Herpetofaunas

of

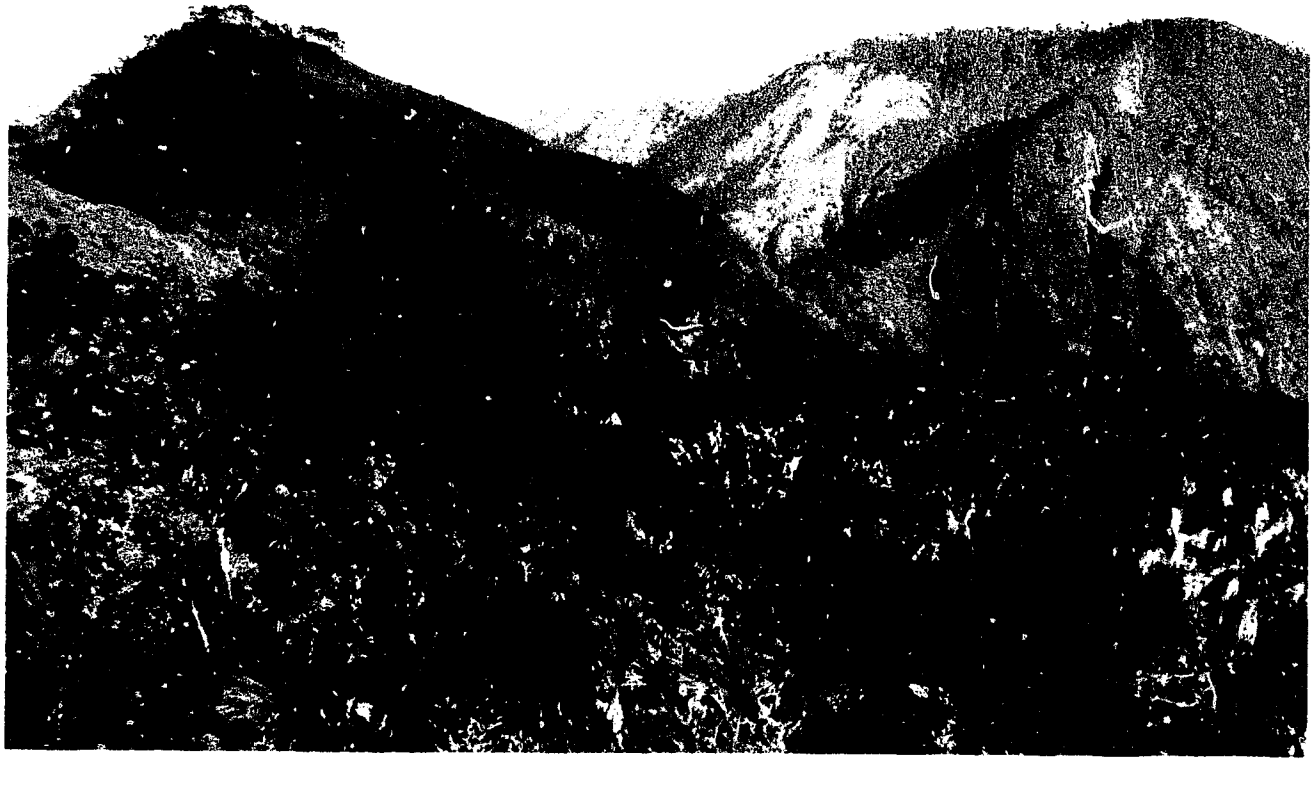
The National Parks of Haiti

by

Richard Franz

and

Daniel Cordier



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January 1986

Prepared for USAID/Haiti under contract Number
521-0169-C-00-3083-00

THE HERPETOFAUNAS OF THE PROPOSED NATIONAL PARKS IN SOUTHERN HAITI.

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INTRODUCTION

Recently, Haiti has proposed to establish national parks in two remote high altitude areas in the Massif de la Hotte and the Massif de la Selle in the southern part of the country. Both of these areas contain remanents of virgin montane forests, in a rugged mountainous setting, which together produce extremely valuable scenic resources. These areas also serve as important refugia for unique biotas, ones which are declining rapidly. Many of these plants and animals occur no other places in Hispaniola, or for that matter in the world. Hence, these parks may represent the last chances to preserve these species for the future.

Between January 1984 and February 1985, Charles A. Woods of the Florida State Museum organized several expeditions into the proposed park areas, with the missions of inventorying their biotas. The goal of these biological surveys was intended to supply the necessary documentation to permit the establishment of appropriate boundaries for the newly created parks, and to earmark those special areas within the parks that contain unique species.

The purpose of this paper is to report on the herpetological data obtained by members of the 1984-1985 C.A. Woods-FSM Expeditions to these mountain areas, and to review other pertinent information on these areas gathered by previous visitors. We believe with these data we can provide a preliminary assessment of the distributional limits of the amphibians and reptiles that occur within

the current park boundaries, and present information necessary to document the needs for further boundary modifications.

ORGANIZATION OF MATERIALS

Materials in this report are divided into two parts, one for Parc National Macaya and one for Parc National La Visite. Each part consists of a brief description of the study area, an annotated list of species known to occur within each mountain area, and accounts for individual species found during our visits. Each species account includes the scientific name, a local name when available, the descriptions of the local and general distributions of the species or subspecies, habitat notes, specific records, and a list of pertinent literature.

The Specific Records section lists data for specimens obtained by us during our visits to each park area. (In some accounts, we have refrained from listing those individuals for which we have only made tentative identifications, although we may allude to them in the text portion of the account. These specimens are still under study and will be reported on at a later date.) This section includes the following information: general and specific locality data, elevations in meters, date of collections, field or museum numbers in parenthesis, and name of collectors. General place names (e.g. Plaines Formon, Sou Bois, Bois Formon, Seguin, Morne La Visite, etc.) used here were retrieved from published maps. Names for specific sites were derived from information supplied by the local populace (e.g. Jeremie and Titwe areas, village of Formon, etc.), or names contrived by us to mark important points in the expedition's progress (e.g. Base Camp, Formon Ridge Camp, Brent's Trail, Ravine Camp). These names do not appear on area map; however, they have been shown on the included map.

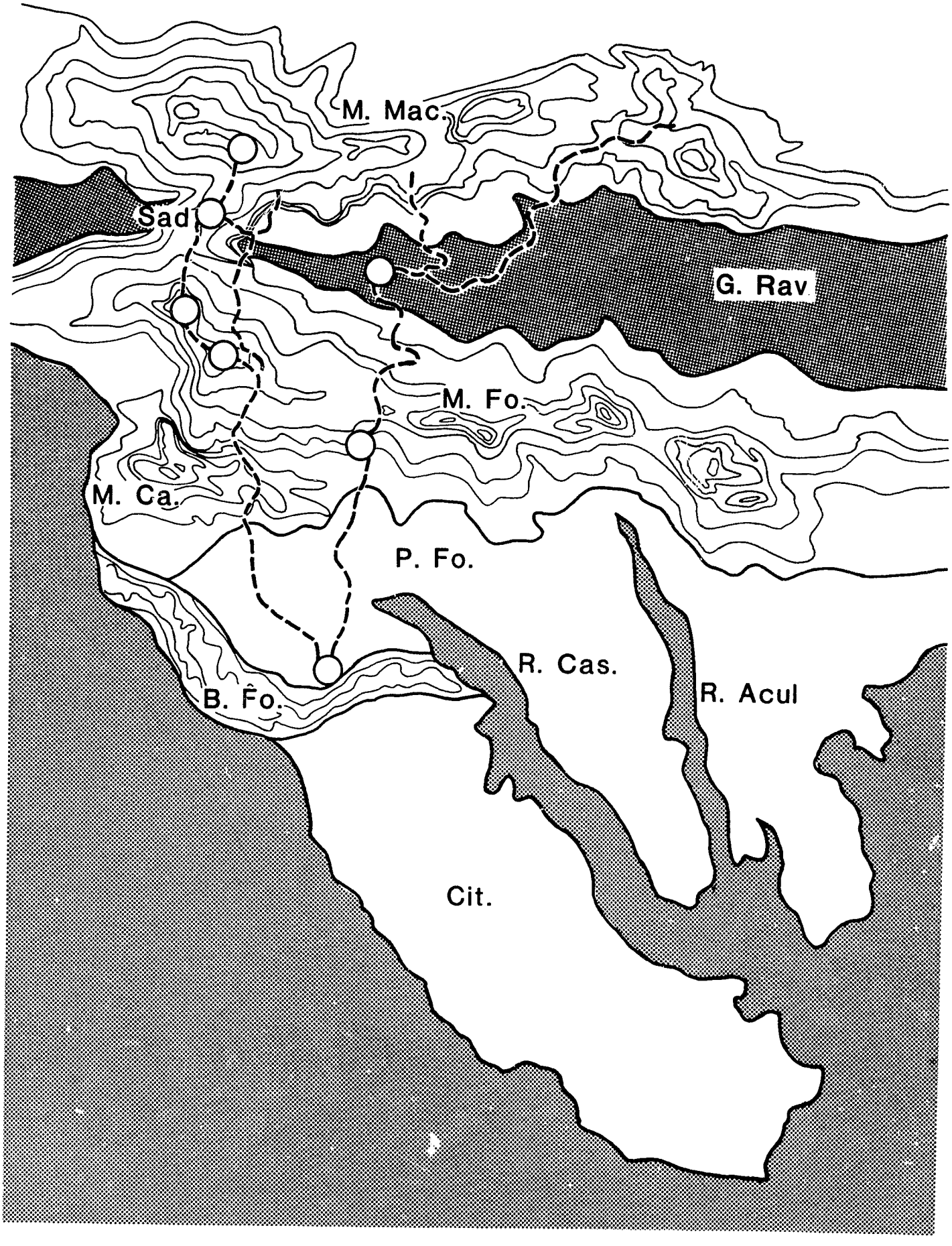
Specimens obtained by us are housed in the collection of the Florida State Museum (UF). In cases where UF specimens remain uncatalogued, we have retained the following original expedition field numbers: RF (Richard Franz), KA (Kurt Auffenberg), or R (Daniel Cordier).

PART I. PARC NATIONAL MACAYA

As proposed, this park lies entirely within the Department du Sud, and includes the ridges of Formon and Macaya, the Saddle, and the upper portions of the Grande Ravine du Sud, at elevations above the 1600 meter contour. Within this area, the two highest peaks (Pic Formon -- 2200 meters; Pic Macaya -- 2340 meters) in Massif de la Hotte are located.

Expeditions to this park originated in Camp Perrin, progressed by road along the Riviere L'Acul, to a point where the road left the river and ascended the plateau (Les Platons), cresting at the ruins of La Citadel. At this point, the vehicles were left, and we began a 2-hour walk to the Base Camp on Plaines Formon through Sou Bois and Bois Formon.

Base Camp on Plaines Formon became the hub of our penetrations into the park. Large numbers of specimens were collected by us or brought to us at this outpost from the surrounding countryside. It was here also that we launched collecting trips into the sinkhole areas on Les Platons. Trails lead out from Base Camp toward the southern park boundary on the south slope of Morne Formon. Collecting within the park was biased due to the limited number of access routes into this precipitous terrain. At the time of our visits, there were two Haitian trails that cross Morne Formon, one that lead through Formon Ridge Camp, cresting the ridge at an elevation of 1900 meters, the other by way of the Jeremie Sinkhole Plain and Morne Cavalier. Both trails ended in the Grande Ravine du Sud. A third trail, cut by Brent Mitchell and a Haitian work force, followed the crest of Formon, connecting both of these trails. This trail then continued beyond the more western Cavalier trail, accessing Pic 2170, Pic Formon, (2200 meters), and the crest of the Saddle (1800-1900 meters). From the Saddle, the climbs to Pic Macaya originated. Collections were made along each


M. Mac.
Sad
G. Rav
M. Fo.
M. Ca.
P. Fo.
R. Cas.
R. Acul
B. Fo.
Cit.

of these routes, along subsidiary trails leading off of the major ones when available, and in the vicinity of camping sites (Formon Ridge Camp on the south slope of Morne Formon at an elevation of 1650 meters, Brent's Camp along Brent's Crest Trail near Pic 2170, Ravine Camp in the Grande Ravine du Sud at 1030 meters, Saddle Camp at a point where the Saddle intersected Morne Macaya at 1900 meters, and Pic Macaya Camp on the crest of Morne Macaya at 2330 meters). The positions of these trails and camps are noted in Figure 1.

We considered the study area to consist of (1) Les Platons (from the ruins of the Citadel at an elevation of 700 meters, north through Bois Formon, Plaines Formon, and Morne Cavalier, to the south base of the ridge of Formon), (2) the south and north slopes of Morne Formon including the crest, (3) the Saddle that forms the headwall of the Ravine du Sud, (4) the Grande Ravine du Sud above 900 meter contour, and (5) the south slope and crest of Morne Macaya (including Pic Macaya at 2340 meters elevation) (see Figure 1). This expanded view of the park area enabled us to gather data for a greater range [illegible] include several forest types that would [illegible]

Herpetological materials [illegible] ity during January and early February, June, [illegible] in 1984, and January and February in 1985. This provide[illegible] for most species. Hopefully, these specimens will become the basis for future natural history studies.

SETTING

Geologically, the region forms a vast upland karst. Permanent surface water is uncommon in the study area, except for the Riviere du Sud and a few springs originating at the bases of the ridges of Formon and Macaya. Deep solution pits (up to 97 meters in depth), sometimes with small caves at their

bottoms, are common in Les Platons area, particularly on Plaines Formon and the lower slopes of Morne Cavalier. A second karst area with deep solution pits also occurs on the ridge of Macaya east of Pic Macaya. One of us (DC) collected extensively in these pits, while exploring them for paleontological materials.

According to Woodring et al (1924), lowland sites are reported to receive up to 2108 millimeters (Les Cayes) of rainfall annually. Unfortunately, they did not have data for high altitude sites, although they did intimate that these sites got considerable more precipitation than the lowlands. They also noted two well-defined wet seasons in the area, one between April-June, and the other August-December. During our stays, it rained little at Base Camp on Plaines Formon, except in June. However, there was precipitation, either as rain or mist, practically every day on Formon and Macaya. Trails, particularly at the crest of these ridges, were generally muddy, with standing pools of water occurring in low spots. Clouds blew through these forests daily, and dripping water was an ever-present sound as one walked the trails. Evenings were usually clear and cool, but by morning the clouds would again reform. The week that was spent in the ravine was hot and sunny. The Saddle showed the most severe weather conditions as a result of local wind patterns which passed through the ravine and up over the Saddle.

There are three distinctive forest types present within the study area. (See Judd in this compendium for a thorough description of each type.) We will refer to them in the accompanying text by the following names.

