Status of Raptors in Panama

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With approximately 40% of its mature forests still intact, Panama retains an estimated 1,500 species of trees and some 880 species of birds in an area one-fifth the size of the State of California.

Within the area of the former Canal Zone the numbers and species of raptors have increased over the last ten years. Censuses taken annually along a 15 mile road through the jungle in December since 1974 indicate that of the 42 raptor species seen, nine have shown no population changes, seven have decreased and 26 have increased in numbers.

Three species of forest falcons (Micrastur), most of the buteos, Black Hawk Eagles (Spizaetus tyrannus), Ornate Hawk Eagles (Spizaetus ornatus) and Great Black Hawks (Buteogallus urubitinga) appear to have benefited from the inaccessibility of some forested areas, which remain intact as part of the watershed for the operation of the Canal and as the source of Panama City's drinking water. Single Harpy (Harpia harpyja) and Crested Eagles (Morphnus guianensis) have been sighted in Parque Soberania Nacional in the former Canal Zone in the last five years. Black Hawk Eagles can be seen daily and Tiny Hawks (Accipiter superciliosis) and Crane Hawks (Geranospiza caerulescens) have recently become established in parts of this park located within 25 miles of Panama City.

Factors adversely affecting the avifauna of Panama impact severely upon the hundreds of thousands of migrants arriving annually in Panama. In September, October and November nearly all of the Turkey Vultures (Cathartes aura), Broadwinged (Buteo platypterus) and Swainson's Hawks (Buteo swainsonii) of North America pass through Panama.

On October 31 three years ago 81,450 Swainson's Hawks were photographed by Smith in three hours over the Pacific entrance to the Canal. The total number photographed and counted during two weeks exceeded 981,000 and included more than 400,000 Broad-wings, 275,000 Swainson's and nearly 300,000 Turkey Vultures. There has been little or no field work on raptors in other areas of Panama to provide reliable data on their abundance or distribution. One or two Harpy and Crested Eagles and a similar number of Hawk Eagles are sighted in the Darien Jungles of eastern Panama annually, depending upon the number of birding groups, botanists or other interested observers there. Reported sightings have not changed in the last eight years, even though the numbers of interested persons going into the area have increased greatly.

It is obvious that the recent extension of the Pan American Highway 125 miles into the Darien has led to the rapid deforestation of much of the eastern Pacific Slope jungle and that impact upon the forest-dwelling raptors has been severe. This damage is irreversible. As the road is extended an additional 35 miles to the Colombian border in the next two to three years it will bisect the largest national park in Central America, with disastrous results unless proper controls are established before the onset of construction.

Much of the Pacific Slope of western Panama has been cleared for hundreds of years. Densities of Caracaras (<u>Daptrius</u> and <u>Milvago</u>) and savannah-dwelling raptors have probably not changed here in decades. Recent new arrivals have been Black-shouldered Kites (<u>Elanus</u> <u>leucurus</u>) that first appeared in 1967 in western Panama, and <u>Pearl Kites</u> (<u>Gampsonyx</u> swainsonii) which began colonizing eastern Panama in 1977.

The northern or Atlantic Slope of Panama has until recently been largely inaccessible except by sea or along foot trails from the Pacific side. It is in this area, and in proposed and recently established national parks along the Costa Rican and Colombian borders, that the only viable hope of protecting forest-dwelling raptors exists. Two roads, one in western and one in eastern Panama, have recently been pushed through to the Atlantic coast. Although these are important to the ecconomic development of Panama, they will bring about serious environmental changes unless outside assistance becomes available to ameliorate their impact.

In the last ten years, Panama has established eight national parks, watersheds and forest preserves with a combined area exceeding 2,000,000 acres, approximately 10% of the country. The Darien National Park, a World Heritage Site and Biosphere Reserve, extends from coast to coast on the Colombian-Panamanian border and with 1,400,000 acres is the largest in Central America. It was recently described in a special publication of the British Ecological Society as an area "that might be the most biologically rich in the world".

Although most of these areas are subject to the conservation efforts of the Renewable Natural Resources Directorate, the agency responsible for administering Panama's national parks and reserves, such efforts have until recently been largely ineffective due to squatters, hunting and a general disregard for conservation.

Local biologists agree that an increasing public awareness of the need to preserve more of the local environment has begun to develop in the last four to six years. The Directorate of Renewable Natural Resources appears to have become more concerned for, and successful in, enforcing the country's environmental regulations. Training programmes for park rangers and support from USAID and local foundations have assisted. Private sector foundations have been formed in the last two years to identify and eventually purchase significant biological sites, to encourage educational programmes within schools and to assist students interested in environmental studies.

The Nature Conservancy, World Wildlife Fund, USAID and an increasing number of US corporations are assisting in financing these projects. The Smithsonian Tropical Research Institute supports students for short- and long-term studies in Panama. USAID sends Panamanian students interested in environmental studies to US schools for education. A National Park Foundation to assess environmental projects is being formed. Another

foundation has obtained a 650 acre forested area within the limits of Panama City and proposes to develop this as an education centre and botanical and zoological garden.

The Panama Audubon Society has contracted with the Renewable Natural Resources Directorate and the Municipality of Panama City to manage a Propagation Centre for Endangered Panamanian Species. Harpy Eagles, Crested Eagles, Bush Dogs (Specthos venaticus) and endangered Panamanian primates and felines are in the programme at this time. Several North American zoos are cooperating in this breeding centre project. The most viable project in Panama is the Kuna Biosphere Reserve, 150,000 acres of primary forest that will increase to 568,000 acres in the next two years. This reserve extends from the continental divide to the Atlantic Ocean in eastern Panama and will eventually include off-shore islands covering a total of 740,000 acres. This reserve is controlled by the Kuna Indian Nation, a semi-autonomous group in the Panamanian community. Long-range objectives are to develop the entire north slope of eastern Panama as an International Conservation Refuge extending to the northern edge of the Darien World Heritage Park. All these foundations and organizations recognize the vulnerability of their projects during the next few years.

There is much intellectual support for conservation in Panama. There is less actual support when conservation interferes with economics. Assistance from international sources is needed if local organizations are to succeed. These organizations understand that local public attitudes towards conservation will be changed by educational programmes and the successful completion of projects that illustrate the benefits of these projects.

Inhabitants of the forested areas of Panama, including raptors, will be the beneficiaries if these efforts succeed. They will inherit the consequences and die if they fail. The coming year - perhaps the next two or three - will determine the future of conservation in Panama.

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