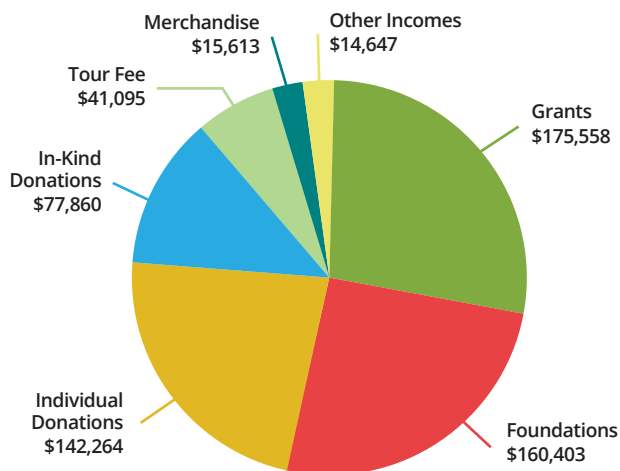
-Justina Urbina, Women Ranger

Financial Report

Thanks to the incredible support from our community, who continue to believe in what we do, a bigger impact could be made for Parrot conservation in 2022.

Incomes

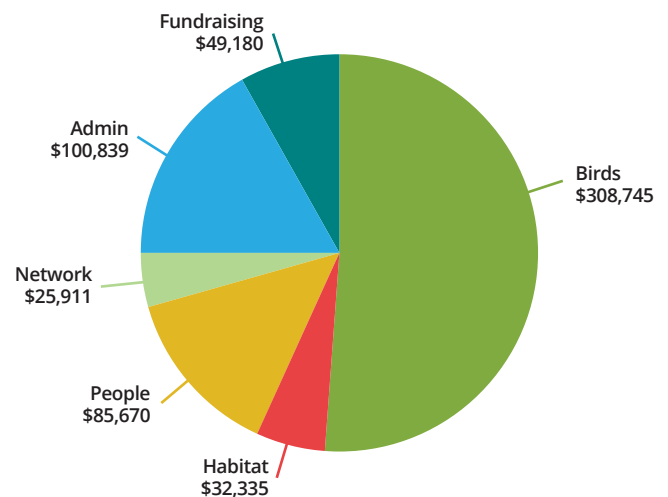
Grants	\$175,558
Foundations	\$160,403
Individual Donations	\$142,264
In-kind Donations	\$77,860
Tour Fee	\$41,095
Merchandise	\$15,613
Other Incomes	\$14,647
Total	\$627,440



Expenses

<i>Birds</i>	\$308,745
<i>Habitat</i>	\$32,335
<i>People</i>	\$85,670
<i>Network</i>	\$25,911
Admin	\$100,839
Fundraising	\$49,180
Total	\$602,680

**Surplus carried over to 2023* \$24,760





Partners

Parrot Conservation is only possible when people and organizations across the world work together. MRN is grateful for its growing network of credible funding and conservation partners, such as the following:



Gratitude to Supporters *Thank you*

Parrot conservation would not be possible without the incredible family of supporters. MRN is grateful for all donors who continued to give generously and to those who joined the family in 2022.

Conservation Visionaries >\$10,000

Anonymous
Benjamin Olewine IV
David and Marcia Murray
Elinor P. Baker Foundation
Greater Los Angeles Zoo Association
Happy Hollow Park and Zoo
Kathy and Corey Raffel
Keefe Family Foundation
Laguntza Foundation
Margaret Harris
Marge and Thom Limbert
Paul Thomson
VanTienhoven Foundation

Benefactors \$2,000-\$4,999

Andrea Ewald and Stephan Meyer-Ewald
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Giorgio and Marcus Zoia
James Eubank
Meryt and Peter Harding
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Roberta Selma Browne and Paul Vosper
Rudolf Capek
Tracy Aviary Conservation Fund
Zoo Miami Foundation
ZooTampa at Lowry Park

Patrons Circle \$5,000-\$9,999

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Suzanne Corrington

Advocates \$1,000-\$1,999

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Janie Mangus
Kathryn Fox
Kenneth Braun
Kristine Karnos and Jay Mitchell
Leo and Stephanie LeGoy
Matthew and Patty Kirchhoff
Mhairi McFarlane and Brent Sinclair
Rachel and Tab Atkins
Robert HAAS Rothschild Foundation
Sandi Perlman
Simon and Enas Muzio (Fidelity Charitable)



"The LaGuntza Foundation made the initial decision to support the McCaw Recovery Network (MRN) because it fits the foundation's mission of species protection and recovery across borders. That MRN is so strategic and organized in its approach to conservation is a big plus and why the foundation continues to support MRN."

- Sue MacGrath, Founder and Chair LaGuntza Foundation

Gratitude to Supporters

Thank you

Guardians \$250-\$999

Adeel Khan
Al Larson
Albert Benmayor
Alexandra Schloemmer
Alice Charn Yew
Andrea Asaro
Becky Long
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Benevity - Google employee match
C Lockhart Mckelvy
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Guardians \$250-\$999

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Stephen and Nancy Penman
Susan Hons
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Thurlow Underhill
Timothy and Marcie Powell
Tom Fountain
Wayne Parks
William and Emily Luddy
Wolfgang Hoeck



2023 Objectives

Scope and Strategies

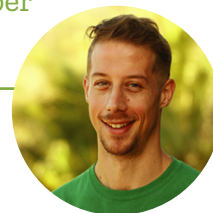
Our 2023 objectives have never been so ambitious, so we are grateful to count on your support to make all this possible:

- Our Great Green Macaw field team will expand to gather more data about survival, and spatial distribution across the year. And the second range-wide census will be further developed.
- The team at the breeding center will focus on increasing the hatching rate. In addition to releasing the twelve Scarlet Macaws in 2023, we hope to finally release the 27 captive bred Great Green Macaw juveniles.
- The “Casa del Titor” nursery continues to grow and the Women Rangers will produce 12,000 trees, lead 9 reforestation events where 5,500 trees will be planted, and educate and involve 200 local school children in the process.
- Fifty local police officers will be trained to enforce illegal ownership of Yellow-naped Parrots
- To further scale our impact, the Network will be developing the second Mastermind group, bringing together 18 key conservationists working with the most endangered parrots from the Americas.
- MRN will embark on a New Era by realizing the Sarapiquí Rainforest Reserve. Securing vulnerable land strategically will help protect Macaws and all other vital species that call the forest their home.



“If local communities do not have climate-resilient livelihoods, then agricultural intensification will continue to expand, causing significant and increasing damage to biodiversity in the region. Fortunately for you and me, those who value nature in all its diverse and amazing glory, are our solutions. Empowering local communities and providing them with the tools to become more resilient is one of the best ways. Tools such as silvopasture, increasing the number of trees in pastures, have shown promise in other regions. Where this is not possible, for example when large private farms are put up for sale, another solution is land protection: the purchase of land to protect it for posterity. Empowering local communities and protecting land. We have the solutions, we just need to do them at a scale that will make a difference.”

-Tom Lewis PhD, MRN Board Member



Help Macaws *Thrive*

If you are interested in leaving a legacy through the purchase of vulnerable rainforest, or otherwise, please email sarah@macawrecoverynetwork.org



Donate



www.macawrecoverynetwork.org

Send a check:

Macaw Recovery Network USA

PO Box 448 Seabrook, TX 77586, US