

BLADEN NATURE RESERVE RAPTOR EXPEDITION

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SUMMARY

As part of a country-wide survey in Belize on the enigmatic Solitary Eagle (*Harpyhaliaetus solitarius*) the Belize Raptor Research Institute (BRRI) in collaboration with Ya'axché Conservation Trust (YCT) set out on an expedition to survey a portion of the Bladen Nature Reserve from 9-12 March 2012. The members of the expedition included Lee McLoughlin (YCT Protected Areas Manager), Gail Stott (YCT Botanist), Victor Bonilla (YCT Ranger and Bird Enthusiast), Wayne Hall (Independent Film Maker), Marion Bolon (Cockscomb Ranger), Fredirico (Cockscomb Ranger), and Ryan Phillips (BRRI, Executive Director and Raptor Biologist). The objective of the expedition was to survey for Solitary Eagles and other raptors starting from Bfree and ending in Que Brada de Oro, which covered 12.9 kilometers one way of the Bladen River valley.

On the 4 day expedition, 14 raptor species (including members of the Cathartidae, Strigidae, Accipitridae, and Falconidae families) were observed, which included the following species: Turkey Vulture *Cathartes aura*, King Vulture *Sarcoramphus papa*, Osprey *Pandion haliaetus*, Double-toothed Kite *Harpagus bidentatus*, White Hawk *Leucopternis albicollis*, Great Black-Hawk *Buteogallus urubitinga*, Ornate Hawk-Eagle *Spizaetus ornatus*, Black-and-white Hawk-Eagle *Spizaetus melanoleucus*, Barred Forest-Falcon *Micrastur ruficollis*, Bat Falcon *Falco ruficularis*, Spectacled Owl *Pulsatrix perspicillata*, Central American Pygmy-Owl *Glaucidium griseiceps*, Mottled Owl *Ciccaba virgate*, and Black-and-white Owl *Ciccaba nigrolineata*. No Solitary Eagles were observed during these days, but more time needs to be spent on multiple high peaks with far views to properly assess the status of this rare eagle in Bladen Nature Reserve. Assessment of habitat for Solitary Eagle indicates that the terrain in the area that was covered during this trip is good foraging habitat, but may not be suitable nesting habitat. Solitary Eagles nest in very steep terrain and are one of the only raptors in Belize that rely on updrafts for gaining altitude and soaring, which these areas are not steep enough from what we know of the species. To date, only 3 nests of the species have been discovered, respectively, and all were found in Pine Forest, so it is not understand if they nest in broadleaved forest. They likely do, but all the records from broadleaved forest could be from foraging or non-breeding individuals, as they have large home-ranges and cover large areas in a short amount of time because of their soaring abilities. I suspect they could be nesting in the Maya Divide within Bladen Nature Reserve.

Species that were not observed, but likely occur in the Bladen Nature Reserve are listed in Table 1.

SPECIES ACCOUNTS

Turkey Vulture *Cathartes aura*

Multiple individuals were observed coursing low over the forest or soaring high throughout the area we surveyed. Likely, migrants passing through and breeding individuals were observed.

King Vulture *Sarcoramphus papa*

Only 1 individual was observed in Que Brada de Oro soaring high on 11 March. The individual was an immature in Plumage III. It takes King Vultures 6 years to reach their adult plumage and maturity. I suspect breeding to occur within BNR and individuals should be observed year-around.

Osprey *Pandion haliaetus*

A single adult individual of the *P. h. carolinensis* subspecies was observed soaring low over Bladen River in the Richardson's valley on 9 March. This subspecies is a winter resident or transient in Belize, so this species should only be observed between September-April in BNR.

Double-toothed Kite *Harpagus bidentatus*

During a 3 hour point-count in Que Brada de Oro on March 11 five different individuals were observed soaring high displaying and courting. Often individuals were in pairs. This species is a resident and breeding begins in March, which is what we observed in BNR. A common species in BNR.

White Hawk *Leucopternis albicollis*

One adult individual was observed 2.4 kilometers southwest of Richardson's Valley on the Bladen River on 11 March. Surprisingly, this was the only individual observed, as I would suspect White Hawks to be common in BNR.

