

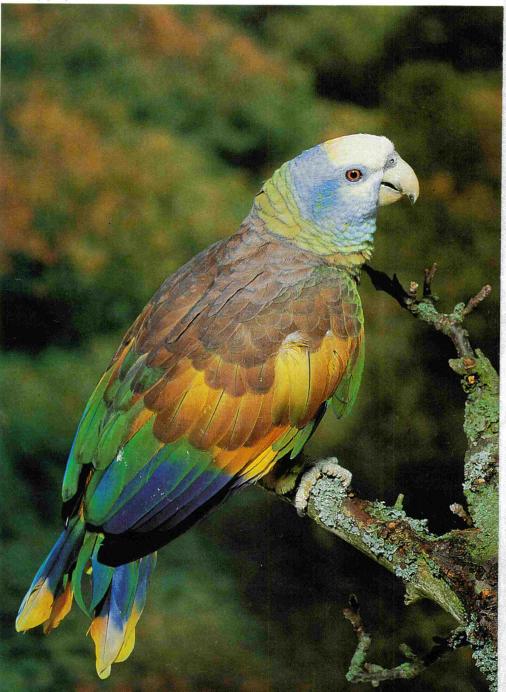
Parrot-watching in the Caribbean

by Joseph M Forshaw Wauchope, Australia

has been your most exciting experience with parrots in the wild?" Often I am asked this question, but always I have much difficulty in giving a prompt. response. I have been most fortunate in having observed a number of rare and highly spectacular species in various parts of the worldwide range, and at the time of occurrence each encounter was exciting. With hindsight it is extremely difficult to make comparisons or to single out any particular experience, but certainly one of the most memorable is a visit made to the Lesser Antilles in April 1980, when I observed in the wild all four of the magnificent Amazona parrots endemic to those islands. Being restricted to a single island makes each species vulnerable to extinction, so meeting with all four in their natural habitats was especially rewarding.

Brilliant Plumage Highlighted in Sunlight

Undoubtedly the most attractive of the four species, and possibly the most distinctively plumaged of all amazons is the St. Vincent Amazon Amazona guildingii, so it was particularly gratifying that it was the first species to be encountered, and in the largest numbers. Approximately 30 noisy parrots were leaving roosting trees soon after sunrise as I climbed a narrow trail winding up a mountainside in the Buccament Valley, a well-known local stronghold of the species. The panoramic view was breathtaking, for the valley below was hidden under dense mist that crept higher up the

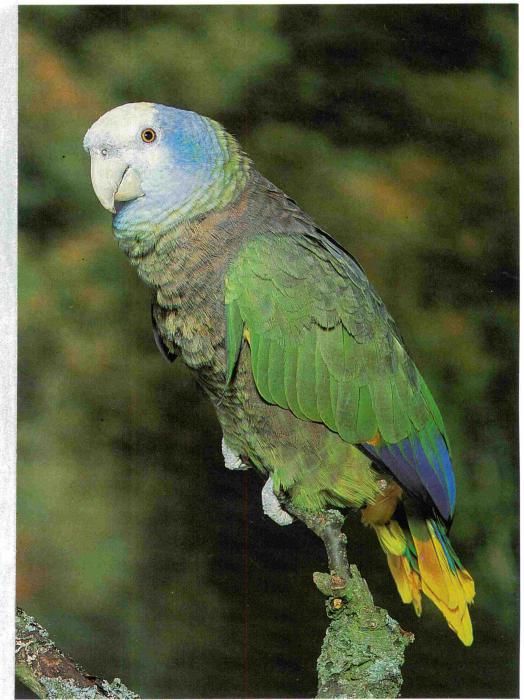


The St. Vincent Amazon, an endangered species from the Caribbean island of St. Vincent, inhabits mountainous rainforest

tree-covered slopes, where rays of bright sunlight penetrated the forest canopy. Between mid stages of the slopes was open, sun-filled airspace through which the parrots flew while passing back and forth above the gloomy mountainside. The brilliance of their plumage was highlighted by the sunlight, reminding me of stage performers under spotlights, and the loud, screeching calls further focussed attention on them. On the opposite slope a large tree appeared to be a

favored roosting site, for a number of birds flew out from its spreading branches, some to cross above the valley, others to circle two or three times before returning to the same tree. Both 'yellow-brown' and 'green' birds were present, though the latter appeared to be more numerous.

With a total length of 40cm and weighing up to 700g, the St. Vincent Amazon is one of the larger *Amazona* species. It occurs as two major color morphs, usually referred to as 'yellow-



The orange-brown morph on the left and the green morph on the right illustrate the color variation that occurs in this species.

brown' and 'green' morphs, but the plumage coloration is quite variable within each and virtually no two birds are alike. A key feature of the distinctive plumage coloration is the creamywhite forecrown and cheeks, merging into orange and violet-blue on the neck; the body plumage is bronzebrown, with orange-yellow bases to the flight feathers, which are broadly edged with violet-blue and the tail is orange at the base with a wide central band of dark violet-blue and broadly

tipped orange-yellow.