I. Montane Pine Forests/Cloud Forests-- West Indian pine (Pinus occidentalis) characterized the forests on the slopes and crests of Formon and Macaya and near the summit of Morne Cavalier, at elevations greater than 1300 meters. This forest could be divided into the following recognizeable associations that graded into one another, and probably resulted as a

consequence of fires and other disturbances. (1) Dry pinelands were characterized by pines, blackberries (Rubus spp.) and ferns (Pteridium aquilinum, Histiopteris incisa, Blechnum tuerckheimii); (2) Moist pinelands, including "cloud forest", had scattered pines and a dense layer of woody shrubs (Didymopanax tremulum, Persea anomala, Myrsines coriacea, Brunellia comocladiifolia, Garrya fadyenii, Miconia spp.), tree ferns (Cynathea harrisii, Alsophila minor, Weinmannia pinnata), bromeliads, and climbing bamboo (Arthrostylidium haitiense); (3) Open balds were dominated by Myrica picardae and Ilex obcordata.

II. Wet Forests on Limestone-- This forest type occurs on Les Platons and the lower slopes of Cavalier, Formon and Macaya, below 1250 meters. Important plants include Dendropanax arboreus, Didymopanax tremulum, Prunus occidentalis, Prunus myrtifolia, Beilschmeidia pendula, Zonthoxylum haitiense, and many melastomes (particularly species of Macranium, Calcygonium, Miconia, and Ossaea), Chrysophyllium argentium, Dipholis cubensis, Phyllanthus myriophyllus, Micropholis sp. n., Lunania mauritii, Daphnopsis crassifolia, Palicouria alpinus, Psychotria pubescens, Cobelia robusta, Alchornia latefolia, Rhytidophyllum spp., Solanum spp., and Eupatorium spp. Unfortunately, much of the original forest has now been cut and the areas planted with gardens or converted to pastures. There are still some undisturbed forest remanents on the more rugged limestone hills in the area locally known as Bois Formon.

III. Ravine Pine Forest-- This peculiar forest occurs along the floodplain of the Riviere du Sud in the inner gorge of the Grande Ravine at elevations to at least 1250 meters. Here, spindly pines grow in rather extensive stands in the alluvial cobble and boulder bars along the stream. Although close to water, the area appears arid with ferns (particularly Pteridium aquilium), blackberries (Rubus spp.) and a few woody shrubs (Heterotrichum angustifolium, Gyrotaenia

myriocarpa, Senecio stenodon, Garraya faydenii, and Cestrum bicolor) forming a dense layer under the pines.

ANNOTATED LIST OF AMPHIBIANS AND REPTILES KNOWN FROM THE MASSIF DE LA HOTTE AND ADJACENT AREAS.

The following 54 amphibians and reptiles were reported in Schwartz and Thomas (1975) Henderson and Schwartz (1984), and/or this report, as occurring in the Massif de la Hotte in the western Tiburon Peninsula, Haiti. * = indicates those taxa listed in the literature from the Massif de la Hotte, but not reported from the study area; ** = includes those taxa represented in collections from the study area; 1 = includes those taxa not previously listed from the Massif de la Hotte, but are represented in our collections. Those species without notation are reported as occurring in the general area by Henderson and Schwartz (1984) and may eventually be found within the study area.

Order ANURA

Family Leptodactylidae (22 taxa)

Eleutherodactylus abbotti Cochran
** Eleutherodactylus apostates Schwartz
* Eleutherodactylus audanti audanti Cochran
** Eleutherodactylus bakeri Cochran
** Eleutherodactylus brevirostris Shreve
** Eleutherodactylus chlorophenax Schwartz
** Eleutherodactylus counouspeus Schwartz
* Eleutherodactylus eunaster Schwartz
** Eleutherodactylus glandulifer Cochran
* Eleutherodactylus glaphycompus Schwartz
** Eleutherodactylus heminota Shreve and Williams
* Eleutherodactylus hypostenor Schwartz
Eleutherodactylus inoptatus Barbour
** Eleutherodactylus lamprotes Schwartz
1 Eleutherodactylus nortoni
** Eleutherodactylus oxyrhynchus Dumeril and Bibron
** Eleutherodactylus pictissimus pictissimus Cochran
** Eleutherodactylus ruthae aporostegus Schwartz
* Eleutherodactylus sciagraphus Schwartz
* Eleutherodactylus semipalmatus Shreve
** Eleutherodactylus ventrilineatus Shreve
** Eleutherodactylus wetmorei wetmorei Cochran

Family Hylidae (4 taxa)

** Hyla heilprini Noble
** Hyla pulchrilineata Cope
** Hyla vasta Cope
** Osteopilus dominicensis Tschudi

Order SQUAMATA

Suborder SAURIA

Family Gekkonidae (1 taxon)

* Sphaerodactylus elasmorhynchus Thomas

Family Anguidae (3 taxa)

** Celestus costatus costatus Cope
** Celestus stenurus stenurus Cope
* Sauresia sepsoides Gray

Family Iguanidae (19 taxa)

1 Anolis armouri Cochran
** Anolis coelestinus coelestinus Cope
** Anolis cybotes Cope
* Anolis darlingtoni Cochran
** Anolis distichus aurifer Schwartz
* Anolis distichus suppar Schwartz
* Anolis distichus vinosus Schwartz
** Anolis dolichocephalus dolichocephalus Williams
* Anolis dolichocephalus sarmenticola Schwartz
* Anolis koopmani Rand
* Anolis monticola monticola Shreve
** Anolis monticola quadrisartus Thomas and Schwartz
** Anolis ricordi leberi Williams
* Anolis ricordi viculus Schwartz
* Anolis rupinae Williams and Webster
Anolis semilineatus Cope
* Anolis singularis Williams
** Chamaelinorops barbouri Schmidt
** Leiocephalus melanochlorus melanochlorus Cope

Family Boidae (2 taxa)

** Epicrates gracilis hapalus Sheplan and Schwartz
** Epicrates striatus exagistus Sheplan and Schwartz

Family Colubridae (3 taxa)

** Antillophis parvifrons parvifrons Cope
** Darlingtonia haetiana haetiana Cochran
** Uromacer catesbyi catesbyi Schlegel

SPECIES ACCOUNTS

ORDER Anura

Family Leptodactylidae (There were large numbers of frogs in the genus Eleutherodactylus obtained by us whose identities remain undetermined. Within this group, there are, no doubt, several undescribed taxa represented. We decided to refrain from including them in this report until they can be adequately studied.)

Eleutherodactylus apostates Schwartz

Crapau

Previously, E. apostates has been reported in the literature from the vicinity of the type locality at Castillon on the north slope of Massif de la Hotte, between 1029 and 1147 m (Schwartz and Thomas 1975). Our specimens indicated its occurrence on the southern slopes of this mountain area.

SPECIFIC RECORDS: Formon Ridge (north slope)-- elev. 1650 m, 7 Jan 1983, (CAW#), C.A.Woods; 5 Jan 1983, (UF 53928), C.A.Woods.

REMARKS: We were unable to distinguish between specimens of E. apostates and Eleutherodactylus bakeri in all cases. Therefore, we have included only those specimens identified by A. Schwartz as apostates in the Specific Records of this account. All other specimens were included in the E. bakeri account. In the future, we hope to resolve these identification problems, and present a more representative picture of the distribution of these two species in the park area.

PERTINENT LITERATURE: Schwartz 1973 (original description), Schwartz and Thomas 1975 (synopsis, distribution), Henderson and Schwartz 1984 (key).

Eleutherodactylus bakeri Cochran

Crapau

E. bakeri occurs on Les Platons at Plaines Formon and Morne Cavalier, on the slopes of Morne Formon and Morne Macaya, at elevations between 1000 and 2340 meters. We found them in a variety of habitats including in deep sinkholes, in leaf mold, under bark of upright dead pine trees, and in bromeliads.

According to Schwartz and Thomas (1975), E. bakeri is known from the type locality stated as "Mt. La Hotte, 5000-7800 feet" and Castillon.

SPECIFIC RECORDS: Les Platons (Plaines Formon)-- vicinity of Base Camp, 1000 m, 26 Jan 1984, (UF 58343), C.A.Woods; upper ravine of Riviere Cass Cou, 1300 m, 29 Jan 1984, (UF 58347), R.Franz; 30 Jan 1984, (UF 58348), R.Franz; dry ravine near Trouing Jeremie #5, 2 km NW of Base Camp, elev. 1220 m, 1 Feb 1984, (UF 58349, 58363), R.Franz; Trouing Jeremie #9, 2.0 km NW of Base Camp, elev. 1220 m, 2Feb 1984, (UF 58362), C.A.Woods; Jeremie #10, 2 km NW of Base Camp, elev. 1108 m, (UF 58373), C.A.Woods, D.Cordier; (Morne Cavalier area)-- south slope, 1600 m, 1Feb 1984, B. MacFadden, R.Cleeland; southwest slope, elev. 1300-1400 m, 31 Jul 1984, (UF 58376-58380), R.Franz, S. Partin; Formon Ridge (south slope)-- Formon Ridge Camp, elev. 1650 m, 24 Jan 1984, (UF 58334); 26 Jan 1984, (UF 58330-58331); basin, ESE of Formon Ridge Camp, elev. 1500 m, 27 Jan 1984, (UF 58340-58342), R.Franz; 3 Aug 1984, (UF 58352-58354), S.Woods, A.Fowler, J.Yarington; (crest)-- trail between Formon Ridge Camp and Ravine Camp, elev. 1800-1860 m, 26 Jan 1984, (UF 58329), 4 Aug 1984, (UF 58350-58351), S.Woods;

(north slope)-- trail, between Formon Ridge Camp and Ravine Camp, elev. 1900 m, 25 Jan 1984, (UF 58327), R.Franz, J.Franz; 1700-1790 m, 24 Jan 1984, (UF 58328); 1650 m, 28 Jan 1984, (UF 58335-58336), R.Franz; ravine garden, east trail between Formon Ridge Camp and Ravine Camp, elev. 1650 m, 28 Jan 1984, (UF 58337-58339), R.Franz; Saddle-- south of Saddle Camp, elev. 1860-1900 m, 5 Feb 1985, (UF 58371-58372), R.Franz; Macaya Ridge (south slope)-- above Saddle Camp, elev. 1900-2100 m, 6-7 Feb 1984, (UF 58368-58369), R.Franz, W.Judd; (Crest)-- vicinity of Pic Macaya Camp, elev. 2200-2340 m, 6-7 Feb 1984, (UF 58365-58366, 58370), R.Franz.

PERTINENT LITERATURE: Cochran 1935 (original description), 1941 (general account), Schwartz 1973 (description of E. apostates), Schwartz and Thomas 1975 (synopsis, distribution), Henderson and Schwartz 1984 (key).

Eleutherodactylus brevirostris Shreve

Crapau

This frog was found commonly in the Montane Pine Forests and Cloud Forests on the slopes and crest of Formon, the Saddle, and the crest of Macaya. On Les Platons, it was only found in the northwestern part of Plaines Formon and in the Morne Cavalier area. At two of these lower sites, specimens were collected from deep sinkholes. We did not found it in the Grande Ravine du Sud.

This species may have a distribution similar to that of Eleutherodactylus glandulifer, i.e. being incredibly abundant in the moist pinelands and cloud forests of the mountain slopes, and restricted to moist ravines and caves and cave-like habitats at lower elevations, particularly where the forests have been removed. At higher elevations, we found this frog hopping all over the ground

when the weather was wet, and under rocks and debris lying on the ground during drier periods.

Previously, E. brevirostris was known from the northern and eastern foothills of the Massif de la Hotte, and from the vicinity of Castillon, at elevation from 1029 to 2264 meters (Schwartz and Thomas 1975). Our records extend the known range of this frog onto the southern slopes of the central ridges in the massif.

SPECIFIC RECORDS: Les Platons (Plaines Formon)-- vicinity of Trouing Sicol, 2.5 km NW of Base Camp, elev. 1240-1260 m, 1 Aug 1984, (RF 482, 484), D. Cordier; Trouing Jeremie #2, 2.5 km NW of Base Camp, elev. 1280, 31 Jan 1984, (RF 324), R.Franz, D.Cordier; upper ravine of Riviere Cass Cou, on trail between Base Camp and Formon Ridge Camp, elev. 1250 m, 31 Jan 1984, (RF 339), F.G. Thompson; (Morne Cavalier area)-- Trouing Johnionelli, 3.2 km NW of Base Camp, elev. 1420 m, 2 Aug 1984, (RF 632), D. Cordier; Ridge of Formon (South Slope)-- vicinity of Formon Ridge Camp, elev. 1650 m, 24 Jan 1984, (RF 269), R. Franz, J. Franz; 26 Jan 1984, (RF 268), F.G. Thompson; 3 Aug 1984, (RF 539), S. Woods, A. Fowler, J. Yarington; basin above spring, SE of Formor Ridge Camp, elev. 1500-1530 m,3 Aug 1984, (RF 539), local collector; (RF 547), A. Fowler, S. Woods, J. Yarington; 28 Jan 1984, (RF 275), F. G. Thompson; 28 Jan 1984, (RF 276), R. Franz; (RF 286), R. Franz, B. J. MacFadden, R. Cleeland; (Crest)-- trail from Formon Ridge Cap to Ravine Camp, elev. 1800-1900 m, 4 Aug 1984, R. Franz, local collectors; (North Slopes)-- trail between Formon Ridge Camp and Ravine Camp, elev. 1700-1750 m, 24 Jan 1984, (RF 2650, R. Franz; 28 Jan 1984, (RF 282), R. Franz; 4 Aug 1984, (RF 555), R.Franz, local collectors; elev. 1650 m, 7 Jan 1983, (C.A.W#), C. A. Woods; in ravine along trail, elev. 1500, 7 Aug 1984, (RF 586) R. Franz, local collectors; Saddle-- vicinity of Saddle Camp, elev. 1800

m, 7 Aug 1984, (RF 599), R. Franz, local collectors; Ridge of Macaya (crest)--near Pic Macaya Camp, elev. 2200-2340 m, 6 & 7 Feb 1984, (RF 374), R. Franz.

PERTINENT LITERATURE: Shreve 1936(original description), Cochran 1941 (general account), Schwartz 1973 (distribution, biogeography), Schwartz and Thomas 1975 (synopsis, distribution), Henderson and Schwartz 1984 (key).

Eleutherodactylus chlorophenax Schwartz

Crapau

Previously, E. chlorophenax was known only from the type locality at Castillon which is located on the northern slope of the Massif de la Hotte. Our records from Les Platons and the Graande Ravine du Sud indicate it is more widespread in this mountainous region.

E. chlorophenax occurred on Les Platons and in the Grande Ravine du Sud, within the Wet Limestone Forests and in the drier ravine pinelands. Most of the specimens were taken from within deep solution pit caves up to 97 meters below the surface. At all of these sites, this frog was found in association with Eleutherodactylus nortoni. Both frogs show similar behaviors in these caves, hopping about or hiding under rocks and organic debris on the bottom, or wedging themselves into nooks and crannies on the vertical walls of the sink. Two specimens, collected on the surface, were found under a rock in a dry stream bed, and from a notch on the side of a giant boulder, about 2 meters above the cobble strewn flodplain of the Riviere du Sud.

