Black-hooded Parakeet: New Feral Breeding Species in California?

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The sighting of four wild Black-hooded Parakeets, Nandayus nenday (Vieillot), in a residential area of Loma Linda, San Bernardino County, California on December 22, 1972 has prompted us to investigate the present status of these birds in the area. We have attempted to determine place of origin, range and habits in order to assess their chance of survival. We have observed and photographed the birds since the spring of 1972, and believe we have traced them back to the original escape in the fall of 1969. Although our main source of information on nesting comes from verbal communication with local residents, testimony of the persons involved is corroborative and we believe indicates, along with other supporting evidence, that the Blackhooded Parakeet has bred and successfully raised young in the wild in southern California.

Little published information is available concerning Nandayus nenday, the only species of the genus. Meyer de Schauensee (1966, 1970) lists it as a resident of southern Brazil, Paraguay, southern Bolivia, and northern Argentina. Orfila (1937) and Olrog (1959) contain illustrations of the species and give short descriptions. A few notes on nesting behavior have also been presented by Naumberg (1930). No record of previous introductions of this species have been found; hence, this is apparently the first report of the Black-hooded Parakeet, also called the Nanday Conure, in the wild state in North America.

Distinguishing field marks for *Nandayus* include general bright green plumage with a black hood extending back to just behind the eye and rust red feathers on the tibiotarsal region. See

Figure 1. Length is about 12 in., of which the long tapering tail accounts for nearly half. In addition to its colorful plumage, the bird's raucous squawking makes it quite conspicuous among the local avifauna.

In attempting to discover from where the birds may have escaped, we contacted local aviaries and pet shops as well as governmental agencies. Only one possible source has been found; we consider this the most probable place of origin for the escaped birds we are now observing. A parrot aviculturist in Yucaipa, California reported that a breeding pair of Black-hooded Parakeets accidentally escaped from an open air aviary along with several other psittacines in a storm and flood in the fall of 1969. Soon after the escape the pair was reported in the Loma Linda area, about ten miles from Yucaipa, but recapture attempts were unsuccessful. In the fall of the following year (1970) the former owner received word that there were now four or five Black-hooded Parakeets in Loma Linda and therefore a successful reproduction was believed to have taken place. We have been unable to find anyone with information on the birds from that date until the spring of 1972.

A aviculturist, Mrs. Georgia A. McCrory, in the community of North Loma Linda informed us that two Black-hooded Parakeets began frequenting her yard in March or April, 1972, probably attracted by the squawking of her Jenday Conure, *Aratinga jandaya*, and other psittacines housed in large outdoor aviaries. Several neighbors report

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Figure 1. The Black-hooded Parakeet, *Nandayus nenday*, a recent introduction to southern California, feeding on chinabetries.

their presence at about the same time. The birds were observed by local residents almost daily until late summer (July?) when one of the birds suddenly disappeared. The other parakeet continued feeding in the neighborhood and made frequent trips to a cottonwood tree located in a grove of eucalyptus a few blocks away. This routine is reported to have continued for about three weeks when the second bird reappeared. After another week and a half of frequent trips to the cottonwood tree by both birds, an immature bird returned with the adults. Over the next week at one or two day intervals three additional immature parakeets appeared. Although near-adult size the immature birds were recognized by their awkwardness and duller plumage. We have examined the supposed nest tree and found three nesting sites. The Black-hooded Parakeets, like most other members of the family, typically nest in natural cavities and old woodpecker holes. The three separate excavations in dead portions of this tree, at heights of 40-60 feet, had rather large entrances but otherwise were typical abandoned woodpecker nesting cavities. One of the three holes is still visited frequently by the parakeets and may be used as a roost. These six birds remained as a group in the Loma Linda area until December 1972, a short time before we first observed them. By mid-December only four birds were being seen; those believed to have been the older birds disappeared at that time and have not been seen since.

The above account, although not verified by our direct observation and thus constituting circumstantial evidence, still suggests that the Blackhooded Parakeet has bred in the wild in California.