Great Black-Hawk *Buteogallus urubitinga*

Three adult individuals were observed and breeding was confirmed in Que Brada de Oro as a pair was observed courting and copulating on 11 March (Figure 2). The other individual was observed on 11 March 2.4 kilometers southwest of Richardson's Valley. This species is often confused for Solitary Eagle as plumage is very similar and no field guides properly depict how to differentiate between the two species. Great Black-Hawks are common in BNR, so caution needs to be taken when identifying *Buteogallus* and *Harpyhaliaetus*.

Ornate Hawk-Eagle *Spizaetus ornatus*

A pair was observed soaring low over the canopy and vocalizing on 10 March .65 kilometers east of the confluence in Que Brada de Oro on the Bladen River (see map). The male was considerably smaller in size than the female. A nest is probably close to this location due to the pair's behavior.

Black-and-white Hawk-Eagle *Spizaetus melanoleucus*

A known nest located near the Calera area (16.54299°N/88.79036W) was surveyed on 9 March and 11 March (Figure 3). On 9 March, three individuals were observed soaring low over the nest. Due to the far distance, I could not determine the age of the individuals, but I assume that there were two adults and one juvenile, since the adults were observed incubating in 2011. *Spizaetus* species have a long dependency period and the juvenile born in 2011 should still be present around the nest-site as observed. At one point one the birds perched in the nest tree for a few minutes before flying off and out of sight. On 11 March, no birds were observed near the nest-site. The nest was visited and photos were taken of this rare species. To date, only six nests have been discovered of this species, this nest being the sixth. There are only two nests known in Belize, this nest and one on the Hidden Valley Private Reserve near Mountain Pine Ridge. This species is considered rare throughout Belize and is nowhere common.

Barred Forest-Falcon *Micrastur ruficollis*

A single bird was heard vocalizing on 11 March in the Richardson's Valley. This is the only location we heard this species, which is very vocal during March during the onset of the breeding season.

Bat Falcon *Falco rufigularis*

A single adult was observed flying low over the Bladen River in the Richardson's Valley headed towards the karst cliff to the east, which may be a nesting site. With it nearly dark we could not determine if flew into the cliff. Further surveys should be conducted to determine if they are nesting in this cliff.

Spectacled Owl *Pulsatrix perspicillata*

A pair was heard dueting on 11 March above our camp in Richardson's Valley in the river bottom.

Central American Pygmy-Owl *Glaucidium griseiceps*

A single bird was vocalizing on 10 and 11 March in Que Brada de Oro during the day. It was differentiated from Ferruginous by tone and shorter series of calls.

Mottled Owl *Ciccaba virgate*

A single bird was vocalizing in Richardson's Valley on 11 March.

Black-and-white Owl *Ciccaba nigrolineata*

A single bird was heard in Richardson's Valley on 11 March.

Table 1. Raptors observed during the 9-12 March Bladen Nature Reserve Expedition and raptor species that were not observed during the expedition, but are expected to be within Bladen.

Raptor Species Observed	Raptor Species Not Observed but Expected
Turkey Vulture <i>Cathartes aura</i> R/W/T	Gray-headed Kite <i>Leptodon cayanensis</i> R
King Vulture <i>Sarcorambus papa</i> R	Hook-billed Kite <i>Chondrohierax uncinatus</i> R/T
Osprey <i>Pandion haliaetus</i> W/T	Swallow-tailed Kite <i>Elanoides forficatus</i> S
Double-toothed Kite <i>Harpagus bidentatus</i> R	Plumbeous Kite <i>Ictinia plumbea</i> S
White Hawk <i>Leucopternis albicollis</i> R	Bicolored Hawk <i>Accipiter bicolor</i> R
Great Black-Hawk <i>Buteogallus urubitinga</i> R	Crane Hawk <i>Geranospiza caerulescens</i> R
Ornate Hawk-Eagle <i>Spizaetus ornatus</i> R	Roadside Hawk <i>Buteo magnirostris</i> R
Black-and-white Hawk-Eagle <i>Spizaetus melanoleucus</i> R	Broad-winged Hawk <i>Buteo platypterus</i> W/T
Barred Forest-Falcon <i>Micrastur ruficollis</i> R	Short-tailed Hawk <i>Buteo brachyurus</i> R
Bat Falcon <i>Falco rufigularis</i> R	Crested Eagle <i>Morphnus guianensis</i> R
Spectacled Owl <i>Pulsatrix perspicillata</i> R	Harpy Eagle <i>Harpia harpyja</i> *R
Central American Pygmy-Owl <i>Glaucidium griseiceps</i> R	Black Hawk-Eagle <i>Spizaetus tyrannus</i> R
Mottled Owl <i>Ciccaba virgate</i> R	Collared Forest-Falcon <i>Micrastur semitorquatus</i> R
Black-and-white Owl <i>Ciccaba nigrolineata</i> R	Orange-breasted Falcon <i>Falco deirolencus</i> R
	Vermiculated Screech-Owl <i>Megascops guatemalae</i> R
	Crested Owl <i>Lophostrix cristata</i> R