SPECIFIC RECORDS: Les Platons (Citadel area)-- Trou Zambi, trail between the Citadel and Base Camp, elev. 995 m, 30 Jun 1984, (UF 56797, 56799), D. Cordier;

(Plaines Formon)-- Trouing Dirant #1, 0.25 km WSW of Base Camp, elev. 1030 m, (RF 634), D. Cordier; Trouing Deron, elev. m (RF 272), D. Cordier; upper Ravive Cass Cou, trail between Base Camp and Formon Ridge Camp, elev. 1300 m, 29 Jan 1984, (RF 297), R. Franz; Grande Ravine du Sud-- Ravine Camp, elev. 1030 m, 5 Aug 1984, (UF 56800), R.Franz.

PERTINENT LITERATURE: Schwartz 1976 (original description), Henderson and Schwartz 1984 (key).

Eleutherodactylus counouspeus Schwartz

Crapau

Originally, this frog was known only from the type locality at Grotto de Counou Bois, near Camp Perrin. However, recent collections have shown the species to be common in the vicinity of the Cavillon (Schwartz, pers. comm.). Our specimens extend the range of this species to include the area near the Citadel on Les Platons, at an elevation of 730 meters.

Initially, the type specimen was secured as it actively hopped about rocks about fifty feet back from the entrance of Grotto de Counou Bois. Specimens from the vicinity of Cavillon were found to call from deep inaccessible crevices in extremely rocky places (Schwartz , pers. comm.) The five specimens obtained by us occurred beyond the lighted zone at the bottom of a deep sink. These frogs, like the one from Grotto de Counou Bois, were found to be active and accurate jumpers, and seemed quite at home in the total darkness. No other frog was found association with this species at Trou Jhing. Perhaps, this species is excluded by E. chlorophenax and E. nortoni from sinkholes at higher elevations.

SPECIFIC RECORDS: Les Platons (Citadel Area)-- Trou Jhing, 2.2 km NW of the Citadel ruins, elev. 730 m, 30 Aug 1984, (UF 57633-57635, R 124), D. Cordier.

PERTINENT LITERATURE: Schwartz 1964a, Schwartz and Thomas 1975 (synopsis, distribution), Henderson and Schwartz 1984 (key).

Eleutherodactylus glandulifer Cochran

Crapau

Specimens of E. glandulifer from the study area were found under rocks and other debris on the ground, and in deep sinkhole caves, at elevation between 1100 and 1900 meters. They were common at the surface in the Montane Pine Forests on the slopes of Morne Cavalier and Morne Formon, but ar[illegible].enly not on the drier southern slopes of Morne Macaya. Specimens from elevations below 1300 meters in the Les Platons region were only found inside sinkhole caves in the Jeremie sinkhole plain area. These cave specimens were found in cavities on the vertical walls of the shafts, as well as on the under debris at the bottom, at depths up to 27 meters below the surface. We interprete the sinkhole frogs to be part of relictual colonies of this species at lower elevations. This may have resulted as a consequences of drier conditions with the removal of the local Wet Limestone Forest which formerlly predominated in this area. Previously, E. glandulifer was known from the type locality in the north and east foothils of Macaya and from Castillon, between 1000 ft and 4000 ft (Schwartz and Thomas 1975). Our specimens extend the range to the southern slopes of the Massif de la Hotte.

SPECIFIC RECORDS: Les Platons (Plaines Formon)-- Trouing Jeremie #1 (in sink 12

meters below surface), 2.5 km NW of Base Camp, 2 Aug 1984, (RF 619), D. Cordier; Jan 1984, (RF 311), D. Cordier; Trouing Jeremie #3, (RF), D, Cordier, A. Folwer; Trouing Jeremie #5, (in cave 12 meters below surface), 1 Feb 1984, (RF 329, RF 336), D. Cordier; Trouing Jeremie # 6, 1 Feb 1984, (RF 342), D. Cordier; Trouing Jeremie #8, (in sink 17 meters below surface), 2 Feb 1984, (RF 360), D. Cordier, C.A.Woods; Trouing Jeremie #10 (in cave 27 meters below surface), 2 Feb 1984, (RF 362), D. Cordier, C.A.Woods; (Morne Cavalier area)-- Trouing Johnionelli, elev. 1420 m, 2 Aug 1984, spec. and eggs (RF 615-617), D. Cordier; soth slope of Morne Cavalier, elev. 1500 m, (RF 335), B.J.MacFadden, R. Cleeland; near summit of Morne Cavalier, elev. 1550 m, 4 Feb 1984, (RF379), F.G.Thompson; Formon Ridge (South Slope)-- along trail between Base Camp and Formon Ridge Camp, elev. 1400 m, 3 Aug 1984, (RF 545), R. Franz, S.Partin; vicinity of Formon Ridge Camp, elev. 1650 m, 3 Aug 1984, (RF 534, 538), S. Woods, A. Fowler, L Yarington; 26 Jan 1984, (RF 267), R. Franz; 28 Jan 1984, (RF 295), R.Franz; 3 Aug 1984, eggs (RF 540), J. Yarington; basin at spring, ESE of Formon Ridge Camp, elev. 1460 m, 27 Jan 1984, (RF 285), R.Franz, J. Franz; basin above spring, ESE of Formon Ridge Camp, elev. 1500 m, 28 Jan 1984, (RF 275), F.G.Thompson;elev. 1500-1530 m, (RF 286), R.Franz, B.J. MacFadden, R. Cleeland; 3 Aug 1984, (RF 547), S.Woods, A.Fowler, J.Yarington; ravine of the upper Riviere Cass Cou, at intersection with trail to Formon Ridge Camp, elev. 1300 meters, 29 Jan 1984, (F 297), R.Franz, and S. Partin; (North Slope)-- small ravine at trail between Formon Ridge Camp and Ravine Camp, elev. 1500 m, 28 Jan 1984, (RF 276), R.Franz; ravine east of garden site, east of trail between Formon Ridge Camp and Ravine Camp, elev. 1650 m, 28 Jan 1984, (RF 280), R. Franz; near crest of Morne Formon, along trail between Formon Ridge Camp and Ravine Camp, elev. 1800-1900 m, (RF 554), R.Franz; 3 Aug 1984, eggs (RF 561), S. Woods. Macaya Ridge (North Slope)--

Trouing Large Genti, approx. 5 km E of Pic Macaya, elev. 1365 m, 13 Sep 1984, (R 079), D. Cordier.

PERTINENT LITERATURE: Cochran 1935 (original description), Cochran 1941 (general account), Schwartz and Thomas 1975 (synopsis, distribution), Henderson and Schwartz 1984 (key).

Eleutherodactylus lamprotes Schwartz

Crapau

All of our specimens were collected from large, water-filled bromeliads at elevations between 975 and 1200 meters.

Previously, E. lamprotes was only known from the type locality at Castillon on the northern slopes of the Massif de la Hotte. Our specimens from Bois Formon, Plaines Formon and the Grande Ravine du Sud suggest this species to be widespread in the central part of the Massif de la Hotte.

SPECIFIC RECORDS: Les Platons (Bois Formon)-- forested limestone hill, 200 m S of Base amp, elev. 975 m, (UF 56802-56803), R.Franz, J.Franz; (Plaines Formon)-- hill SW of the upper ravine of Riviere Cass Cou, trail between Base Camp and Formon Ridge Camp, elev. 1200 m, 30 Jan 1984, (UF 56813), R. Franz; limestone hill at Base Camp, elev. 1000 m, 1 Aug 1984, (RF 531), R. Franz; Grande Ravine du Sud-- floodplain of the Riviere du Sud, above Ravine Camp, elev. 1100 m, 7 Aug 1984, (UF 56804-56805), R.Franz.

PERTINENT LITERATURE: Schwartz 1973 (original description), Schwartz and Thomas 1975 (synopsis, distribution), Henderson and Schwartz 1984 (key).

Eleutherodactylus nortoni Schwartz

Crapau

Previously, E. nortoni was known only from the Massif de la Selle in Haiti and two localities in Pedernales Province in Republica Domonicana. Our spec mens extend the known range of this species into the Massif de la Hotte.

This frog was common in deep sinkhole caves up to 97 meters deep in the Les Platons region and the karst plain on the east side of the Macaya ridge. It co-occurred with Eleutherodactylus chlorophenax at several sinkhole sites, where both species were found amongst the rocks and organic debris on the bottom, or on the vertical walls of the sinks. There were only two occasions when this species was located on the surface-- in a notch of a limestone cliff face, near a small stream, cascading into the Riviere du Sud, and under a large rock in a rocky area that had recently been converted from forest to pasture.

SPECIFIC RECORDS: Les Platons (Citadel Area)-- Trou Zambi, trail between the Citadel and Base Camp, elev. 995 m, 30 Jun 1984, (UF 56794-56796, 56798), D. Cordier; (Bois Formon)-- Trouing Bois Formon #1, elev. m, 23 Jan 1984, (UF 56788), D. Cordier; (Plaines Formon)-- Trouing Deron, elev. m, 25 Jan 1984, (UF 56789-56791), D. Cordier; Trouing Delvas Dirant, 0.5 km WSW of Base Camp, elev. 1080 m, 5 Aug 1984, (RF 621), D. Cordier; Trouing Dirant #1, 0.25 km WSW of Base Camp, elev. 1030 m, 8 Aug 1984, (RF 634), D. Cordier; Trouing Vapir Dirant #2, 1.85 km SW of Base Camp, elev. 985 m, 14 Sep 1984, (R 102), D. Cordier; Trouing Cheetah, 1.5 km SSE of the Base Camp, Elev. 850-900 m, 6 Aug 1984, (RF 625), D. Cordier; vicinity of Jeremie sinkhole plain, 2.5 km NW of Base Camp, 1250 m, 1 Feb 1984, (UF 56793), F.G. Thompson; Trouing Jeremie #1, elev. 1240 m, (RF 619), D. Cordier; Trouing Jeremie #3, 31 Jan 1984, (UF 56792), D. Cordier; Grande

Ravine du Sud--- Ravine Camp, elev. 1030 m, 6 Aug 1984, (RF 587), R. Franz; 7 Aug 1984, (UF 56801), local collector; Macaya Ridge-- Trouing Large Genti #1, karst area on the eastern part of the ridge, elev. 1365 m, 13 Sep 1984, (R 079), D. Cordier.

PERTINENT LITERATURE: Schwartz 1976 (original description); Henderson and Schwartz 1984 (key).

Eleutherodactylus oxyrhynchus (Dumeril and Bibron)

Crapau

E. oxyrhynchus is the most common frog on Les Platons. Here, it occurs on disturbed sites in incredible numbers, frequently 2 to 7 under a single rock. At higher elevations, this frog is less common, and seems to prefer old garden sites. It may be that this species has recently invaded the slopes of Morne Cavalier and Morne Formon, and the Saddle, from Les Platons, following deforested corridors. We found no specimens on the south slope or crest of Morne Macaya, in forested area on Morne Formon, or in the inner gorge of the Grande Ravine du Sud. E. oxyrhynchus was also common in the bottoms of sinkhole pits, up to 12 m.

E. oxyrhynchus is known to occur in the Massif de la Hotte and Massif de la Selle, at elevations between 735 m and 1176 m (Schwartz and Thomas 1975).

SPECIFIC RECORDS: Les Platons (Bois Formon)-- Trouing Grand Fond, 1.25 km SW of Base Camp, elev. 920 m, 6 Aug 1984, (RF 623), D. Cordier; Trouing Delas, Bois Dirant, 0.5 km WSW of Base Camp, elev. 1080 m, 5 Aug 1984, (RF 621), D. Cordier; (Plaines Formon)-- vicinity of Base Camp, elev. 970 m, 31 Jul 1984, (RF 451),

local collectors; 1 Aug 1984, (RF 507, 531), local collector; Trouing Sicol area, approx. 2,5 km W of Base Camp, ele. 1240-1260 m; 1 Aug 1984, (RF482, 483, 484), D. Corider; upper ravine of Riviere Cass Cou, at intersection with trail between Base Camp and Formon Ridge Camp, elev. 1260-1300 m, 29 Jan 1984, (RF 297), R.Franz; 3 Aug 1984, (RF 542), R. Franz, S. Partin; vicinity of Trouing Jeremie sinkholes, approx. 2 km NW of Base Camp, elev. 1210-1280 m, 1 Feb 1984, (RF 331), R.Franz; Trouing Jeremie #1, 2 km NW of Base Camp, elev. 1210 m, 30 Jan 1984, (RF 311), D. Cordier; Trouing Jeremie #4, 2 km NW of Base Camp, elev. 1220 m, (RF 340), D. Cordier; Trouing #5, 2 km NW of Bae Camp, elev. 1220 m. 1 Feb 1984, (RF 329), D. Cordier; Trouing Jeremie #6, 2 km NW of Base Camp. elev. 1220 m, 1 Feb 1984, (RF 342), D. Cordier; (Morne Cavalier area)-- southwest slope of Mone Cavalier, elev. 1300-1400 m, 31 Jul 1984, (RF 445), R.Franz, S. Partin; vicinity of Trouing Titwe, approx. 3.5 km NW of Base Camp, elev. 1000 m, 1 Aug 1984, (RF 505), local collectors; Trouing Johnionelli, 3.2 km NW of Base Camp, elev. 1420 km, (RF 632), D. Cordier; Formon Ridge (South Slope)-- Formon Ridge Camp, elev. 1650 m, 26 Jan 1984, (RF 268), F. G. Thompson; basin, ESE of Formon Ridge Camp, elev. 1500 m, 28 Jan 1984, (RF 275), F.G.Thompson; 3 Aug 1984, (RF 547), S. Woods, A Fowler, J. Yarington; (North Slope)-- trail between Formon Ridge Camp and Ravine Camp, elev. 1500 m, 7 Aug 1984, (RF 586), local collector; Saddle-- east slope, below Saddle Camp, elev. 1800 m, 7 Aug 1984, (RF 599), local collector.

PERTINENT LITERATURE: Cochran 1935 (original description of E. femur-levis), Lynch and Schwartz 1971 (systematics, illustrations), Schwartz 1973 (distribution, biogeography), Schwartz and Thomas 1975 (synopsis, distribution), Henderson and Schwartz (key).

Eleutherodactylus ventrilineatus (Shreve)

Crapau

Previously, this frog was only known from the type series obtained by J. P. Darlington in 1934 on the Pic Macaya. As far as we known, the specimens obtained by us represent only the second series of this species in exsistence in museum collections. Our specimens extend the known range to include the Saddle and Morne Formon, at elevations in excess of 1700 meters.

All of our specimens including females with eggs were found on drier, more open sites in the Montane Pine and Cloud Forests. The frogs were most common in areas that were recently burned or under cultivation.

