# First nest record of Red-faced Parrot *Hapalopsittaca pyrrhops*

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## Introduction

The Red-faced Parrot *Hapalopsittaca pyrrhops* is known only from southern Ecuador and one location in northern Peru, a range within which it is endangered[1,2]. Prior to the 1990s virtually nothing was known about this parrot[3]. Since then, the *Parrots in Peril* expeditions have collected data on its status, distribution, biology and conservation[4,5].

During a *Parrots in Peril* expedition from March to June 1992 we observed juvenile *H. pyrrhops* in temperate forest areas (2,500-3,200 m) around the town of Saraguro (3°37'S 79°14'W), Loja Province, Ecuador. With these sightings in mind we decided to return to these same forests earlier in the breeding season to find nest sites.

Here we present details of the first nest record and breeding attempt for this species. More extensive details of *H. pyrrhops* breeding biology will be presented elsewhere[4].

Red-faced Parrot *Hapalopsittaca pyrrhops* by John P. O'Neill

Red-faced Parrot nest-tree (E. P. Toyne)

Adult Red-faced Parrot at the nest entrance (C. Balchin)

### Discovery of the nest

We surveyed the forests around Saraguro during the period October 1994 to January 1995 and particularly looked for nest sites, which we presumed to be tree-cavities. In one forest, on 10 November 1994, we watched a hole in a Lauraceae tree for a few minutes, and then as we left we heard the characteristic *ch-ek ch-ek*[5], and two *H. pyrrhops* flew to the tree, one disappearing into the hole. After 2.5 hours, an adult bird called from an adjacent tree, the bird came out of the hole and the pair flew off together. We could not climb to the hole to check the contents, as it was 17.5 m above ground-level, and we had none of the necessary equipment.

### Return to the nest

We returned to the site on 21 November with climbing equipment and watched the tree. The pair were behaving in a similar manner to before: when the sitting bird left with its mate, it flew 20 m from the nest to a nearby tree where it was fed with regurgitated food. It took 20 minutes for one of us to climb to the hole, during which time the sitting bird left but returned after less than one minute. The bird left again when the hole entrance was tapped. Torch-light revealed the presence of two creamy matt-white eggs. As the hole was of forearm depth and the climber was in a precarious position, we decided against removing the eggs for measurement, and instead estimated them to be around 3.5-4.0 x 2.0-2.5 cm in size[4].

The nest-hole entrance was 77 cm long by 9 cm wide, and the nest-floor was 45 cm below the entrance[4]. The eggs were laid on a flat base with some dust and a few wind-blown leaves. As usual for parrots, there was no nesting material[3].

The nest-tree was climbed twice more to record the progress of the nesting attempt. Both eggs hatched and two very young chicks were observed in early December. Unfortunately, due to the other objectives of the expedition and lack of personnel, the nest was only monitored by site visits, more or less every two weeks. By the first week of January, one chick was more developed than the other (wing chord 88 mm compared to 68 mm: see[4]) but both had green feathers and emerging red crown and throat feathers. By mid-January both nestlings were seen at the nest entrance and by late January both had fledged and were seen close to the nest-tree.

Within the same forest, flocks of up to six *H. pyrrhops* were seen pairing off and nest-site prospecting. Our records suggest that, in common with other birds in the region, the October–January period (the dry season) is the usual breeding season for *H. pyrrhops*[4].

### Conservation implications

We now know that *H. pyrrhops* can nest in tree-cavities, and so the extent to which such cavities limit the population can be assessed. As there were many suitable-looking but unoccupied cavities in the forests, we suggest that reasons for the localised and restricted range of *H. pyrrhops* might not be related to the availability of nest sites. Poor breeding performance, predation or lack of certain food-types at critical times might be other likely limiting factors.

Unfortunately, the forest with the nest site had a severely degraded understorey as a result of cattle-grazing. Trees were also being felled for fuelwood, and the resultant cleared land turned to cattle pasture. Due to the forest's increasingly small size (400 ha, much of which has been cleared) it seems that there is little one can do to conserve it. Instead, efforts should perhaps be concentrated on forests that are already under some form of protected status, such as Podocarpus National Park and Huashapamba Community Forest, both of which support populations of *H. pyrrhops* (Toyne *et al.* unpubl.). However, it would be interesting to monitor the degradation of the Saraguro forest to determine the extent to which *H. pyrrhops* and other rare birds such as Bearded Guan *Penelope barbata* and Grey-breasted Mountain-toucan *Andigena hypoglauca*[1] can tolerate such habitat loss.

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### References

1. Collar, N. J., Crosby, M. J. & Stattersfield, A. J. (1994) *Birds to watch 2: the world checklist of threatened birds*. Cambridge, U.K.:

BirdLife International (BirdLife Conservation Series 4).
2. Collar, N. J., Gonzaga, L. P., Krabbe, N., Madroño-Nieto, A., Naranjo, L. G., Parker, T. A. & Wege, D. C. (1992) *Threatened birds of the Americas: the ICBP/IUCN Red Data Book*. Cambridge, U.K.: International Council for Bird Preservation.
3. Forshaw, J. M. (1989) *Parrots of the world*. Third edition. London: Blandford Press.
4. Toyne, E. P. & Flanagan, J. N. M. (in prep.) Biology of the Red-faced Parrot *Hapalopsittaca pyrrhops* in southern Ecuador.
5. Toyne, E. P., Flanagan, J. N. M. & Jeffcote, M. T. (in press) Vocalizations of the endangered Red-faced Parrot *Hapalopsittaca pyrrhops* in southern Ecuador. *Orn. Neotrop.* 6.

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