R- Resident species

S- Summer resident (breeding)

W- Winter resident (non-breeding)

T- Transient

* Nest located in BNR in 2010



Figure 1. Raptor Expedition transect starting at BFree and ending in Que Brada de Oro with observation points of various raptors species.



Figure 2. Left: A pair of Great Black-Hawks copulating in Que Brada de Oro. Right: One of the adult Great Black-Hawks soaring in Que Brada de Oro after copulation. Note the long tail with short rounded wings.

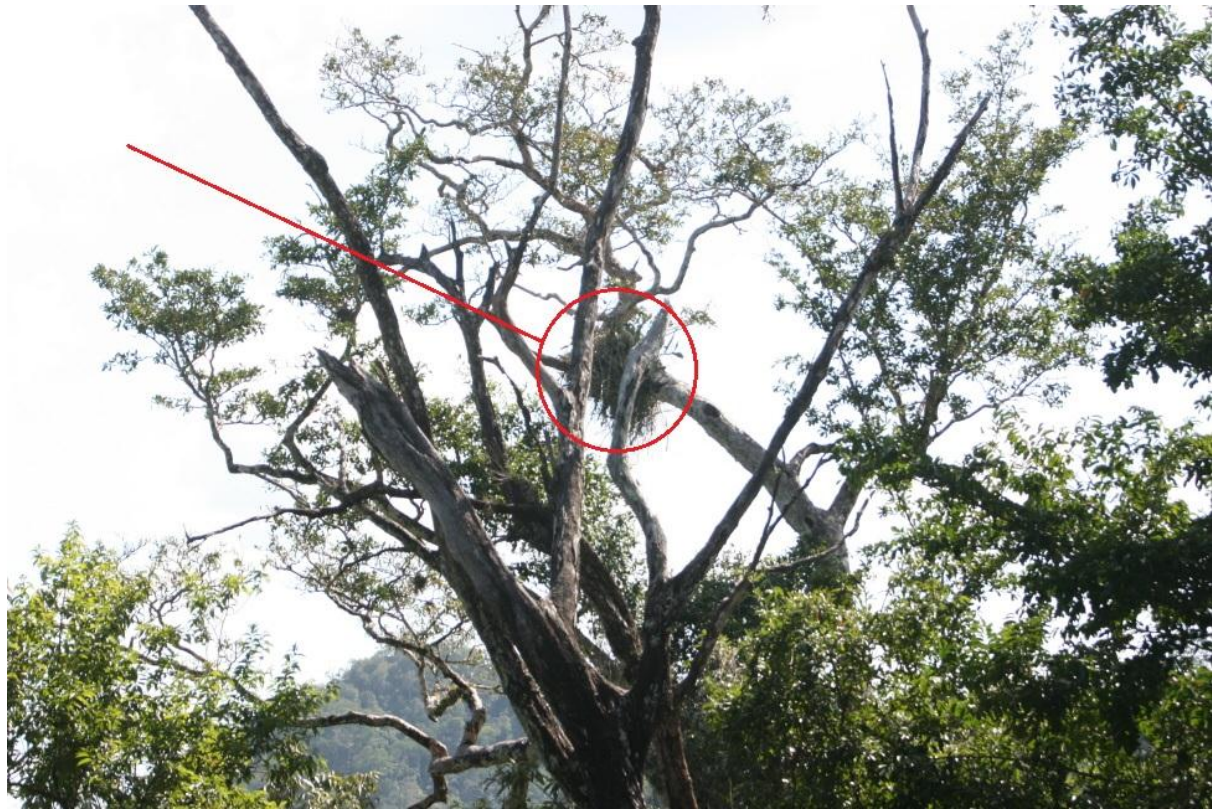


Figure 3. Black-and-white Hawk-Eagle nest in the Bladen Nature Reserve.