SPECIFIC RECORDS: Formon Ridge (north slope)-- garden site, along trail between Formon Ridge Camp and Ravine Camp, elev. 1700 m, (RF 258), R.Franz, J.Franz; (Crest)-- along trail between Formon Ridge Camp and Ravine Camp, elev. 1800-1900 m, 26 Jan 1984, (RF 266), R. Franz, W. Judd; 28 Jan 1984, (RF 282), R. Franz; 4 Aug 1984, (RF 554), R. Franz; spec. and eggs (RF 557), S. Woods; spec. and eggs (RF 559), S. Woods; Brent's Trail to Pic 2170, approx. 1.3 km W of trail between Formon Ridge Camp and Ravine Camp, elev. 2140-2200 m, (RF 365), R. Franz; Saddle-- trail along ridge along crest, elev. 1860-1900 m, 5 Feb 1984, (RF 369), R.Franz, W.Judd; Saddle Camp, elev. 1900 m, Jun 1984, (KA 360), D. Cordier; Macaya Ridge (South Slope)-- Shoulder Trail to Pic Macaya, elev. 1900-2100 m, (RF 370), R.Franz; (Crest)-- vicinity of Pic Macaya Camp, elev. 2200-2340 m, (RF 373, RF 375), R. Franz, W. Judd; 11 Sep 1984, (R 066), D. Cordier.

PERTINENT LITERATURE: Shreve 1936 (original description), Cochran 1941 (general account), Schwartz and Thomas 1975 (synopsis, distribution), Henderson and Schwartz 1984 (key).

Eleutherodactylus wetmorei wetmorei Cochran

Crapau

We purchased 2 specimens of this frog from local collectors during our stay. Both of these specimens were supposedly collec 1 from the Plaines Formon area, but unfortunately, we were unable to dulpicate their collections during our sampling. Since this species is rather common at lower elevations, it may be that these specimens had been collected from a site outside the study area and transported to Base Camp for us to purchase.

E. wetmorei wetmorei occurs in the Massif de la Hotte, from Camp Perrin and Les Platons on the west to the vicinity of Miragoane, at elevations between 215 and 882 meters. Other subspecies are known from the northern slopes of the Massif de la Hotte and the Monts Cartaches, and from the north and south slopes of the Massif de la Selle and Morne l'Hopital, and southeast of Los Arroyos in the Republic Dominicana. (Schwartz and Thomas 1975).

SPECIFIC RECORDS: Les Platons (Plaines Formon)-- vicinity of Base Camp, 1000 m, 31 Jul 1984, (RF 451), local collector; 1 Aug 1984, (RF 531), local collector.

PERTINENT LITERATURE: Cochran 1935 (original description of E. wetmorei), 1941 (general account), Shreve and Williams 1963 (systematics), Schwartz 1968a (description of subspecies), 1977, Schwartz and Thomas 1975 (synopsis, distribution), Henderson and Schwartz 1984 (key).

Family Hylidae

Hyla heilprini Noble

Crapau

This hylid frog is a common in the Grande Ravine du Sud. We found it to rarely strays far from flowing water. Tadpoles and transforming froglets were common in plunge pools along the rocky and boulder-strewn upper Riviere du Sud, at elevations up to 1200 meters. The few specimens from Plaines Formon were reported to have been taken among the rocks in wet areas along the creek bed in the Ravine Cass Cou.

H. heilprini is a widespread endemic species in Hispaniola, particularly at elevations between 590-880 meters (Schwartz and Thomas 1975). In the Massif de la Hotte, Schwartz and Thomas (1975) reported it from Camp Perrin, Les Platons, and the base of Pic Macaya.

SPECIFIC RECORDS: Les Platons (Plaines Formon)-- village of Formon, 1 km E of Base camp, elev. 900 m, 30 Jul 1984, (RF 436), local collectors; vicinity of Base camp, elev. 970 m, 31 Jul 1984, (RF 453), local collector; Grande Ravine du Sud-- vicinity of Ravine Camp, elev. 1030 m, 6 Aug 1984, (RF 583), R. Franz; 8 Aug 1984, (RF 610), local collectors; 13 Sep 1984, (R 078), D. Cordier; 1 km W and upstream from Ravine Camp, elev. 1200 m, 7 Aug 1984, tadpoles and froglets (RF 591), R. Franz, S. Partin, A Fowler; side canyon entering river, near Ravine Camp, elev. 1100-1150 m, 8 Aug 1984, (RF 606), local collector.

PERTINENT LITERATURE: Noble 1923 (original description), 1927 (natural history information), Cochran 1941 (general account), Shreve and Williams 1963 (systematics), Trueb and Tyler 1974 (morphology and systematics), Schwartz and Thomas 1975 (synopsis, distribution), Henderson and Schwartz (key).

Hyla pulchrilineata Cope

Crapau

All of the specimens of H. pulchrilineata in our collections were from the vicinity of Base Camp. Specimens found by us were collected at night on the leaves of melastomes on a rocky limestone hillside in back of camp, or in the grasses around the cow pond. Specimens, initially seen on the leaves, jumped into the rocks, and had to be dug out of the limestone rubble.

H. pulchrilineata is endemic to Hispaniola and occurs through the island (Schwartz and Thomas 1975).

SPECIFIC RECORDS: Les Platons (Plaines Formon) -- Base camp, elev. 970 m, 22 Jan 1984, (RF 254), A Fowler, J. Franz, R. Franz; 26 Jan 1984, (UF 57630-57631) A. Fowler; 2 Feb 1984, (RF 353), local collector; 1 Aug 1984, (RF 531), local collectors; 9 Aug 1984, (UF 58084), D. Cordier.

PERTINENT LITERATURE: Cochran 1941 (general account), Shreve and Williams 1963 (systematics), Trueb and Tyler 1974 (morphology and systematics), Schwartz and Thomas 1975 (synopsis, distribution), Henderson and Schwartz 1984 (key).

Hyla vasta Cope

Crenouigne

This huge treefrog was uncommon in the study area. All of our specimens were collected by local people, so we did not have direct experience with this frog. According to them, these frogs were taken in rolled up banana leaves near a small spring in the Riviere Cass Cou creek bed, just below Base Camp. We

failed to locate tadpoles of this species in any of the creeks of the area, while tadpoles of other hylids were common.

At Camp Perrin, tadpoles of H. vasta were common in pools along the Riviere du Sud, between 200-400 meters. It may be that this frog achieves its altitudinal limits on the slopes of Les Platons, below Plaines Formon, and does not make it onto the plateau proper or into the upper reaches of the Riviere du Sud in the Grande Ravine.

H. vasta is restricted to the southern mountains of the Tiburon and Barahona peninsulas, and in the central mountain areas of Haiti and Republicana Dominicana, and in hilly to mountainous areas of northern and eastern Republicana Dominicana, between 300 and 1025 meters (Henderson and Schwartz 1984).

SPECIFIC RECORDS: Les Platons (Plaines Formon Area)-- below Base Camp, elev 900 m, 30 Jul 1984, (UF 58077-58078), local collectors; 1 Aug 1984, (UF 58082), local collector; Canalzil area, in vicinity of the Riviere Cass Cou, southeast of Base Camp, elev. 700-800 m, 9 Jun 1984, (UF 58079-58081), local collectors.

PERTINENT LITERATURE: Cochran 1924, Noble 1923a, 1923b, 1923c, 1927 (description, life history, ecology), Cochran 1941 (general account), Shreve and Williams 1963 (systematics), Trueb and Tyler 1974 (morphology and systematics), Schwartz and Thomas 1975 (synopsis, distribution), Henderson and Schwartz 1984 (key).

Osteopilus dominicensis (Tschudi)

Crapau

In the park area, we found the casque-headed O. dominicensis common around Base Camp, and in the vicinity of Morne Cavilier at elevations up to 1530 meters, but were unable to find it at higher elevations on Formon or Macaya, or in the Grande Ravine du Sud. In both areas this frog was associated with the grassy margins of small ponds. At Base Camp, we also found it common in the buildings, frequently appearing on the walls and furniture at night around our gas lamps, presumably gathering insects that were attracted these light sources.

O. dominicensis is reported to be widespread in Hispaniola including many of the offshore islands, at elevations from sea level to 1470 m (Schwartz and Thomas 1975).

SPECIFIC RECORDS: Les Platons (Plaines Formon)-- vicinity of Base Camp, elev. 970 m, 26 Jan 1984, (UF 58053-58055), A. Fowler; 4-13 Jun 1984, (UF 58083), K. Auffenberg; 30 Jul 1984, (UF 58056-58058), local collectors; 31 Jul 1984, (UF 58059-58070), local collectors; 1 Aug 1984, (UF 58073-58075), local collector; 9 Aug 1984, (UF 58085-58091); (Morne Cavalier Area)-- in pasture near Trouing Johnionelli, 3.2 km NW of Base camp, elev. 1420 m, 2 Aug 1984, (UF 58052), S. Woods; spring, on east slope of Morne Cavalier, 0.5 km ENE of Pic 1570, 3.2 km WNW of Base Camp, elev. 1530 m, 9 Aug 1984, (UF 58071-58072).

PERTINENT LITERATURE: Noble 1927 (tadpole morphology and behavior), Cochran 1941 (general account), Shreve and Williams 1963 (systematics), Trueb and Tyler 1974 (morphology and systematics), Schwartz and Thomas 1975 (synopsis, distribution), Henderson and Schwartz 1984 (key).

Order SQUAMATA

Suborder SAURIA

Family Anguidae

Celestus costatus costatus (Cope)

* Soude

Celestus costatus is wide-spread in Hispaniola. The subspecies, C. c. costatus, occurs in the western Tiburon Peninsula including the Massif de la Hotte, from Dame-Marie and Jeremie, south to Camp Perrin, and east to the vicinity of Miragoane, from sea level to 1117 m (3800 ft) (Schwartz and Thomas).

C. c. costatus was found in the vicinity of Plaines Formon, Bois Formon and the Grande Ravine du Sud at elevations to 1330 m (4522 ft). Specimens were collected from under limestone rocks in disturbed sites (pastures and newly dug gardens). This lizard was much more abundant at Plaines Formon than in the Grande Ravine.

SPECIFIC RECORDS: Les Platons (Plaines Formon)-- Bois Formon, approx. 0.5 SW of Base Camp, elev. 1000 meters, 30 July 1984, (RF 443), R.Franz; vicinity of Base Camp, elev. 1000 meters, 31 July 1984, (RF 449, 456, 457, 466, 472, 474, 479), local collectors; 1 Aug 1984, (RF 512, 521, 524, 527), local collectors; Trouing Titwe area, approx. 3.5 km NW Base Camp #1, elev. 1320-1330 meters, 1 August 1984, (RF 486, 501, 502, 503). Grand Ravine du Sud-- vicinity of Ravine Camp, elev. 1030 meters, 5 Aug 1984, (RF 577), R.Franz; 6 Aug 1984, (RF 582), R. Franz.

PERTINENT LITERATURE: Cochran 1941 (general account); Schwartz 1964b (systematics), Schwartz and Thomas 1975 (synopsis, distribution), Henderson and Schwartz 1984 (key).

(* Soude refers to Typhlops in Camp Perrin)

Celestus stenurus stenurus (Cope)

Soude

Celestus stenurus is wide-spread in Hispaniola with numerous subspecies recognized. Populations from the Tiburon Peninsula are known as C. stenurus stenurus. It occurs over most of the Tiburon Peninsula at elevations from near sea level to 1117 m (3800 ft) and intergrades with C. s. weinlandi in the region around Port-au-Prince and the north slopes of the Massif de la Selle (Schwartz and Thomas 1975).

This lizard was found on Plaines Formon and in the Grande Ravine du Sud, to elevations of 1030 m (3607 ft). In both areas, C. stenurus was found to co-occurred with C. costatus, although it seemed to prefer the drier sites. It was more abundant than C. costatus in the the Grande Ravine area, and less common on Plaines Formon. In the Grande Ravine, we found the majority of specimens in piles of rocks along the stream channel, particularly in association with dense bracken fern glades.

SPECIFIC RECORDS: Grand Ravine du Sud-- vicinity of Ravine Camp, elev. 1030 meters, 7 Feb 1984, (RF 380), F.G.Thompson; 5 Aug 1984, (RF 572, 577), R.Franz; 6 Aug 1984,(RF 582), R.Franz; 7 Aug 1984, (RF 594), R.Franz. Les Platons (Plaines Formon)-- vicinity of Base Camp, elev. 1000 meters, 31 July 1984, (RF

448, 471, 472), local collector: Trouing Titwe area, approx. 3.5 km NW of Base Camp, elev. 1000 meters, 1 Aug 1984, (RF 503), local collector.

PERTINENT LITERATURE: Cochran 1941 (general account); Schwartz 1964b (systematics); Schwartz and Thomas 1975 (synopsis, distribution), Henderson and Schwartz 1984 (key).

Family Iguanidae

Anolis cf. armouri (Cochran)

Anoli

Specimens of a cybotes-like anoles from high elevation sites on Morne Macaya, Morne Formon and in the Grande Ravine du Sud resemble Anolis armouri known from the Massif de la Selle and from the Sierra de Baoruco (Republica Dominicana). Specimens from Les Platons are more difficult to separate from A. cybotes, and may be intermediate between the two forms. It will be necessary to study in this complex of lizards from the study site in detail before the precise natures of these lizards are revealed.

Unfortunately, the systematics of the Anolis cybotes group remain incompletely studied. We repeat the remarks of Schwartz and Thomas (1975: 77) here to indicate the complexity of the situation. "Probably no other Hispaniolan anole more requires detailed analysis than A. cybotes. Within the range of A. cybotes are several geographic variants that are almost certainly nameworthy, including those from both Isla Catalina and Isla Saona. The relationships of the taxa cybotes and armouri are poorly understood; in the Sierra de Baoruco, these forms replace each other ecologically and altitdinally, but they seem to

intergrade on the Montagne Noire. The distribution of haetianus (=Anolis cybotes haetianus Garman, new combination in Schwartz and Thomas 1975) is poorly understood since specimens of haetianus occur near and at the type locality of A. c. cybotes (Jeremie). It seems probable that cybotes, armouri, and haetianus are disinct species, and that there are several unnamed subspecies of A. cybotes (sensu stricto)."

Specimens from the high elevations in the Massif de la Hotte preferred disturbed sites. Around the Formon Ridge Camp, this lizard was usually found in rock piles where they would sun themselves until disturbed; at which time they would dash under rocks or into the pile where they had to be dug out. In the ravine, they were most common on the boulders and cobbles that were part of the stream bed.

