

Nidos Adoptivos of “Blue Beard” Macaws 2008-2009



Chicks 010 and 015

Introduction

The Blue-throated Macaw (*Ara glaucogularis*) is a restricted range species endemic to the department of Beni in Bolivia. It is one of the most threatened bird species in the world (Birdlife International 2007). It is believed that one of the principal factors affecting the population size of this species is the lack of available nest sites and the inter-species competition with the more common and abundant Blue and Gold Macaw (*Ara ararauna*) that shares the same ecological niche.

In 2005 the Asociación Armonía/Loro Parque Fundación Blue-throated Macaw Conservation Program experimented and placed 20 artificial nests in the southern zone of the species distribution. Beginning the following year, Bird Endowment formed a part of the initiative for conservation of the Blue-throated Macaw and created the "Nido Adoptivo™" project for adoption of artificial nests, which entails searching for donors to sponsor the nest boxes annually. Each participant is honored as an "El Beni-Factor™" for a year.

<http://www.birdendowment.org/inBolivia/nidoAdoptivo.shtml>

These studies have demonstrated that the lack of cavities in trees and palms in the Llanos de Moxos habitat could be a limiting factor in the reproduction of many species of birds including the Critically Endangered Blue-throated Macaw.

Design of the nests

The design of the model for the nests was taken from information obtained in the field of a successful natural nest found in a hollow of a palm where two chicks were hatched and raised. Several aspects were taken into consideration such as latitudinal location, suitable depth -- both vertical and horizontal -- entrance shape and diameter, etc.

The artificial nest consists of a rectangular box 1m. long x 30 cm. (fig.1), with an entrance hole 12 cm. in diameter or 12 x 25 cm. in other cases, although this year we experimented with new measurements and designs of the nest entrance. On one side of the box there is a small inspection door to facilitate the monitoring of the reproductive process.



Figure 1. Artificial nest occupied by Blue-throated Macaws

The nests are constructed with the wood of Palo Maria (*Calophyllum brasiliense*) and Ochoó (*Hura crepitans*) and are placed at a height of 5 m above ground. The majority of them have been situated in Totaí palm trees (*Acrocomia aculeata*) in areas where Blue-throated Macaws have been seen frequently. The Palo Maria wood is more difficult for them to destroy and for that reason we have chosen to use this material.

Monitoring the artificial nests occurs along with that of natural nests. Nest box inspections occur every 15 days. The data is collected in a predetermined schedule.

Results

Thanks to the effort of Bird Endowment with its “Nido Adoptivo™” project, 43 nest boxes were funded by different persons who want to help the conservation of the Blue-throated Macaw.

One year ago our goal was to install 50 new nest boxes in the first-ever Blue-throated Macaw Reserve located north of the city of Trinidad. We also wanted to maintain the nest boxes previously established in the southern range.

During this transition, we decided that each donor could “own” two, one in the new reserve and another one in the south zone. Therefore each “El Beni-Factor” sponsored two nest boxes for this one-time expansion of the project.

The south zone was the one that encountered Macaw activity during the breeding season. Nevertheless, the nests in the reserve were occupied by other species of birds. Next is a summary of the results of the “Nidos Adoptivos” in the south zone, since the nests placed in the reserve currently do not have as much relevance.

Table 1. Initials, sponsor and species that used the nests in the 2008-2009 breeding year

Nest	Name	Location	Activity
1#	Katy Secor	S 15° 19' 22" W 064° 37' 40"	Blue-and-Yellow Macaw, laid two eggs, hatched one chick which fledged in good health
WJ	Jennifer White	S 15° 19' 11" W 064° 37' 05"	Blue-and-Yellow Macaw, laid two eggs, hatched one chick which fledged in good health
WR	Wayne Rankin	S 15° 18' 43" W 064° 37' 06"	Blue-and-Yellow Macaw, laid three eggs, hatched one chick which fledged in good health

