

THE SOLITARY EAGLE

Harpyhaliaetus solitarius

A NEW THREATENED SPECIES

Jack Clinton-Eitnear

The Solitary Eagle (*Harpyhaliaetus solitarius*) is a large black eagle with one wide white tail band across the tail and a very narrow white tailtip. The species occurs historically from south-eastern Mexico southward through Central and South America to Argentina. Generally observed on the lower slopes of mountains or foothills, its preferred habitat appears to be pine and hardwood forests. Upon occasion however, it has been sighted in tropical wet forest such as Tikal Park, Peten, Guatemala. The following is an attempt to summarize the status of the species. I have added personal observations to those already documented in the literature. It is hoped that this treatment will serve to stimulate further study on a species that until recently was not considered in imminent danger of extinction.

MEXICO

In no other country, within its range, is the species so well known as it is in Mexico. Nevertheless, a great deal remains to be documented as to its ecological requirements. The most detailed of the observations recorded in Mexico are those by Harrison and Kiff (1977) and Smith (1982). These two papers document observations at four nests containing three young eagles, one in each of three nests, and an egg in the fourth. Additionally, the nest structures were contained in trees ranging from Mexican yellow pine (*Pinus ponderosa*) and indio desnudo tree (*Bursera simaruba*), to a tremendous fig tree (*Ficus sp.*). The nests were located between 1 metre and 27 metres above the ground. While no detailed observations were made at any of the nests one nestling, under observation by Harrison, was observed to be fed an unknown species of colourful snake by its surviving parent (the other had been previously collected). Recently Ramos (1986) lists the species as decreasing in Mexico due to habitat destruction and pesticide usage.

GUATEMALA

Recent sightings of the species in Guatemala include an observation of an immature eagle by a group of biologists from the University of Texas at Arlington on 23 June, 1988, in an area known as El Faro, Quetzaltenango (Vannini 1989). During their 1988 studies in Tikal Park, Peten members of Peregrine Fund/Project Maya noted the presence of Solitary Eagle(s) within their study site (Burnham *et al.* 1989).

BELIZE

The status of the species in Belize has previously been summarized by Eitnienar (1986). The species continues to be observed within the Chiquibul Forest Reserve and associated Mountain Pine Ridge Forest Reserve. The most recent such observation was on 30 May, 1990, when a single Solitary Eagle was observed flying near the Chiquibul Road/Macal River bridge. The eagle was being mobbed by two Brown Jays (*Psilorhinus morio*) and vocalizing loudly. Bruce Miller, an ornithologist working at the nearby Caracol Ruins, mentioned that he had observed the species within the year.

Summary of *Harpyhaliaetus solitarius* sightings in Belize, C.A.

Date	Observer(s)	Location
09 Sept. 1969	A. Clewell, D. Weyer ¹	Near Rio on Mt. Pine Ridge Forest Reserve
10 Sept. 1969	P. Hill ¹	Hidden Valley, Mt. Pine Ridge Forest Reserve
11 Jan. 1982	B. L. Sage ¹	Crique Negro, Colombia Forest Station
10 Feb. 1983	C. S. Robbins, K Anderson D. Weyer ¹	Sibun River bridge on Hummingbird Highway
29 Mar. 1985	T. Keller, K. Keller ²	Guancaste Park
11 June 1986	J.C. Eitnienar, S. McGehee ²	Macal River bridge on Chiquibul Road
30 May 1990	J.C. Eitnienar	Macal River bridge on Chiquibul Road

1 Weyer (1984)

2 Clinton-Eitnienar (1986)

HONDURAS, NICARAGUA

The species is known only from one specimen in Honduras (Monroe 1968) and not observed, within suitable habitat, in Nicaragua (Howell 1971).

COSTA RICA

The Solitary Eagle is included on the official endangered list of the Costa Rica government (Stiles 1985). According to F.G. Stiles and A.F. Skutch (1989) it is considered "rare and local in hilly country around Gulfo Dulce and on Peninsula de Osa".

PANAMA

According to R.S. Ridgely and J.A. Gwynne (1989), the most recent sightings include two birds observed north of El Llano on 9 September, 1972, by N.G. Smith and a single bird observed by R.S. Ridgely east of Darien near Cerro Quia on 15 July, 1975.

COLOMBIA

Hilty (1985) included the Solitary Eagle in his "Preliminary Blue List" for Colombia. Additionally, Hilty and Brown (1986) give two documented sightings, both in the eastern Andes in Western Caqueta above Florencia. The first sighting was in June 1975, the second being in September 1978.

ECUADOR

Following is a summary of recent sightings in Ecuador (from Ridgely 1980).

- 29 July 1979 Immature perched, Upper Upano River Valley (Obs. R. Ridgely, R.A. Rowlett)
- 26 Feb. 1980 Pair in courtship flight below Sabanilla (Obs. R. Ridgely, A. Maley and D.W. Finch)
- 01 Mar. 1980 Adult soaring above Jamboe River Valley (Obs. R. Ridgely, A. Maley and D.W. Finch)

FRENCH GUIANA

Thiollay (1985) discovered a pair of Solitary Eagles "calling and displaying" in a disturbed forest between Cayenne and Regina in December, 1981.