SPECIFIC RECORDS: Les Platons (Plaines Formon)-- vicinity of Base Camp, elev. 1000 m, 1 Aug 1984, (RF 494), local collector; vicinity of Jeremie sinkhole plain, 2 km NW of Base Camp, elev. 1240 m, 1 Feb 1984, (RF), R.Franz; vicinity of Trouing Sicol, 2.5 km NW of Base Camp, elev. 1240-1260 m, 1 Aug 1984, (RF 497, D. Cordier; Ravine Datest, upper part of the Ravine Cass Cou, at jct. with trail between Base Camp and Formon Ridge Camp, elev. 1260 m, 30 Jan 1984, (RF 301), R.Franz, J.Franz, W. Judd; Ridge of Formon (South Slope)-- Formon Ridge Camp, elev. 1650 m, 24 Jan 1984, (RF 269), R.Franz, J.Franz; 3 Aug 1984, (RF 546), R.Franz; basin ESE of Formon Ridge Camp, elev. 1530 m, 28 Jan 1984, (RF 270), J. Franz, R.Franz; Ridge of Macaya (South Slope)-- 2 km E of Pic Macaya, elev. 1540 m, 6 Aug 1984, S. Woods, A. Fowler, J. Yarington; Grande Ravine du Sud-- vicinity of Ravine Camp, elev. 1500 m, 7 Feb 1984, (RF 381), F.G.Thompson; Ravine Camp, elev. 1030 m, 5-7 Aug 1984, (UF 56828, 56830, RF 573, 575, 588), R. Franz, local collectors; side ravine on south site of Riviere du Sud, near

Ravine Camp, elev. 1100-1150 m, 8 Aug 1984, (RF604, 607), S.Woods, A.Fowler, J.Yarrington.

PERTINENT LITERATURE: Williams 1963 (systematics), Schwartz and Thomas 1975 (synopsis, distribtion), Schwartz and Henderson 1982 (systematics), Henderson and Schwartz 1984 (key).

Anolis coelestinus coelestinus Cope

Anoli

A. c. coelestinus was common through most of the study site, up to about 1500 m. It was most commonly seen associated with human structures, but away from habitations, this lizard occurred on rocks in open areas, particularly where the forest had been cleared for gardens. In the ravine, it was found on boulders and cobbles along the stream bed.

This lizard generally occurs in Haiti and Republica Dominicana, south of the Cul de Sac Plain with at least one record from the Cul de Sac Plain itself, from sea level to (5600 ft) at Furcy (Schwartz and Thomas (1975). Our specimens from the Formon Ridge Camp (1650 m or 5610 ft) indicate a similar altitudinal range for this lizard in the Massif de la Hotte.

SPECIFIC RECORDS: Les Platons (Bois Formon)-- Trou Grand Fond, 1.25 km SW of Base Camp, elev. 900 m, 7 Aug 1984, (RF 642), local collectors; (Plaines Formon)-- vicinity of Base Camp, elev. 970 m, 26 Jan 1984, (RF 288), C.A.Woods; 1 Aug 1984, (RF 513, 490, 494, 496), local collectors; 9 Aug 1984, (RF 648), D. Cordier; Trouing Vape Deron, 28 Jan 1984, (RF 294), C.A.Woods; vicinity of Trouing Sicol, 2.5 km NW of Base Camp, elev. 1240-1260 m, 1 Aug 1984, (RF 497),

D. Cordier; Ridge of Formon (South Slope)-- basin, ESE of Formon Ridge Camp, elev. 1530 m, 27 Jan 1984, (RF 292), R. Franz; (North Slope)-- trail between Formon Ridge Camp and Ravine Camp, elev. 1500 m, 7 Aug 1984, (RF 585), local collector; Grande Ravine du Sud-- Ravine Camp, elev. 1030-1050 m, 5-7 Feb 1984, (RF 381,384), F.G.Thompson, R. Cleeland; 6 Aug 1984, (RF 581, 588), R.Franz, local colectors; side canyon, south slope of Ravine du Sud, entering Riviere at Ravine Camp, elev. 1100-1150 m, 8 Aug 1984, (RF 604, 607), S.Woods, A.Fowler, J.Yarington.

PERTINENT LITERATURE: Cochran 1941 (general account), Williams 1965 (systematics), Schwartz 1969 (systematics), Schwartz and Thomas 1975 (synopsis, distribution), Henderson and Schwartz 1984 (key).

Anolis cybotes cybotes Cope

Anoli

Specimens showing the cybotes characteristics were most commonly found on Les Platons below 1260 meters with a few specimens from the Grande Ravine with them. However, most of the ravine specimens as well as the high elevation ones were of the armouri morph.

Anolis cybotes is generally distributed throughout Hispaniola and many of the offshore islands. The systematic relationships of the lizards in the Anolis cybotes complex are not fully understood (see Anolis armouri species account for more information).

SPECIFIC RECORDS: Les Platons (Bois Formon)-- near Trouing Cheetah, 1.5 km SSE of Base Camp, lev. 850-900 m, 6 Aug 1984, D. Cordier; near Trouing Dirant #1, 0.25 km SSE of Base Camp, elev. 1030 m, 8 Aug 1984, D. Cordier; (Plaines

Formon)-- vicinity of Base Camp, elev. 1000 m, 26 Jan 1984, (RF 305), A. Fowler; 31 Jan 1984, (RF 326), local collector; 1 Aug 1984, (RF 496, 515, 525), local collectors; vicinity of Trouing Sicol, 2.5 km NW of Base Camp, elev. 1240-1260 m, 1 Aug 1984, (RF 497), D. Cordier; Near Trouing Mesanfort Diclaire, 1.0 km NNE of Base Camp, elev. 950 m, 7 Aug 1984, (RF 628, 642), D. Cordier; hill south of Ravine Datest, trail between Base Camp and Formon Ridge Camp, elev. 1260 m, 30 Jan 1984, (RF 301), R.Franz, J.Franz, W.Judd; Grande Ravine du Sud-- Ravine Camp, elev. 1030 m, 7 Aug 1984, (RF 588), R. Franz, local collectors.

PERTINENT LITERATURE: Cochran 1941 (general account), Williams 1965 (systematics), Schwartz and Thomas 1975 (synopsis, distribtuion), Schwartz 1979 (systematics), Schwartz and Henderson 1982 (systematics), Henderson and Schwartz 1984 (key).

Anolis distichus aurifer Schwartz

Anoli

A. distichus was one of the three most abundant anoles occurring within the study area. Specimens were collected from Les Platons, Bois Formon, Plaines Formon, slopes of Cavilier, Formon, and Macaya, and the Grande Ravine du Sud, at elevations up to 1800 m (ft). It was most common at elevations lower then 1500 meters. This species was collected on the trunks of pine and other trees, usually on drier sites. On Plaines Formon and Les Platons, it occurred primarily in the ecotone areas where the forest was being cut, on isolated trees in agricultural area, and in a few case on houses and other buildings. In the Grande Ravine, it was common on the trunks of pine trees, and occasionally on the large boulders along the stream channel.

A. distichus occurs in southeast Florida, Bahamas, and Hispaniola. In Hispaniola, it is widely-distributed including the offshore islands. Three subspecies of Anolis distichus (aurifer Schwartz, suppar Schwartz, and vinosus Schwartz) are reported from the western Tiburon Peninsula and the Massif de la Hotte in Haiti. Specimens from the study area are most similar to A. d. aurifer (Schwartz, pers. comm.). This subspecies was previously reported from near Cavaillon, Pourcine, Trou Bois, on the north and south flanks of the Massif de la Hotte near the tip of the Tiburon Peninsula, and east to Paillant near Miragoane (Schwartz and Thomas 1975). A. d. vinosis has been reported from Camp Perrin and Les Platons, south to Les Cayes, west to Presqu'ile du Port-Salut and Chevalier, north to Roche-a-Bateau; intergrades with A. d. aurifer at Cavillon and Plaine Martin between Catiche and Duchity; with A.d. suppar at Gadouard between Roche-a-Bateau and Coteaux (Schwartz and Thomas 1975). A. d. suppar occurs on the western tip of Tiburon Peninsula, from Dame-Marie east to Jeremie, south on the northern slopes of the Massif de la Hotte in the vicinity of Marche Leon, and around the tip of the peninsula to Cantin between Port-a-Piment and Coteaux; intergrades with A. d. aurifer at Roseaux on the north coast (Schwartz and Thomas 1975).

SPECIFIC RECORDS: Les Platons (Citadel area)-- vicinity of Trouing Carfineyis, 2 km SE of Base Camp, elev. 950 m, 14 Sep 1984, (R 103, 115), D. Cordier; (Bois Formon)-- near Trouing Cheetah, 1.5 km SSE of Base Camp, elev. 850-900 m, 6 Aug 1984, (UF 56815, 56817-56819, 56823, 56826, RF 624), D. Cordier; vicinity of Trouing Vapir Dirant, 1.85 km SW of Base Camp, elev. 985 m, 14 Sep 1984, (R 098), D. Cordier; (Plaines Formon)-- Base Camp, elev. 975 m, 22 Jan 1984, (RF 253), R. Franz; 4 Jun 1984, (KA 350), K. Auffenberg; 31 Jul 1984, (RF 474), local collectors; 1 Aug 1984, (RF 492, 496, 513), local collectors; Trouing

Sicol area, 2.5 km NW of Base Camp, elev. 1240-1260 m, 1 Aug 1984, (RF 497), D. Cordier; near Trouing Mesanfort Diclaire, 1.0 km NNE of Base Camp, elev. 950 m, (RF 641-642), D. Cordier; (Eastern Plateau)--near Trouing Larome #2, above Govin, plateau area between Ravine Cass Cou and Ravine L'Acul, elev. 1010 m, 10 Aug 1984, (RF 643), D. Cordier; Ridge of Formon (North Slope)-- trail between Formon Ridge Camp and Ravine Camp, elev. 1500 m, 7 Aug 1984, (RF 585), local collector; Saddle-- below Saddle Camp, elev. 1800 m, 7 Aug 1984, (RF 599), D. Cordier; Ridge of Macaya (South Slope)-- 2 km E of Pic Macaya, elev. 1440 m, 6 Aug 1984, (RF 579), S. Woods, A. Fowler, J. Yarington; 2 km E of Pic Macaya, elev. 1200-1500 m, 13 Sep 1984, (R 086, 090), D. Cordier; 5.5 km E of Pic Macaya, elev. 1300-1500 m, 10 Sep 1984, (R 062, 059, 060), D. Cordier; 12 Sep 1984, (R 067, 072), D. Cordier; Grande Ravine du Sud-- Ravine Camp, elev. 1030 m, 5 Aug 1984, (RF 576), R.Franz; upstream from Ravine Camp, elev. 1150 m, 7 Aug 1984, (RF 593), R.Franz; side ravine, south of Ravine Camp, elev. 1100-1150 m, 8 Aug 1984, (RF 604), S.Woods, A.Fowler, J. Yarington;

PERTINENT LITERATURE: Schwartz 1968b (original description); Schwartz and Thomas 1975 (synopsis, distribution), Henderson and Schwartz 1984 (key).

Anolis dolichocephalus sarmenticola Schwartz

Anoli

The specimens collected by us in the Grande Ravine du Sud were caught on the leaf blades of bracken ferns grewing among scattered pines on the flood plain of the river.

Specimens from the Ravine Camp in the Grande Ravine are most similar to A. d. sarmenticola. This subspecies has been collected at Saut Mathurine,

Marceline, Camp Perrin, Les Platons above Carrefour Canon, Trombeau Cheval between Camp Perin and Beaumont, and north of Cavillon (Schwartz and Thomas 1975).

Generally, A. dolichocephalus is known from the vicinity of Dame-Marie and Jeremie, to 13 km north of Cavillon, on the north and south slopes of the Massif de la Hotte, south to Camp Perrin, Les Cayes, and along the Presqu ile de Port Salut east of Port-Salut, elevations from sea level to 854 m (at Castillon) (Schwartz and Thomas 1975). Specimens from the Ravine Camp in the Grande Ravine du Sud extend the altitudinal range of the species to 1030 meters.

SPECIFIC RECORDS: Grande Ravine du Sud-- Ravine Camp, elev. 1030 m, 7 Aug 1984, (UF 56833), S. Woods; 8 Aug 1984, female and egg (UF 56834), R. Franz.

PERTINENT LITEWRATURE: Williams 1963 (original description of A. henderson dolichocephalus); Schwartz 1968c (description of subspecies), Schwartz and Thomas 1975 (synopsis, distribution), Henderson and Schwartz 1984 (key).

Anolis monticola quadrisartus Thomas and Schwartz

Anoli

Anolis monticola is endemic to the upland areas of the extreme western end of the Tiburon Peninsula at elevations between 382-823 m (1300-2800 ft) (Schwartz and Thomas 1975). The subspecies, A. m. quadrisartus, is reported from about 4 mi from Camp Perrin, between Post Avance and Catiche, and Les Platons (Schwartz and Thomas 1975). Our specimens extend the known range of this lizard into the upper Ravine du Sud to an elevation of 1150 m (3910 ft).

One specimen was collected on the rocks in the lighted portions of deep

solution pit near the ruins of the old fort. The others were found among rocks along the flood plain of the Riviere du Sud. One specimen was initial seen as it perched atop a small rock in full sunlight on an exposed portion of the stream's bed. This animal attempted to escape by swimming across a small pool of water, and then darting in and around other stream cobbles on the beach. The other one was captured as it jumped from a large stream-side boulder onto some overhanging shrubs.

SPECIFIC RECORDS: Les Platons (La Citadel area)-- Trou Jhing, 2.2 km NW of the Citadel ruins, elev. 730 m, 30 Aug 1984, (UF 57636); Grande Ravine du Sud-- near Ravine Camp, elev. 1030 m, 5 Aug 1984, (UF 56831), R.Franz; upstream from Ravine Camp, elev. 1150 m, 8 Aug 1984, (UF 56832), R.Franz, S.Partin.

PERTINENT LITERATURE: Shreve 1936, Thomas and Schwartz 1967, Schwartz and Thomas 1975 (synopsis, distribution), Henderson and Schwartz 1984 (key).

Anolis ricordi leberi Williams

Aganmant

All of our specimens of A. ricordi were collected in the trees and vines overhanging the cut bank sides of the intermittent Riviere Cass Cou near the small village of Formon. The vegetation of this area except for the narrow fringe of native trees along this bank had been cleared and planted with bananas and vegetables.

Anolis ricordi is wide-spread in Hispaniola where several subspecies have been described. Two of these subspecies occur in the western Tiburon Peninsula: A. r. leberi from Camp Perrin and Marceline on the southern slope of the Massif

de la Hotte; A. r. viculus Schwartz from the vicinity of Castillon on the northern slope. Our specimens extends the known range of A. r. leberi to Plaines Formon at an elevation of 750 m (2550 ft).

SPECIFIC RECORDS: Les Platons (Plaines Formon)-- along the Riviere Cass Cou, near the village of Formon, 2 km E of Base camp, elev. 800 m, 10 Aug 1984, (RF 636, 637), local collectors.

