

PARROTS IN PERIL - ECUADOR 1992 SUMMARY REPORT

The following members participated in the expedition; *Elliott Paul Toyne* (Expedition leader), *Mark Thomas Jeffcote* (Deputy leader), *Jeremy Flanagan*, *Sachin Kapila*, *Domitille Vallee*, *Rodrigo Tapia*, *Angil Hualpa*, *Eduardo Cueva*, *Aturro Lopez* the latter four were members of the Ecuadorian environmental group *Arcoiris*.

The following expedition aims were achieved;

- 1) Information was collected to substantiate Podocarpus National Park as a key site for the effective conservation of three threatened species of parrot.
- 2) The effectiveness of Podocarpus National Park as a protected area was assessed by carrying out an environmental impact assessment of gold mining and colonists activities within the park.
- 3) Data was collected on the status, distribution and ecology of threatened parrot species pertinent to their conservation.
- 4) Additionally, new data on the avifauna of this region was compiled.

The expedition cost approximately £7000 and covered the period 19 March - 4th July 1992. During this time the following study sites were visited;

Within Podocarpus National Park.

El Limon (04°02'S, 79°00'W)

The sub-tropical forests and nearby town were surveyed for wild and captured parrots during 28-30 March. One rare species of parrot the White-breasted Parakeet *Pyrrhura albipectus* was found. This is a new location for this species.

Bombuscara Field Centre (04°02'S, 78°58'W)

The upper-tropical forests of this area were surveyed for White-breasted Parakeet activity and specimens of Lepidoptera and Odonata were collected. This site was visited on the following days; 31 March - 1 April, 27-28 April and 1 May.

Quebrada Curintza (04°08'S, 78°57'W)

The sub tropical forests of this previously unexplored area was found to contain White-breasted parakeets. The problems of illegal colonization were assessed using rapid rural appraisal techniques as part of the environmental impact assessment project. This work was completed during the period 30 April - 3 May.

Cajanuma (04°06'S, 79°09'W)

The primary cloud-forests within the altitude range of 2550 to 3200m were investigated for Red-faced Parrot *Hapalopsittaca pyrrhops* several times between March and May. This site is only a 30 minute taxi ride from Loja. There are two trails from an information centre leading up to the paramo which good access into the forest. Red-faced Parrots were seen on two occasions in April. Cajanuma was also used a site for assessing the problems of park management and a day of informal interviews was spent with the park guards.

Romerillos (04°13'S, 79°54'W)

Romerillos is the main entrance to the park for illegal gold-miners. It was first visited (29/04/92) to assess the situation and reaction of miners when we told them we wished to visit the mining area. Previous to our arrival there had been hostile clashes between miners with Ministry of Agriculture officials, police and army. On our first visit butterfly specimens were taken to compliment our work

in the Bombuscara area.

The Romerillos "loop" was walked (19/05-23/05/92) and the forest in the elevational range of 1400-2500m was investigated for parrot activity. Several parrots were found including the White-breasted Parakeet. The illegal mining area, **San Luis**, was visited and soil and sediment samples taken for mercury content analysis. Preliminary results revealed very high levels of mercury.

The walk to San Luis was accompanied with mules (\$50 per day) for transport of our food and equipment and took three days and one day (without mules) to walk out. The illegal miners were not hostile to us and nobody was injured during this trip. This walk required both fitness and stamina, any unfit or unacclimatized persons would be unwise to attempt it.

Andean cloud-forest survey for parrots.

The fragmented high elevation forests (2300-3500m) around Saraguro were surveyed for the extremely rare Red-faced Parrot and the rare, nomadic Golden-plumed Parakeet *Lepitosittaca branickii*. All sites visited needed a local guide and the local environmental group, *Promusta*, helped organize this for us. The following locations were visited;

Selva Algre (03°32'S, 79°22'W)

A small forest of 400ha situated north-west of Saraguro on the road between Saraguro and Manu. The forest was surveyed for 3½ days (11/04 - 15/04/92). Data on feeding and roosting ecology of the Red-faced Parrot was collected. The expedition camped in a small clearing on the edge of the forest. The forest was heavily degraded by cattle grazing and the collection of wood for fire. The local people were genuinely concerned about the loss of forest in the area and were very helpful throughout our stay.

Huashapamba (03°34'S, 79°20'W)

This community owned forest is approximately 125-250ha and situated 6km south of Saraguro, adjacent to the Saraguro-Loja road. Red-faced Parrots were located during our 3½ days stay. Data on vocalizations, feeding habits and flock size was collected. It is important that local permission is obtained first before entering and camping in the forest.

Ingapirca (03°42'S, 79°13'W)

The south-facing slope of this 400ha forest was surveyed for one day. The area is south-west of Saraguro and contained paramo, stunted elfin and cloud-forest habitats. Parrots were present but not identified. This forest along with the following three can be reached by taxi from Saraguro.

Santiago (03°49'S, 79°17'W)

A small (250ha) degraded forest is controlled by the Ministry of Agriculture. The forest also called Jago is situated 25km south of Saraguro, near a town called Santiago. The north-facing slope of the forest was surveyed for one day (12/04/92). None of our parrot species were encountered.

Torre (03°38'S, 79°17'W)

This forest is located between the two Indian communities of Namorin and Lagunas and is close to Acanama and Urtusinga. A small section of this forest which covers several hilltops was surveyed on one day (13/04/92). Unfortunately weather conditions were very poor and although parrots were seen sound recordings and visual sightings were very poor.

Onacapa/ Hinuina (03°41'S,79°12'W)

This forest is 1km east of the River Puna and was surveyed for one day (14/04/92). Both the Red-faced Parrot and the Golden-plumed Parakeet were found; sound recordings of both species were taken and Red-faced Parrot food plants collected for subsequent identification.

Environmental impact assessment of mining and colonization within Podocarpus National Park and adjacent areas.

This work was mainly carried during the period May to mid-June. The main gold-mining area, Nambija, was visited and the different processes of gold-mining were assessed. Mercury was used to make an amalgam with the gold, this mercury can leak into the environment, so soil, sediment and dust samples were collected for mercury content analysis at Imperial College, London. This area was then used as a comparison with the small-scale gold-mining occurring within the park. Preliminary results reveal mercury levels to be higher within the park.

The areas of Pituca, Loyola, Sabanilla and Bombuscara were visited during the above period and the problems of illegal colonization were investigated.

The preliminary findings of both ornithological and environmental aspects of the expedition were presented to the Ministry of Agriculture and other relevant organizations whilst the expedition was in Ecuador.

E.P.Toyne (1/09/92)
Expedition Leader
Dep't of Biology
Imperial College
London SW7 2BB