RW	Wayne Rankin	S 15° 18' 00" W 064° 37' 55"	Blue-and-Yellow Macaw, laid two eggs, hatched two chicks which were predated by unknown animal
FC	France Archambault and Calvin Embry	S 15° 18' 0" W 064° 37' 57"	Blue-and-Yellow Macaw, laid three eggs, hatched two chicks which fledged in good health
BA	Blue-throated Macaw Yahoo Group/ Jim P	S 15° 18' 02" W 064° 37' 58"	Blue-and-Yellow Macaw, laid three eggs, hatched one chick which fledged in good health
NF	Noelle Fontaine	S 15° 17' 19" W 064° 38' 46"	Blue-and-Yellow Macaw, laid three eggs, hatched two chicks, one died and the other fledged in good health
SC	Susanne Cochran	S 15° 18' 16" W 064° 38' 09"	Blue-and-Yellow Macaw, laid three eggs, hatched three chicks which fledged in good health
VB	Vicki Baiamonte	S 15° 17' 49" W 064° 38' 47"	Blue-and-Yellow Macaw, laid four eggs, hatched two chicks which fledged in good health
DE	Eva Dicker	S 15° 17' 45" W 064° 38' 55"	Black-bellied Whistling Duck laid four eggs
DC	Claire Dicker	S 15° 17' 24" W 064° 38' 52"	Black-bellied Whistling Duck laid nine eggs
SR	Dr. and Mrs. Robert Stonebreaker	S 15° 17' 20" W 064° 38' 46"	Blue-and-Yellow Macaw, laid three eggs which were predated. Later Black-bellied Whistling Duck laid one egg which was predated.
JL	Lisa Johnson	S 15° 17' 18" W 064° 39' 49"	No activity
JE	Jennifer White	S 15° 17' 19" W 064° 38' 44"	Blue-and-Yellow Macaw, laid two eggs which were predated. Later Black-bellied Whistling Duck occupied the nest and laid 17 eggs

			which all hatched.
PU	Parrot University	S 15° 15' 07" W 064° 44' 28"	Blue-and-Yellow Macaw, laid three eggs, hatched three chicks which fledged in good health.
TO	Uselton Family Foundation	S 15° 15' 08" W 064° 41' 31"	Blue-and-Yellow Macaw, laid three eggs, hatched three chicks which fledged in good health
NS	Uselton Family Foundation	S 15° 14' 57" W 064° 42' 10"	Streaked Flycatcher laid three eggs, hatched three chicks
US	Uselton Family Foundation	S 15° 14' 53" W 064° 42' 06"	Blue-and-Yellow Macaw, laid three eggs, hatched two chicks, one died and the other fledged in good health
EL	Uselton Family Foundation	S 15° 14' 54" W 064° 42' 09"	Blue-and-Yellow Macaw, laid three eggs, hatched two chicks which were predated when they were very young
DM	Daina Mahone	S 15° 12' 50" W 064° 43' 18"	Blue-and-Yellow Macaw, laid three eggs which were predated. Later Black-bellied Whistling Duck with six eggs and also White-eyed Parakeet with two eggs. At the end, ducks hatched.
RR	Margo and Randy Rose	S 15° 12' 34" W 064° 43' 37"	Blue-and-Yellow Macaw, laid two eggs, hatched two chicks which fledged in good health.
KR	Kathryne Thorpe	S 15° 15' 16" W 064° 43' 48"	Blue-and-Yellow Macaw, laid three eggs, hatched three chicks but all died from unknown cause.
LS	Bolivar the BTM	S 15° 12' 15" W 064° 41' 01"	Blue-and-Yellow Macaw, laid three eggs, hatched two chicks which were predated.
CP	PEAC-Cleveland	S 15° 11' 56" W 064° 43' 41"	No activity
KS	Katy Secor	S 15° 11' 43"	Blue-and-Yellow