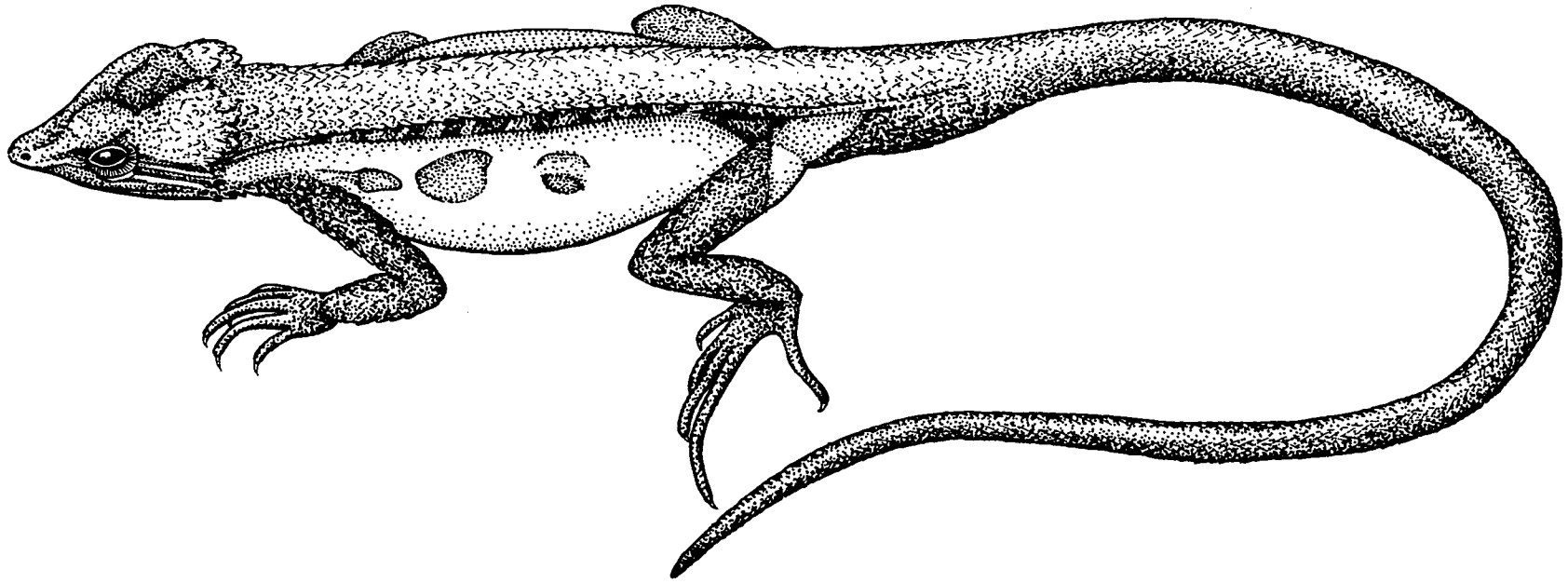
PERTINENT LITERATURE: Williams 1965, Schwartz 1974 (systematics), Schwartz and Thomas 1975 (synopsis, distribution), Henderson and Schwartz 1984 (key

Chamaelinorops barbouri Schmidt

Anoli

There are five known populations of C. barbouri, two in Haiti (Massif de la Hotte, Massif de la Selle), three in the Dominican Republic (Sierra de Baoruco, Cordillera Central, and Sierra de Neiba) (Schwartz and Inchaustegui 1980). Schmidt's (1919) record from Navassa Island between Hispaniola and Jamaica appears in error (Thomas 1966).

The CAW-FSM expeditions obtained specimens of this rare lizard on Plaines Formon, and on the slopes of Formon and Macaya ridges at elevations between 1030 and 1600 meters. Specimens were most abundant in the Wet Montane Pine Forest Vegetation Type. Most of the specimens were found close to the ground, particularly in association with dead pine needles. However, three specimens including an adult female and a juvenile were collected among twigs in dead shrubs. Schwartz and Inchuastegui (1980) listed specimens from piles of cut grasses and vines, in weeds on the ground beside a road, on the ground along a



Chamaelinorops barbouri

path through "cafetel", in natural vegetation along the edge of deciduous woods and banana-coffee cultivations in a ravine-like river valley, on boulders in a once wooded ravine, and in a crevice on a large tree about 1.2 meters above the ground in a recently cut-over area. Schwartz and Inchaustegui (1980) indicated that this lizard demanded shade and sufficient ground cover in the form of small woody shrubs or forest floor debris in which to live.

SPECIFIC RECORDS: Les Platons (Plaines Formon)-- vicinity of Trouing Sicol, 2.5 km NW of Base camp, elev. 1240-1260, 1 Aug 1984, (RF 485), D. Cordier; Ridge of Formon (South Slope)-- spring at outlet to basin, ESE of Formon Ridge Camp, elev. 1460 m, 27 Jan 1984, (RF 293), F.G. Thompson; basin, ESE of Formon Ridge Camp, elev. 1530 m, 3 Aug 1984, (RF 548), S. Woods, A. Fowler, J. Yarington; Ridge of Macaya (South Slope)-- 2 km E of Pic Macaya, 1200-1500 m, 12-13 Sep 1984, (R 073, 095), D. Cordier; Grande Ravine du Sud-- vicinity of Ravine Camp, elev.1030 m, 5-6 Aug 1984, (RF 571, 590), R.Franz, local collectors.

PERTINENT LITERATURE: Schmidt 1919 (description); Cochran 1928 (description); Cochran 1941 (general account); Thomas 1966 (distribution), Schwartz and Thomas 1975 (synopsis, distribution), Schwartz and Inchaustegui 1980 (systematics, ecology, and behaviour), Henderson and Schwartz 1984 (key).

Leiocephalus melanochlorus melanochlorus Cope

Mabuya

This lizard was found on Plaines Formon, Bois Formon, slopes of Formon and Macaya, and the flood plain of the Riviere du Sud, to elevation of 1650 meters. It was common on drier sites on the plateau, particularly in areas modified by

agriculture, along paths, and in pastures. We surmise that this lizard moved along deforested corridors to reach newly created garden plots on the slopes of both ridges. We did not find it in areas where the forest persisted. In the Grande Ravine, it was found among the bracken ferns and scrubby pines along the flood plain of the Riviere du Sud.

Leiocephalus melanochlorus appears restricted to the Tiburon Peninsula, ranging from the area around Furcy and Kenscoff to Jeremie, at elevations from sea level to 1647 m (5600 ft) (Schwartz and Thomas 1975). Populations from the western Tiburon Peninsula and Ile-a-Vache are referred to the nominate subspecies, L. m. melanochlorus, while more easternly populations (east of St. Michel du Sud) belong to the subspecies, L. m. hypsistus Schwartz.

SPECIFIC RECORDS: Les Platons (Plaines Formon)-- vicinity of Base Camp, elev.970 m, 2 Feb 1984, (RF 358); 4-13 June 1984, (UF 57653-57659), K. Auffenberg; 31 Jul 1984, (UF 57784-57795), local collectors; 1 Aug 1984, (UF 57661-57662, 57796-57826), local collectors; near Trouing Mesanfort Diclaire, 1 km NNE of Base Camp, elev. 950 m, 7 Aug 1984, (UF 57827-57829), D. Cordier; trail between Base Camp and Formon Ridge Camp, elev. 1060 m, 30 Jan 1984, (RF 318), W. Judd; vicinity of Trouing Carfineyis, 2 km SE of Base Camp, elev. 950 m, (UF 57679-57707, R 105, R 108), D. Cordier and local collectors; Ravine Seche, elev. 800 m, 13 Jun 1984, (UF 57660), D. Skean; (Bois Formon)-- near Trouing Grande Fond, 1.25 km SW of Base Camp, elev. 920 m, (UF 57663-57664), D. Cordier; Grande Ravine du Sud--

Ravine Camp, elev. 1030 m, 5 Aug 1984, (RF 570), R. Franz; 7 Aug 1984, (RF 595), S.Woods; 8 Aug 1984, (RF 603), local collector; Macaya Ridge (South Slope)-- 2 km east of Pic Macaya, elev. 1200-1500 m, 12 Sep 1984, (UF 57668), D. Cordier; 13 Sep 1984, (UF 57669-57670), D. Cordier; Pic 1516, 5.5 km east of Pic Macaya,

elev. 1300-1500 m, 10 Sep 1984, (UF 57665-57666), D. Cordier; 12 Sep 1984, (UF 57667), D. Cordier.

PERTINENT LITERATURE: Cochran 1941 (general account), Schwartz 1966a (systematics), Schwartz and Thomas 1975 (synopsis, distribution), Henderson and Schwartz 1984 (key).

Suborder SERPENTES

Family Boidae

Epicrates gracilis hapalus Sheplan and Schwartz

One female specimen (925 mm SVL, 1080 mm TL) was collected in a rock pile at Ti Macaya. This specimen was in the process of molting at the time of capture.

This subspecies occurs from Port-au-Prince and Jacmel, west to Jeremie in the Tiburon Peninsula (Schwartz and Thomas 1975).

SPECIFIC RECORDS: Les Platons (Plaines Formon)-- Ti Macaya, 4 June 1984, (KA 352), local collector.

PERTINENT: Sheplan and Schwartz 1974 (original description), Schwartz and Thomas 1975 (synopsis, distribution), Henderson and Schwartz 1984 (key).

Epicrates striatus exagistus Sheplan and Schwartz

Two specimens of this boa were brought to Base Camp by local collectors from Plaines Formon. The larger of the two from Trou Grand Fond was taken from a tree hole several meters above the ground, where it had apparently retired after taking a meal.

E. striatus occurs in the Bahama Islands and Hispaniola. Of the numerous subspecies described, one race, E. s. exagistus, is reported from the distal end of the Tiburon Peninsula, east to Les Basses, although it may also occur farther east since there are apparent intergrades from near Jacmel. This form is also known from Ile-a-Vache. (Schwartz and Thomas 1975).

SPECIFIC RECORDS: Les Platons (Plaines Formon)-- vicinity of Base Camp, elev. 970 m, 4-13 Jun 1984, (KA 351), local collector; vicinity of Trou Grand Fond, 1.25 km SW of Base camp, elev. 900 m, 7 Aug 1984, (RF 627), local collector.

PERTINENT LITERATURE: Sheplan and Schwartz 1974 (original description), Schwartz and Thomas 1975 (sysnopsis, distribution), Henderson and Schwartz 1984 (key).

Family Colubridae

Antillophis parvifrons parvifrons (Cope)

Ti coulevre flambo

As defined by Maglio (1970), the genus Antillophis has two species, one in Cuba and the other, A. parvifrons, in Hispaniola. There may be a local population of Antillophis on Little Inagua Island, Bahama Islands, but its taxonomic status is unknown at the present time (Schwartz and Thomas 1975). A. parvifrons is widespread in Haiti and Republica Dominicana, including the offshore islands, with numerous subspecies described. Within the western Tiburon Peninsula, there is only the nominate subspecies reported. According to Schwartz and Thomas (1975), this form intergrades with A. p. protenus Jan in the vicinity of Miragoane.

A. parvifrons was the most common snake found in the study area. Most of the specimens, except for those from the ravine, were found under rocks at Les Platons, where they appeared most abundantly in cultivated areas. The few specimens from the arid Grande Ravine du Sud were collected along the cobble-strewn stream bed of the Riviere du Sud.

SPECIFIC RECORDS: Les Platons (Bois Formon)-- 0.5 km SW of Base Camp, elev. 1000

m, 30 Jul 1984 (RF 440-441), R.Franz, S.Partin, S. Woods, J. Yarington; vicinity ofTrouing Vapir Dirant #2, 1.8 km SW of Base Camp, elev. 985 m, (R 101), D. Cordier; vicinity of Trouing Carfineyis, 2 km SE of Base Camp, elev. 950 m, 14 Sep 1984, (R 117), D. Cordier;

(Plaines Formon)-- vicinity of Base Camp, elev. 970 m, 4-13 Jun 1984, (KA 351), local collectors; 26 Jan 1984, (UF 56071), local collector; 30 Jan 1984, (UF 56051-56059), local collectors; 31 Jan 1984, (UF 56060), local collector; 2 Feb 1984, (UF 56063-56068), local collectors; 30 Jul 1984, (RF 437), local collector; 31 Jul 1984, (RF 464-465, 473, 476-477), collector; 1 Aug 1984, (UF 57511-57515, RF 488, 517-519, 522-523, 526), collectors; Grande Ravine du Sud-- upstream from Ravine Camp, elev. 1250 m, 7 Aug 1984, (UF 57517), R. Franz; near Ravine Camp, elev. 1050 m, (R 064), D. Cordier; Macaya Ridge (South Slope)-- 2 km E of Pic Macaya, elev. 1200-1500 m, 12 Sep 1984, (R 074), D. Cordier; Pic 1516, 5.5 km E of Pic Macaya, elev. 1300-1500 m, 10 Sep 1984, (R 065), D. Cordier.

PERTINENT LITERATURE: Barbour 1930 (systematics), Cochran 1941 (general account), Thomas and Schwartz 1965 (systematics), Schwartz and Thomas 1975 (synopsis, distribution), Henderson and Schwartz 1984 (key).

Darlingtonia haetiana haetiana Cochran

Niris (dark phase), Serpente (red phase).

D. haetiana was found to be a very common snake in the Les Platons region, with specimens from Plaines Formon, Jeremie sinkhole plain and Morne Cavalier areas, at elevations between 970 and 1420 meters. Only one specimen was collected in the Grande Ravine. Specimens were found mostly under rocks, and

were commonly encountered as farmers cleared new garden plots. All of the specimens were found in association with Wet limestone Forests, and not in the pine forests except in the ravine.

This snake occurs in the Massif de la Hotte and the Massif de la Selle in Haiti, and in the Sierra de Baoruco in Republica Dominicana, at elev. between 970 and 1647 meters. Each mountain area has its own endemic subspecies.

SPECIFIC RECORDS: Les Platons (Plaines Formon)-- vicinity of Base Camp, elev. 970 m, 30 Jan 1984, (RF 314), R.Franz; (RF 354-355), local collectors; 4-13 Jun 1984, (KA 351), local collectors; 30 Jul 1984, local collectors; 31 Jul 1984 (RF 463-464, 473), local collectors; 1 Aug 1984, (RF 520), local collectors; vicinity of Trouing Sicol, 2.5 km NW of Base Camp, elev. 1240-1260 m, 1 Aug 1984, (RF 500), D. Cordier; Ravine Datest, upper ravine of the Riviere Cass Cou, at junct. of trail between Base Camp and Formon Ridge Camp, elev. 1260 m, 3 Aug 1984, (RF 544), R.Franz, S. Partin; vicinty of Trouing Jeremie caves, elev. 1220-1240 m, 31 Jan 1984, (RF 321), R.Fran, J. Franz; 1 Feb 1984, (RF 344), R. Franz; 2 Feb 1984, (RF 363), local collector; (Morne Cavalier Area)-- vicinity of Trouing Johnionelli, 3.2 km NW of Base Camp, elev. 1420 m, 2 Aug 1984, (RF 617), D. Cordier; Grande Ravine du Sud-- vicinty of Ravine Camp, elev. 1050 m, 7 Feb 1984, (RF 383), R.Cleeland.