The 'green' morph differs in having the upperparts predominantly dusky green, the bases of the flight feathers green, and the underwings green instead of bronze-brown and yellow. The bill is white, the iris orange and the legs pale grey. The sexes are alike and juveniles are duller versions of adults, there being no transition from green juveniles to yellow-brown adults as at times is claimed.

On St. Vincent, these parrots inhabit

mainly humid forests in and at the periphery of the central mountains, particularly in ridge and valley areas at lower elevations where there are large trees suitable for nesting. At times they are seen in other habitats, including the margins of Pinus plantations and cultivated farmlands. During the 1970s, grave concerns were expressed about their future survival, and declining numbers were attributed to habitat loss, hunting, and capture for the livebird market. Intermittent hurricanes also are thought to have contributed to the declines, with Hurricane Allen in 1980 being especially destructive. The eruption of the Soufriere volcano in 1979 killed an unknown number of birds and destroyed significant tracts of forest. However, conservation initiatives undertaken during the past 20 years by government and non-government agencies seem to have reversed the decline, and surveys carried out in 1992 and 1994 indicate that there now is a stable population comprising approximately 800 birds. Public awareness campaigns also have been successful, leading to a formal declaration by the government naming the species as the National Bird of St. Vincent and the Grenadines.

As almost 100 captive birds are held in collections, the St. Vincent Amazon probably is the most familiar of the four species. However, it remains one of the least studied in the wild, and little is known of its biology. Noisy and gregarious, these amazons usually are encountered in groups of up to 20 or more birds, but pairs stay together and are readily discernible when feeding in the treetops or flying overhead. I found them to be fairly confiding and, unless persistently disturbed, they were reluctant to leave a feeding area.

Though striking and highly conspicuous while in flight, they are extremely difficult to detect amidst the dense canopy foliage where they feed on fruits, seeds, berries and probably blossoms. In the Buccament Valley, a single parrot and then a pair flew into a tree under which I was standing, and immediately they disappeared from sight; only by waiting patiently for movement of the outer branches was I able to relocate them as they gathered ripening



Distribution of Amazona parrots in the Lesser Antilles.

fruits. Feeding sometimes is accompanied by the emission of discordant notes which have been likened to the squeaking of a rusty lock being turned or to a group of persons squabbling. The strong, direct flight features rapid, jerky wingbeats, and is accompanied by loud *quaw...quaw* call-notes.

Breeding takes place towards the end of the dry season, that is about April, and the nest is in a hollow limb or hole in a large tree. Preference is shown for gommier trees *Dacryodes excelsa*, and a hollow in a decayed limb or part of the trunk may be enlarged by the birds. A normal clutch comprises two white eggs measuring approximately 46.5 X 38.8mm. Incubation by the female lasts about 25 days, and some 70 days after hatching the young birds leave the nest.

Guided Parrot Walks

From St. Vincent I travelled to St. Lucia, where surveys carried out in 1975 had revealed the estimated population of St. Lucia Amazons *Amazona versicolor* to be as low as 100 birds, with the greatest concentration being towards the southern sector of the island, especially in and around Quilesse Forest Reserve, an area of less than 40 sq km and surrounded by human habitation. Primary causes for

the decline in numbers were identified as deforestation, shooting for food or sport, and capture for the live-bird market, though I doubt that the last has been significant because outside the island this species is virtually unknown in captivity. Some two years before my visit, the government initiated a conservation program aimed at fostering national pride in the species and recognition of the need to protect it. Public awareness campaigns, with particular emphasis in schools, were coupled with enforcement improved protection legislation, and the species was proclaimed officially to be the "National Bird."

A very successful practical application of the program has been guided tours conducted by Forestry Department officers along a "parrot walk" through Quilesse Reserve; I participated in one of these tours and was rewarded with memorable sightings of parrots. The birds have responded well to increased protection, and during a survey conducted in August 1996 the population was estimated at 350 to 400 individuals.

Some 43cm in total length, the St. Lucia Amazon is a large parrot with prominent black margins to feathers of the predominantly green plumage producing a decidedly scalloped appear-

ance. The forecrown is deep violetblue, becoming paler blue on the hindcrown and face, and the foreneck is red, with a variable reddish-brown suffusion on the lower breast to upper abdomen. There is a prominent red wing-speculum, and red is concealed at bases of the lateral tail-feathers. The strong, robust bill is dusky grey, the iris orange and the legs pale grey.

In Quilesse Forest Reserve, I found these amazons to be quite wary, most sightings being of single birds flying across forested valleys. On one occasion, after having lapsed well behind the main party of observers participating in the forest walk, I was standing at the edge of the mountainside path to admire the panoramic view, when a lone parrot alighted in the crown of a small tree only 30m away. I had excellent views of this striking bird as it peered down at me, the blue face and red foreneck highly prominent, but regrettably it did not stay to feed, and soon slipped away, dropping silently down into the valley below, where quickly it disappeared from sight.