Rogers (1969) lists Nandayus nenday as "consistent and regular breeders" in captivity. Other avicultural texts also mention the free breeding of this species (Seth-Smith, 1926; Tavistock, 1929; Prestwich, 1949, 1952; Bates and Busenbark, 1969). Since various parrots are routinely raised outdoors in our area we do not find it surprising that if escaped birds were able to find suitable nesting sites, they could breed and raise young. The Nanday's natural habitat of open woodlands and palm groves (Wetmore, 1926; Meyer de Schauensee, 1970), indicates conditions similar to those in southern California. However, whether the birds become successfully established or not will depend on more than their ability to produce one or two broods in the past three years. It can even be doubted that there is sufficient feral breeding stock to maintain itself without further introductions. Provided the birds did become established, we would still not be able to predict with any degree of certainty the effects the introduced species would have on the existing avifauna. The descriptions by Kerr (1892, 1901) of "very large flocks" in some parts of South America do cause one to consider the possible im-

From December to April 1973, the four remaining parakeets were observed only within a restricted range of two to three square miles, the outline of which closely parallals the city limits of Loma Linda. Two roosting areas are located at extreme ends of this area with numerous feeding localities toward the interior. To our knowledge the parrots have not molested citrus orchards or other cultivated fruits within this territory.

During the time we have observed the feeding habits of the parakeets their principal food item has been seeds of the Chinaberry, Melia azedarach, a small tree native to Asia, commonly as an ornamental in the southern United States and now naturalized in some areas (Abrams, 1951). We are unaware of any other bird capable of cracking the hard fruits of this tree; thus the parakeets may be the only animals currently utilizing this abundant food source. The birds also visit various palms and may feed on the palm fruit or nuts as members of this species do in their native habitat (Wetmore, 1926). In addition Nandayus nenday is apparently a partial ground feeder since we have on several occasions seen

them feeding in a harvested corn field, sometimes right alongside the also-introduced Rock Doves, Columbia livia. The parakeets have also been reported frequenting gardens in the Loma Linda area during the spring and patches of sunflower in the summer. From these observations it appears that a variety of food sources are available and that the parakeets have quite readily adjusted to take advantage of them.

On three occasions we have observed interspecific aggression between the Nandays and the ubiquitous Starling, Sturnus vulgaris. Each time the squabble was over roosting rights to either a tree cavity or dense palm fronds. The apparent lack of competition over wild foods may then be in part balanced by competition with another introduced species over roosting and nesting sites. If the species continued to increase such competition would become more acute.

Feral psittacines are often accused of being reservoirs of diseases transmissible to man and domestic animals. Of particular concern in southern California is potentiality of escaped parrots to carry Exotic Newcastle disease and transmit it to poultry. For this and other reasons it is our opinion that the Black-hooded Parakeet, like all other recent avian escapes, deserve constant surveillance. In the course of this study we have found three other species of Psittacidae at large in the area. A group of five Amazons, three Amazona ochrocephala, the Yellow-headed Parrot and two Amazona autumnalis, the Redlored Parrot, were located in the downtown area of San Bernardino where they are reportd to have been living for four or five years without change in number. One Budgerigar, Melopsitta undulatus, was also seen in Loma Linda; it is a common escape which never seems to live long in the wild state. Inasmuch as wild parrots are potential disease reservoirs and many regularly raid ripening citrus and other fruit orchards, the status of all parrots in California should be carefully followed.

Several other escaped parakeets have recently been reported breeding in the U. S.; the Australian Shell Parakeet, Melopsittacus undulatus, in Florida (Cahalane et al, 1965), the Canary-winged Parakeet, Brotogeris versicolurus, in California and Florida (L. R. Davis, California Department of Agriculture, personal communication), and the Monk or Quaker Parakeet Myiopsitta monachus, in New York (Trimm, 1972) and elsewhere. If these reports indicate a trend, there is reason for concern that parrot-like birds may become pests. We hope this brief report will stimulate others to volunteer information that will be helpful to biologists in assessing the status and future of exotic birds in the United States.

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