PERTINENT LITERATURE: Barbour 1930 (systematics), Cochran 1941 (general account), Thomas and Schwartz 1965 (systematics), Schwartz and Thomas 1975 (synopsis, distribution), Franz and Gicca 1983 (natural history), Sadjak and Henderson 1983 (natural history), Henderson and Schwartz 1984 (key).

Uromacer catesbyi catesbyi (Schlegel)

Coulevre lien.

U. catesbyi occurs island-wide in Hispaniola, as well as on many of its offshore islands. The nominate subspecies is restricted to the Tiburon Peninsula, east about the longitude of Momance (Schwartz and Thomas 1975).

In the study area, this snake was found in the Wet Limestone Forests, and not in pinelands. According to local farmer, it usually found in shrubbery and small trees; our specimens were collected as they cleared land for gardens.

SPECIFIC RECORDS: Les Platons (Bois Formon area)-- Sou Bois, elev. 1020 m, 4 Aug 1984, (UF 57229), local collectors; (Plaines Formon)-- vicinity of Base Camp, elev. 970 m, 26 Jan 1984, (UF 56073), local collector; 4-13 Jun 1984, (UF 57230-57231), local collector.

PERTINENT LITERATURE: Mertens 1939 (systematics), Cochran 1941 (general account), Schwartz 1970 (systematics), Schwartz and Thomas 1975 (synopsis, distribution), Henderson and Schwartz 1984 (key).

PARC NATIONAL MACAYA AND ITS HERPETOFAUNA

The Annotated List presented earlier in this report cites 26 amphibians and 28 reptiles in the Massif de la Hotte. This list and the analysis below did not take into consideration those taxa whose distributions are confined to coastal and low elevations sites (under 700 meters), and undescribed or unidentified taxa found during recent explorations. At least one of the the new taxa is a unique frog from Morne Formon in the vicinity of Formon Ridge Camp, the Formon crest, and the north slope down to approximately 1650 meters. This species is now under study by Blair Hedges, Richard Thomas, and one of us (RF) and will be published on separately.

Collections from the study area include 18 frogs, 11 lizards, and 5 snakes. This represents approximately 58% of the taxa presented in the Annotated List. Tabulation of the information present in Tables 1 and 2 show the following patterns in the distribution of the amphibians and reptiles in the study area. In general, the study area includes a mixture of both wide-ranging and highly restrictive species. The wide-ranging amphibians and reptiles are usually well-represented in collections from lower elevations while the restrictive ones are confined to specific habitats and/or certain altitudes. Examination of Table 1 indicates that the greatest species richness occurs at elevations under 1300 meters and that as one ascends in elevation the number of species decreases markedly until there are but 3 on Pic Macaya (elevation 2340 meters). Within the proposed park area (between 1600 and 2340 meters), we found 8 species (Table 2). Five were restricted to mid and high elevation sites, while 3 were wide-ranging. Only Eleutherodactylus ventrilineatus (and the undescribed frog) appears to be endemic to the proposed park itself.

Expansion of the park boundaries would increase the number of species present in the park. Table 2 shows the following: inclusion of Morne Cavalier and south slopes of M. Formon and M. Macaya-- an additional 7 taxa included in park (Eleutherodactylus nortoni, Celestus costatus costatus, Anolis coelestinus coelestinus, Chamaelinorops barbouri,Leiocephalus melanochlorus melanochlorus, Antilliophis parvifrons parvifrons, Darlingtonia haetiana haetiana); inclusion of portions of Plaines Formon, Bois Formon, and Grande Ravine du Sud-- 15 more taxa added (Eleutherodactylus chlorophenax, Eleutherodactylus lamprotes, Eleutherodactylus wetmorei wetmorei, Hyla heilprini, Hyla pulchrilineata, Hyla vasta, Osteopilus dominicensis, Celestus stenurus stenurus, Anolis cybotes cybotes, Anolis dolichocephalus sarmenticola, Anolis monticola quadrisartus, Anolis ricordi leberi, Epicrates gracilus hapalus, Epicrates striatus exagistus, Uromacer catesbyi catesbyi); inclusion of portions of the north slope including areas near Castillon-- at least 16 more taxa added (* Eleutherodactylus audanti audanti, * Eleutherodactylus abbotti, * Eleutherodactylus eunaster, * Eleutherodactylus glaphycompus, * Eleutherodactylus heminota, * Eleutherodactylus hypostenor, * Eleutherodactylus inoptatus, ** Eleutheroactylus pictissimus pictissimus, * Eleutherodactylus sciagraphus, Eleutherodactylus semipalmatus, Sphaeodactylus elasmorhynchus, * Anolis darlingtoni, Anolis distichus suppar, Anolis dolichocephalus dolichocephalus, Anolis monticola monticola, Anolis ricordi viculus, and probably others-- *= those taxa that may eventually be found in one of the other proposed inclusion; **= those taxa known to occur at lower elevations just outside of the study area).

Many of the listed amphibians and reptiles occur in specific habitats. Note that those species occurring at elevations above 1300 meters are found in Montane Pine Forests/ Cloud Forest; those found below 1300 meters are associated with Wet Forests on Limestones. Both of these habitat types provide a cool and

humid environment for its inhabitants. Data suggest that when these conditions become more arid through deforestation and agriculture many of the species disppear from the surface with some taking refuge in sinkholes and caves. Other are probably extirpated. It is also apparent that certain species (noteably Eleutherodactlus oyrhynchus, Osteopilus dominicensis, Anolis coelestinus, Anolis distichus, Leiocephalus melanochlorus, Celestus costatus, Celestus stenurus, Darlingtonia haetiana) are apparently able to thrive under those new conditions and in some cases spread. This has probably enabled certain "weed" species to follow trails where the canopy has been removed into areas that were previously uninhabited by them. We do not doubt that Eleutherodactylus oxyrhynchus and Anolis distichus used these corridors to gain access to high altitude sites on M. Formon, the Saddle, and M. Macaya. The intrusion of exotic species probably adversely
impacts resident species.

We think that the creation of a park within the Massif de la Hotte is absolutely essential for the survival of the region's herpetofauna. The region is an important center for endemism in southern Hispaniola and contains over 30 restricted species and subspecies. In addition, there are at least 15 other taxa which are also found in the Massif de la Selle area but are missing from intervening lowlands.

To preserve portions of the Massif de la Hotte means to provide a sanctuary for approximately 30 % of amphibian and reptile species known from Hispaniola (including 17 species which are found nowhere else in the world).

TABLE 1. Altitudinal distribution of amphibians and reptiles at Parc National Macaya.

2340 meters (SUMMIT)

E. bakeri, E. brevirostris, E. ventrilineatus.

1900 meters

E. apostates (?), E. bakeri, E. brevirostris, E. glandulifer (1900 m), E. oxyrhynchus (1800 m), E. ventrilineatus, A. armouri (1650 m), A. distichus (1800 m)

1600 meters

E. apostates (?), E. bakeri, E. brevirostris, E. glandulifer, E. nortoni (1365 m), E. oxyrhynchus, C. costatus (1330 m), A. armouri, A. coelestinus (1530 m), A. distichus, C. barbouri (1530 m), L. melanochlorus (1500 m), A. parvifrons (1500 m), D. haetiana (1420 m).

1300 meters

E. apostates (?), E. bakeri, E.chloropheax (1300 m), E. glandulifer, E. lamprotes, E. nortoni, H. heilprini (1200 m), C. costatus, C. stenurus (1030 m), A. armouri, A. coelestinus, A. cybotes (1260 m), A. distichus, A. dolichocephalus (1030 m), A. monticola (1150 m), C. barbouri, L. melanochlorus, A. parvifrons, D. haetiana, U. catesbyi (1020 m).

1000 meters

E. chlorophenax, E. counouspeus (730 m), E. lamprotes, E. nortoni, E. oxyrhynchus, E. wetmorei, H. heilprini, H. pulchrilineata (1000 m), H. vasta (900 m), O. dominicensis (1000 m), C. costatus, C. stenurus, A. armouri, A. coelestinus, A. cybotes, A. distichus, A. monticola, A. ricordi (900 m), L. melanochlorus, E. gracilus, E. striatus (970 m), A. parvifrons, D. haetiana, U. catesbyi.

700 meters

---------- OUTSIDE STUDY AREA ----------

PART II: PARC NATIONAL LA VISITE

This park is located on a high karsted plateau, north of the the town of Seguin, Department de l'Ouest. Access was gained by road originating in Petionville, through Kenscoff and Furcy, and in Jacmel through Seguin. We used the buildings at the old saw mill along the road between Furcy and Seguin as Base Camp, from which we launched collecting trips to other areas of the park. Later, this group of buildings are to be used as the park headquarters. As proposed, the park area included the plateau itself, Morne La Visite, Cabaio, Belle Fontaine, Tete Opaque, Roche Cabrit, and other hills occurring along its northern edge, and the plateau slopes, down to the 1600 meter contour. Unlike the Macaya expeditions, we did not purchase specimens from the local populace, but collected them ourselves. This was necessary because we feared we would not be able to control the accuracy of the locality data for the specimens brought to us due to the transitory nature of the population in the area.

Collections were made in February and June, in 1984, and January, in 1985. Field work was centered on the plateau. Attempts were made to collect specimens in as many diverse habitats as possible. Large collections of specimens were obtained from the vicinity of Base Camp, along routes leading to and on the major hills along the northern rim, on the west and north slopes, on the far western extension of the plateau at D'Enfer, along the Riviere Blanche, and in caves and sinkholes on the plateau. We also made collecting forays to Morne La Selle and along the road between Seguin and Marigot on the lower south slope of the Massif de la Selle, but we did not include these specimens in the current report. Collection sites are shown on the map in Figure 4.

SETTING

The park area is located on a karst plain that slopes from a high point in the north, southward. Most of the headwater drainages are subterranean, and have their resurgences from springs and caves in the valley of the Riviere Blanche. The Blanche leaves the plateau by a narrow ravine about 5 km west of Seguin. It eventually joins the Riviere Grande which flows into the Caribbean 2 km east of Marigot.

Judd (this compendium) describes the following two forest types as occurring in the park. The Pine (Pinus occidentalis) Forests on Limestone can be divided into four recognizeable associations: (1) Open Rocky Pinelands with dense stands of pine with an understory of Agave antillarium and other shrubs; (2) Open Pine Savannas with widely scattered pines and hummocks of bunch grass (Danthoria domingensis); (3) Open Pinelands with scattered shrubs (Lyonia microcarpa, Myrica picardae, Baccharis myrsinites, Garrya fadyenii, Eupatorium illitum, E. cabaionum) and many grasses and sedges; and (4) Moist Pinelands with continous shrub layer (shrub species listed in #3). The Cloud Forests on Limestone are locally referred to as "rac bois", and occur mostly along the steep north slope of the plateau. These are composed primarily of hardwood species, and show a high diversity of plant species. Both forest types have been severely modified by human activities and the ensuing ruderal habitats are composed of mainly exotic plants, particularly European weed species.

ANNOTATED LIST OF AMPHIBIANS AND REPTILES KNOWN FROM THE MASSIF DE LA SELLE AND ADJACENT MOUNTAIN AREAS.

Sixty-five taxa are listed as potentially occurring in, or are known from, the Massif de la Selle and adjacent mountain areas (Schwartz and Thomas 1975, and Henderson and Schwartz 1984). * = indicates those taxa listed in Henderson and Schwartz (1984) from these mountain areas, but were not reported from the park; ** includes those taxa either reported in the literature as occurring in the park or represented in our collections. Those taxa without notation are reported to occur more generally in the area and may eventually be found in or near the study area.

Order ANURA

Family Leptodactylidae (18 taxa)

** Eleutherodactylus abbotti Cochran
** Eleutherodactylus armstrongi Noble and Hassler
** Eleutherodactylus audanti audanti Cochran
** Eleutherodactylus darlingtoni Cochran
* Eleutherodactylus fowleri Schwartz
** Eleutherodactylus furcyensis Shreve and Williams
** Eleutherodactylus glanduliferoides Shreve
* Eleutherodactylus heminota Shreve and Williams
* Eleutherodactylus hypostenor Schwartz
Eleutherodactylus inoptatus (Barbour)
** Eleutherodactylus jugans (Cochran)
** Eleutherodactylus leoncei Shreve and Williams
* Eleutherodactylus norton Schwartz
** Eleutherodactylus oxyrhynchus (Dumeril and Bibron)
* Eleutherodactylus pictissimus pictissimus Cochran
? Eleutherodactylus ruthae aporostegus Schwartz
* Eleutherodactylus semipalmatus Shreve
* Eleutherodactylus wetmorei ceraemerus Schwartz

Family Hylidae (4 taxa)

** Hyla heilprini Noble
Hyla pulchrilineata Cope
* Hyla vasta Cope
Osteopilius dominicensis (Tschudi)

Order SQUAMATA

Suborder SAURIA

Family Gekkonidae (6 taxa)

Gonatodes albogularis notatus Reinhardt and Lutken
Hemidactylus brooki haetianus Meerwarth
* Sphaerodactylus altavelensis brevirostratus Shreve

* Sphaerodactylus armstrongi Noble and Hassler
* Sphaerodactylus cinereus
* Sphaerodactylus streptophorus Thomas and Schwartz

Family Anguidae (3 taxa)

* Celestus stenurus weinlandi Cope
* Celestus costatus oreistes Schwartz
** Wetmorena haetiana haetiana Cochran

Family Iguanidae (13 taxa)

* Anolis alinger Mertens
** Anolis armouri (Cochran)
Anolis bahorucoensis southerlandi Schwartz
Anolis coelestinus coelestinus Cope
Anolis cybotes cybotes Cope
Anolis distichus dominicensis Reinhardt and Lutken
* Anolis hendersoni ravidormitans Schwartz
Anolis ricordi subsolanus Schwartz
Anolis semilineatus Cope
* Anolis singularis Williams
* Chamaelinorops barbouri Schmidt
Leiocephalus melanochlorus hypsistus Schwartz
Leiocephalus personatus personatus Cope

Family Teiidae (1 taxon)

Ameiva taeniura varica Schwartz

Suborder SERPENTES

Family Typhlidae (4 taxa)

* Typhlops capitulata capitulata Richmond
Typhlops hectus Thomas
* Typhlops pusilla Barbour
Typhlops sulcata Cope

Family Leptotyphlopidae (1 taxon)

* Leptotyphops leptepileptus Thomas, McDiarmid, and Thompson

Family Boidae (3 taxa)

* Epicrates fordi fordi Gunther
Epicrates gracilis hanalus Sheplan and Schwartz
Epicrates striatus striatus Fischer

Family Tropidophiidae (1 taxon)

Trophidophis haetianus haetianus Cope

Family Colubridae (9 taxa)

Alsophis anomalus (Peters)
Antillophis parvifrons protenus (Jan)
* Darlingtonia haetiana perfector Schwartz and Thomas
* Darlingtonia haetiana vaticinata Schwartz
Hypsirhynchus ferox ferox Gunther
Ialtris dorsalis (Gunther)
Uromacer catesbyi catesbyi (Schlegel)
Uromacer frenatus frenatus (Gunther)
Uromacer oxyrhynchus Dumeril and Bibron

Suborder Amphisbaenia

Family Amphisbaenidae (2 taxa)

Amphisbaena innocens Weinland
* Amphisbaena manni Barbour

ORDER Anura

Family Leptodactylidae. (There were many specimens of Eleutherodactylus that remain unstudied. Some of these specimens do not agree with the existing descriptions of any known forms and may represent undescribed taxa. Additional study is necessary before we can properly ascertain the status of these forms.)