		W 064° 43' 22"	Macaw, laid three eggs, hatched two chicks which were predated, Later Blue-throated Macaw laid three eggs, hatched three chicks, but one week before fledging they were stolen by poachers/ bird traffickers.
BJ	Janice Boyd	S 15° 11' 31" W 064° 43' 10"	Black-bellied Whistling Duck laid 21 eggs, all hatched.
WP	Wendy's Parrots	S 15° 11' 29" W 064° 43' 08"	Blue-and-Yellow Macaw, laid three eggs, hatched one chick which died after one week.
HF	Gamini and Lisa Ratnavira	S 15° 11' 25" W 064° 43' 11"	Blue-and-Yellow Macaw, laid two eggs, hatched two chicks which fledged in good health. Later nest was occupied by Barn Owl which laid six eggs, hatched four which fledged successfully.
MM	Mark and Daina Mahone	S 15° 11' 25" W 064° 43' 13"	White-eyed Parakeet laid four eggs, hatched one chick which fledged successfully
ASC	Arizona Seed Cracker Society	S 15° 16' 30" W 064° 46' 01"	Blue-and-Yellow Macaw, laid three eggs, hatched two chicks which fledged in good health
AST	Avicultural Society of Tucson	S 15° 16' 30" W 064° 46' 00"	No activity
JJ	Jana Julleis	S 15° 16' 27" W 064° 45' 58"	Black-bellied Whistling Duck laid 40 eggs
LSR	Bird Endowment	S 15° 16' 15" W 064° 46' 02"	Blue-and-Yellow Macaw, laid three eggs, hatched three chicks which fledged in good health.
RG	Rigoletto Kayla Grasso, BTM	S 15° 16' 09" W 064° 46' 04"	Blue-and-Yellow Macaw, laid three eggs, hatched three chicks which fledged in good health.
LIN	Blue-throated Macaw	S 15° 16' 03"	Blue-and-Yellow

	Yahoo Group/ Rick G	W 064° 45' 05"	Macaw, laid three eggs, hatched two chicks which fledged in good health.
GB	Good Bird Inc.	S 15° 15' 32" W 064° 45' 28"	Dormitory of Barn Owl
CJ	Karen C. Justice	S 15° 15' 32" W 064° 45' 28"	Black-bellied Whistling Duck laid 40 eggs
BT	Blue-throated Macaw Yahoo Group/Steve K	S 15° 15' 31" W 064° 45' 26"	No activity
BH	Brenton Head	S 15° 15' 29" W 064° 45' 26"	No activity
MW	Westech Mechanical	S 15° 15' 19" W 064° 45' 20"	Blue-and-Yellow Macaw, laid three eggs, hatched three chicks which fledged in good health
AS	Rocky Mountain Society of Aviculture	S 15° 15' 02" W 064° 45' 05"	No activity
IC	Mark and Daina Mahone	S 15° 15' 17" W 064° 46' 00"	No activity
C2	Daisy and May	S 15° 13' 02" W 064° 40' 47"	Blue-throated Macaw laid two eggs, hatched two chicks which fledged in good health.

All of these nests were placed in trees on cattle ranches in the southern range of distribution. These are: Esperancita, Las Trancas, La Avenida, Santa Rosa de Justiniano, Getafe, La Asunta and La Cantina.

Of the 43 nest boxes monitored, two were occupied by Blue-throated Macaw (*Ara glaucogularis*) and 27 by Blue-and-Yellow Macaw (*Ara ararauna*); the nest boxes were also used by White-eyed Parakeet (*Aratinga leucophthalmus*), Black-bellied Whistling Duck (*Dendrocygna autumnalis*), Barn Owl (*Polistes dominulus*) and Streaked flycatcher (*Myiodynastes maculatus*) etc. (table 2). Some nest boxes were occupied by three species of birds.

Table 2. Number of artificial nests occupied by different bird species in 2008-2009

Species	Common name	Number of nest boxes occupied
<i>Ara ararauna</i>	Blue-and-Yellow Macaw	27
<i>Dendrocygna autumnalis</i>	Black-bellied Whistling Duck	7
<i>Ara glaucogularis</i>	Blue-throated Macaw	2
<i>Aratinga leucophthalmus</i>	White-eyed Parakeet	2
<i>Polistes dominulus</i>	Barn Owl	2
<i>Myiodynastes maculatus</i>	Streaked Flycatcher	1

Two nest boxes were occupied by Blue-throated Macaws. Nest box **KS** adopted by **Katy Secor** was successful with the hatching of three chicks. Unfortunately, they were stolen one week before fledging by unknown people. The chicks have the following identification with a steel band on the leg: 012 Female, 013 Male and 014 Male.

Another nest box occupied by Blue-throated Macaws was **C2** adopted by **Daisy and May**. Two chicks were raised successfully. They have the following identification with a steel band on the leg: 010 Male and 015 Female. The chicks fledged from nest box C2 on 20 August 09.

Activities for the 2009 - 2010 breeding season

Aside from the 51 existing nest boxes, we would like to place 20 new nest boxes in the southern distribution area. In the Reserve we want to install 50 more nest boxes than are already there -- making a total of 171 nest boxes.

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