St. Lucia Amazons become active shortly before dawn, and morning activity reaches a peak at about 0800 hours, when there is a conspicuous dispersal from nighttime roosts in the forest interior to feeding sites at the forest edges. It is advisable to visit the Reserve at this time, because from mid morning to early afternoon the birds quietly rest amidst the uppermost branches of leafy trees and finding them can be difficult. In mid afternoon there is a gradual resurgence of activity, culminating in pre-roosting aerobatics prior to a return to nighttime roosts. They are strong fliers, often flying quite high and periodically diving or swooping in the fashion of a large raptor. Conversely, they are inconspicuous while clambering amidst dense foliage to feed on fruits, seeds, nuts and berries.

Little is known of the breeding biology, but it seems that egg-laying takes place between January and March, with one or two eggs being laid at the bottom of a hollow limb or hole high up in a tall forest tree. Interference from the Pearly-eyed Thrasher *Margarops fuscatus* has been identified as a likely threat to nesting success.

Altitudinal Segregation of Two Species

Dominica has the distinction of being home to two endangered Amazona species, which for the most part seem to be separated altitudinally. Somewhat similar in appearance to the St. Lucia Amazon, the Red-necked Amazon Amazona arausiaca also has a deep blue facial pattern and red on the foreneck, but fine black margins are restricted to feathers of the neck and mantle, while the underparts are uniformly green, and the bill is white instead of dusky grey. It frequents lowland and foothill forests up to 800m, with recent surveys indicating that its stronghold is in and around the forests of Morne Diablotin, in the north of the island.

Habitat loss, coupled with hunting for food or sport and capture for sale locally as pets caused declines in numbers of Red-necked Amazons, but conservation efforts have been rewarded by a recovery from a low of 150 birds in 1980 to more than 500 in 1993, and some recent estimates have been of up to 250 birds. My first encounter with these parrots was at a locality known locally as Simpa Flats, where some five years earlier highest concentrations had been found during the course of surveys, and here I also observed them to be common. In the early evening, from a vantage point I watched more than a dozen birds, comprising mainly pairs and small parties, as they fluttered from tree to tree; obviously in preparation for the return to their nighttime roost. They were rather wary, and our approach eventually caused them to fly off while screeching loudly, and their departing flight high across the forested valley was most impressive in the gathering dusk.

Nests have been found high up in gommier trees, and at one nest the parents were observed coming to feed the single chick. At 0528 hours, both birds quietly flew out from the nesting tree, presumably for their morning feeding. At 0800 hours, to the accompaniment of much screeching, they and four other parrots returned to the area; the pair eventually flew to the nest tree and entered the hollow. At 0858 hours both birds departed. They

returned silently to the area at 1300 hours, and came to the nest tree at 1333 hours. The male sat on a branch 3m above the hollow entrance while the female visited the hollow, and then she climbed up to sit beside the male. At 1400 hours, they flew off a short distance, returning silently to the nest at 1500 hours. At 1600 hours, both birds suddenly flew off, and then at 1611 hours they returned for the last time.

A National Park for Majestic Mountain Parrots

The largest, and probably most spectacular of all amazons, the Imperial Amazon Amazona imperialis generally occurs at elevations higher than those favored by the Red-necked Amazon, though there is considerable altitudinal overlap in ranges of the two species. More than 45cm in total length, the Imperial Amazon has the head dark maroon-purple suffused with greenish-blue and with black margins to all feathers, while the breast and abdomen are purple, again with strong black margins to the feathers. The upperparts and lower underparts are green, while red is present along the carpal edge of the wing.

Because this species is known to occur in very low numbers only in rainforests on Morne Diablotin and in southern mountains east of Rousseau, I anticipated difficulties in observing it during my brief visit to Dominica. My concerns were well founded, for my only sighting was of a lone bird, and that encounter would not have eventuated without assistance from local forestry officers, who guided Rosemary Low and I to a vantage point on a hill-

side overlooking a known nesting site along a tributary of the Picards River on the slopes of Morne Diablotin.

While we waited at this point, the officers descended into the deeply forested gorge in an attempt to flush one of the nesting pair. Their efforts were rewarded when a parrot flew into view and paused momentarily in the top of a partly-defoliated tree before undertaking a gliding flight above the treetops, showing a strong reluctance to move out into surrounding hurricane-damaged forest. I must agree that in flight this bird appeared strangely eagle-like, a comparison regularly made of the species by other observers.

Though the estimated population in 1998 was of 250 to 300 birds, the Imperial Amazon remains the most seriously threatened of the Lesser Antillean amazons. It is virtually confined to the forests of Mome Diablotin, where near to 100 individuals were counted in just one western valley during a survey conducted in 1994. In recent years, this truly majestic parrot has benefited from joint government and non-government efforts to protect its restricted habitat, and these efforts were bolstered significantly in January 2000 by the formal establishment of Morne Diablotin National Park.

For parrot-lovers in North America, I strongly recommend visits to St. Vincent, St. Lucia, and Dominica. On these largely unspoiled islands, guidance and assistance from friendly forestry officials and local residents will provide the exciting experience of observing four of the world's most spectacular parrots in stunningly beautiful tropical habitats.

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