ARGENTINA

Olog (1985) describes the range of the species as being northern Salta, where a pair has been seen from 1977-80. One adult and a yearling were observed in May, 1980. It is believed that possibly "two to three pairs breed in northernmost Salta".

DISCUSSION

The Genus *Harpyhaliaetus* contains two little-known tropical eagles, the Solitary Eagle (*H. solitarius*) and the Crowned Solitary Eagle (*H. cornatus*). Van Rossem (1948), upon examination of a specimen of *H. solitarius* from Jalisco, Mexico, divides the species into two races *H. solitarius sheffleri* and *H. solitarius solitarius*. The northern race is considered to be those birds encountered north of the Isthmus of Tehuantepec. The subspecific status was based upon the larger size of the northern race.

Collar and Andrews (1988) list both members of the genus as being threatened, due to forest modification. It would appear, however, that *H. solitarius* has always been sparsely distributed and continues to be observed in favourable habitat throughout its range. Considering its "spotty" distribution the long term maintenance of a viable population presents a number of obstacles. Certainly additional study is needed as to the species' ecological requirements. In addition, the species' status, in areas where recent observations have been made, should be monitored. Finally, as with the other large forest eagles (eg. *Harpia harpyja*, *Morphnus guianensis*, *Oroaetus isidori* etc.) the development and integration of a species-specific management plan into current and proposed plans for protected areas and/or educational projects within the species' range would appear the best long-term survival strategy for this highly vulnerable group of magnificent eagles.

REFERENCES

- BROWN, L.H. & D. AMADON 1968. *Eagles, Hawks and Falcons of the World*. Country Life Books, London.
- BURNHAM, W.A., J.P. JENNY & C.W. TURLEY 1989. Maya Project: Progress Report 2. World Center for Birds of Prey, Boise, Idaho, USA.
- EITNIEAR, J.C. 1986. Status of the large forest eagles of Belize. *WWGBP Birds of Prey Bulletin* No. 3: 107-110.
- HARRISON, E. & L. KIFF 1977. The nest and egg of the Black Solitary Eagle. *Condor* 79: 132-133.
- HARTSHORN, G. *et al.* 1984. Belize country environmental profile. Trejos Hnos. Sucs., S.A., Costa Rica.
- HOWELL, T.H. 1971. An ecological study of the birds of the lowland pine savanna and adjacent rain forest in northeastern Nicaragua. *Living Bird* 10: 185-243.
- HILTY, S. 1985. Distributional changes in the Colombian avifauna: a preliminary blue list. In P.A. Buckley *et al.* (Eds.) *Neotropical Ornithology*. Ornithological Monograph No. 36: 1000-1012. American Ornithologists' Union.

- HILTY, S.L. & W.L. BROWN 1986. *A Guide to the Birds of Colombia*. Princeton University Press, Princeton, New Jersey, USA.
- MEYBURG, B.-U. 1986. Threatened and near-threatened diurnal birds of prey of the world. *WWGBP Birds of Prey Bulletin* No. 3: 1-12.
- MONROE, B.L. 1968. *A Distributional Survey of the Birds of Honduras*. Ornithol. Monogr. No. 7. American Ornithologists' Union.
- OLROG, C.C. 1985. Status of wet forest raptors in northern Argentina. In I. Newton & R.D. Chancellor (Eds.) *Conservation studies on Raptors*. I.C.B.P. Tech. Publ. No. 5: 191-197.
- RAMOS, M.A. 1986. Birds in Peril: the diurnal raptors. *WWGBP Birds of Prey Bulletin* No. 3: 26-42.
- RIDGLEY, R.S. 1980. Some rare or previously unrecorded birds in Ecuador. *American Birds* 34: 242-248.
- RIDGLEY, R.S. & J.A. GWYNNE. 1989. *A Guide to the Birds of Panama*. Princeton University Press, Princeton, New Jersey, USA. pp. 98.
- RUSSELL, S.M. 1964. *A Distributional Study of the Birds of British Honduras*. Ornithol. Monogr. No. 1. American Ornithologists' Union.
- SMITH, T.B. 1982. Nests and young of two rare raptors from Mexico. *Biotropica* 14(1): 79-80.
- STILES, F.G. 1985. Conservation of forest birds of Costa Rica. In *Conservation of Tropical Forest Birds*. I.C.B.P. Tech. Publ. No. 4: 148.
- STILES, F. & A. SKUTCH 1989. *A Guide to the Birds of Costa Rica*. Cornell University Press, Ithaca, New York. USA pp. 105.
- THIOLLAY, J.M. 1985. Birds of prey in French Guiana - a preliminary survey. *WWGBP Birds of Prey Bulletin* No. 2: 11-15.
- VANNINI, J. 1989. Neotropical raptors and deforestation: notes on diurnal raptors at Finca El Faro, Quetzaltenango, Guatemala. *Raptor Research* 23(2): 27-38.
- VAN ROSSEM, A.J. 1948. Description of a new race *H. s. sheffleri*. *Proc. Biol. Soc. Wash.* 61: 67-68.
- WEYER, D. 1984. Diurnal birds of prey. *Hawk Trust Annual Report*, Vol. 14: 22-40.

Jack Clinton-Eitniear,
 Director
 The Center for the Study of Tropical Birds
 Inc. (CSTB, Inc), 218 Conway,
 San Antonio, Texas 78209-1716 USA