Eleutherodactylus abbotti Cochran

Specimens tentatively identified as E. abbotti were collected within the park and near Seguin. Further study is warranted in order to positively establish the identification of these specimens.

According to Schwartz and Thomas (1975), E. abbotti occurs in the Tiburon Peninsula in both massifs, as well as in the lowlands between them. They also reported it from scattered localities in northern Haiti and the Republica Dominicana. It is very abundant in all the mountainous areas of the latter country, except in the Sierra Oriental. It is known to occur from sea level to 1647 meters (at Furcy).

PERTINENT LITERATURE: Cochran 1923 (original description), 1941 (general account), Schwartz 1966b (systematics), Schwartz and Thomas 1975 (synopsis and distribution), Henderson and Schwartz 1984 (key).

Eleutherodactylus armstrongi Noble and Hassler

Shreve and Williams (1963) listed this species from Morne La Visite, but we did not find it in the park. Our only collections of E. armstrongi were along the road between Seguin and Marigot at an elevation of 1400 meters. At this locality, it was taken under rocks in pasture areas. Schwartz and Thomas (1975)

listed this frog from the Montagne Noire in the vicinity of Furcy, Obleon, Peneau), and from southwest of Seguin. They also indicate its presence in the Sierra de Baoruco in the Republica Dominicana.

PERTINENT LITERATURE: Noble and Hassler 1933 (original description), Shreve and Williams 1963 (systematics), Schwartz and Thomas 1975 (synopsis, distribution), Henderson and Schwartz 1984 (key).

Eleutherodactylus audanti audanti Cochran

E. audanti is the most abundant and obvious frog within the park area, and occurs even on the summit of Pic La Selle. In the park, it shows considerable variation in color pattern, the most specticular of which is the bright orange morph. We found it in both pine and cloud forest areas, but most commonly on disturbed sites.

This subspecies is reported from the Massif de la Hotte, Montagne Noire, and Massif de la Selle in Haiti and Republica Dominicana. Other subspecies are known from several mountain areas in the Republica Dominicana (Schwartz and Thomas 1975).

SPECIFIC RECORDS: ravine on S slope of hill S of Morne La Visite, elev. 2150 m, 13 May 1984 (UF 60427), K.Auffenberg, R.W.Portal; 2.7 km E Base Camp, elev. 1920 m, 12 Jan 1985, (UF 60356-60370), U. Vermont class; hillside NW of Roche Plate, 18 May 1984, (UF 60371-60372), K.Auffenberg, R.W.Portal; Riviere Blanche ravine, S of road between Jacmel and Kenscoff, elev. 1830 m, (UF 60373-60374), K.Auffenberg, R.W.Portal; plateau S of Morne La Visite, 1-2 km NW of Base Camp, 10 May 1984 (UF 60375-60388), R.Franz; 1 km NE of Base Camp, 3 km NW of Seguin, elev. 2060 m, 15 Feb 1984 (UF 60389-60390), R.Franz; plateau at Tete Opaque, 3.5

km N of Seguin, 15 Feb 1984 (UF 60390-60392), R.Franz, B. Mitchell; along road at western rim of Roche plate, 3 km W of Base camp, elev. 1890 m (UF 60393), R.Franz, et. al.; Nan Carotte, between Morne Cabaio and Peak 2242, elev. 2135 m, 20 May 1984 (60428-60431), D. Cordier; S slope of Morne La Visite, elev. 2100 m, 12 May 1984 (UF 60432-60435), D Skean; Fe Nois, elev. 1880 m, 17 May 1984 (60436-60437), K.Auffenberg, R.W.Portal; W slope of plateau at Roche Plate, approx. 6 km NW of Seguin, elev. 1800-1900 m 14 Feb 1984 (UF 60438-440), R.Franz (UF 60438-60440), R.Franz; between first and second peaks of Morne D'en Fer, elev. 1910-1925 m, 15 May 1984 (UF 60441-60444), K.Auffenberg, R.W Portal; 1 km S Base Camp, elev. 1820 m, 10 Jan 1985 (UF 60394-60398), U. Vermont class; 2 km NE of Base Camp, elev. 2130 m, 11 Jan 1985 (UF 60399-60400), U. Vermont class; 1 km E Base Camp, elev.2030 m, 11 Jan 1985, (60401-60405), U. Vermont class; 0.5 km E Base Camp, elev. 1935 m, 12 Jan 1985 (UF 60406-60419), U. Vermont class; summit of Morne Cabaio, elev. 2200 m, 13 Jan 1985 (UF 6042-60422), U. Vermont class.

PERTINENT LITERATURE: Cochran 1934 (riginal description), 1941 (general account), Shreve and Williams 1963 (systematics and distributional records), Schwartz 1966b (systematics), Schwartz and Thomas 1975 (synopsis, distribution), Henderson and Schwartz 1984 (key).

Eleutherodactylus darlingtoni Cochran

E. darlingtoni is known from the type locality near La Visite, and from along the road to Saltrou on the ridge of La Selle. We have specimens from the park that may be this species but at this point we are not totally convinced of this determination. Further study is necessary to determine if the frogs we have are this species or something undescribed.

PERTINENT LITERATURE: Cochran 1935 (original description), Shreve and Williams 1963 (systematics), Henderson and Schwartz 1984 (key).

Eleutherodactylus furcyensis Shreve and Williams

A specimen of E. furcynsis was collected in the bottom of a deep sinkhole in the park. Other specimens, tentatively identified as this species, were also found at scattered localities in the park and along the road between Seguin and Marigot.

Schwartz and Thomas (1975) report it from Montagne Noire, Morne La Visite, Savane Moutan, near Seguin and between Pedernales and El Aguacate.

SPECIFIC RECORDS: Trou Slierie (63 meters deep sinkhole), 21 Sep 1983, (UF 39199) D. Cordier.

PERTINENT LITERATURE: Shreve and Williams 1963 (original description), Schwartz 1964a (systematics), Schwartz and Thomas 1975 (synopsis, distribution), Henderson and Schwartz 1984 (key).

Eleutherodactylus glanduliferoides Shreve

Specimens of frogs tentatively identified as E. glanduliferoides were found at scattered localities in the park area. Schwartz and Thomas (1975) indicate that it has only been found in the vicinity of La Visite.

PERTINENT LITERATURE: Shreve 1936 (original description), Cochran 1941 (general account), Shreve and Williams 1963 (distribution), Schwartz and Thomas 1975 (synopsis, distribution), Henderson and Schwartz 1984 (key).

Eleutherodactylus jugans (Cochran)

E. jugans is endemic to the La Selle ridge. Our collections indicate it is a frog of cloud forest areas in the park at elevations down to 1690 meters. We found them under rocks in both disturbed and forested areas.

SPECIFIC RECORDS: between the first and second peaks on Morne D'enfer, elev. 1910-1925 m, 15 May 1984, (KA 309), K. Auffenberg, R.W.Portell; Fe Nois peak, on trail from Morne D'enfer to Bo Jacques, elev. 1880 m, 17 May 1984, (KA 313), K.Auffenberg, R. Portell; ridge of Morne D'enfer, elev. 1860 m, 15 May 1984, (KA 310), K.Auffenberg, R.W.Portell; Morne La Visite, elev. 2160 m, 13 Feb 1984, (RF 390), R.Franz; elev. 2080 m, 13 Jan 1985, (RF 792-793), Univ. Vermont class; north face of Morne Cabaio, elev. 1830 m, 16 Jan 1985, Univ. Vermont class; along road on western rim of Roche Plate, 3 km W of Base Camp, elev. 1890 m, 14 Feb 1984, (RF 394), R.Franz, B. Mitchell, S.Yocum, F.G.Thompson; along road on western slope of Roche Plate, elev. 1800-1900 m, 14 Feb 1984, (RF 398), R.Franz; elev. 1690 m, 14 Feb 1984, (RF 401), R.Franz;

PERTINENT LITERATURE: Cochran 1935 (original description), 1937 (systematics), 1941 (general account), Shreve and Williams 1963 (distribution), Schwartz 1964a (systematics), Schwartz and Thomas 1975 (synopsis and distribution), Henderson and Schwartz 1984 (key).

Eleutherodactylus leoncei Shreve and Williams

Specimens tentatively identified as E. leoncei were found at scattered localities in the park. Further study is required to determine definitive nature of these specimens. This frog is known from the Massif de la Selle and

the Republica Dominicana between Los Arroyos and El Aguacate. They indicate a single specimen also from the Sierra de Baoruco.

PERTINENT LITERATURE: Shreve and Williams 1963 (original description), Schwartz and Thomas 1975 (synopsis, distribution), Henderson and Schwartz 1984 (key).

Eleutherodactylus oxyrhynchus (Dumeril and Bibron)

This frog was rare within the park, although we did encounter it at lower elevations along the road below Seguin.

SPECIFIC RECORDS: between Morne Fe Noir and Morne Nacel, elev. 1700-1840, 18 May 1984, (KA 315), K.Auffenberg, R.W.Portell.

PERTINENT LITERATURE: See Eleutherodactylus oxyrhynchus account in Part I.

Family Hylidae

Hyla heilprini Noble

Although we have only one specimen in our collections, we suspect this hylid to be common within the park area, particularly along the Riviere Blanche.

SPECIFIC RECORDS: Morne Fe Noir on trail between Morne D'enfer and Bo Jacque, 1880 m, 17 May 1984, (KA 315), K.Auffenberg, R.W.Portell.

PERTINENT LITERATURE: See Hyla heilprini account in Part I.

ORDER Squamata

SUBORDER Sauria

Family Anguidae

Wetmorena haetiana haetiana Cochran

This unique anguid lizard is widespread and common throughout the park area including the western and northern slopes of the plateau, between 1690-2280 meters elevation. Our collections indicate that it occurs under rocks, primarily on disturbed sites in both Pine and Cloud Forests.

Three subspecies of Wetmorena haetiana have been described from the mountainous areas in the Massif de la Selle area in Haiti, and the Sierra de Baoruco in Republica Dominicana. The nominate subspecies is restricted to the Massif de la Selle including Pic La Selle, Montagne Noire at Furcy and Morne Bourette, at elevations between 1470 and 2594 meters (Schwartz and Thomas 1975).

SPECIFIC RECORDS: Riviere Blanche at waterfalls, elev. 1850 m., 10 May 1984, (KA 290), K. Auffenberg; northwestern rim at Roche Plate, along road from Petioville, 3 km W of Base Camp, elev. 1890 m, 14 Feb 1984, (RF 393) R.Franz, B. Mitchell, S. Yocum, F.G.Thompson; western slope at Roche Plate, 3 km WNW of Base Camp, elev. 1690 m, 14 Feb 1984, (RF 400), R.Franz; plateau, trail to Tete Opaque, 1 km NW of Base Camp, elev. 2080 m, 15 Feb 1984, (RF 402), R.Franz, S. Yocum; Tete Opaque, 3.5 km NW of Base Camp, elev. 2200 m; 15 Feb 1984, (RF 406, 410) R.Franz, B. Mitchell; Roche Cabrit, 2.5 km ENE of Base Camp, elev. 2200 m, (RF 409), R.Franz, S.Yocum, F.G.Thompson; Morne La Visite, elev. 2100 m, 13 Feb

1984, (RF 391), R.Franz; ride between Morne Fe Noir and Morne Nacel, elev. 1700-1840 m, 18 May 1984, (KA 315), K. Auffenberg; 2 km NE of Base Camp, W of Belle Fontaine, elev. 2130 m, 11 May 1985, (RF 701-704), Univ. Vermont class; limestone ridge between Morne Cabaio and Belle Fontaine 3 km NE of Base Camp, elev. 2225 m, 11 Jan 1985, (RF 714-715), Univ. Vermont class; ravine of Riviere Blanche, 1 km W of Base Camp, elev. 2030 m, 12 Jan 1985, (RF 744-748), Univ. Vermont class; near summit of Morne Cabaio, elev. 2250-2280 m, 13 Jan 1985, (RF 781-783), Univ. Vermont class; north slope of Tete Mon, between Morne La Visite and Morne Cabaio, elev. 2000 m, 15 Jan 1985, (RF 807-808), Univ. Vermont class; north slope of plateau, W of Morne Cabaio, elev. 1980 m, 16 Jan 1985, (RF 817-818), Univ. Vermont class; Nan Carotte, between Morne Cabaio and Belle Fontaine, elev. 2135 m, 30 May 1984, (KA 326), D. Cordier.

PERTINENT LITERATURE: Cochran 1927 (original description of W. haetiana), 1941 (general account), Schwartz 1965 (description of subspecies), Schwartz and Thomas 1975 (synopsis, distribution), Henderson and Schwartz 1984 (key).

Family Iguanidae

Anolis armouri (Cochran)

This lizard is widespread throughout the park, and more common than the records indicate. It was primarily seen in disturbed sites, where it was common in rock piles adjacent to cleared garden plots.

According to Schwartz and Thomas (1975), A. armouri intergrades with A. cybotes in the vicinity of Furcy on Montagne Noire, but these forms replace each other ecologically and altitudinally in the Sierra de Baoruco in Republica Dominicana. Our specimens are most like A. armouri. See A. armouri account in

Part I for more information concerning the systematic relationship of these lizards.

SPECIFIC RECORDS: Base Camp, on Furcy-Seguin road, elev. 1865 m, 10 Jan 1985, (RF 649), Univ. Vermont class; appro. 2 km NE of Base Camp, elev. 2130 m, 11 Jan 1985, (RF 706-710), Univ. Vermont class; limestone ridge at rim in northeast section of park, 3 km NE of Base Camp, 11 Jan 1985, (RF 713-719).

PERTINENT LITERATURE: See Anolis armouri account in Part I.

PARC NATIONAL LAVISITE AND ITS HERPETOFAUNA

Twelve species of amphibians and reptiles are reported to occur within the proposed boundaries of Parc National LaVisite. Three species (Eleutherodactylus darlingtoni, Eleutherodactylus glanduliferoides, Eleutherodactylus jugans) are endemic to the park and the crest of the La Selle range. Four others (Eleutherodactylus armstrongi, Eleutherodactylus furcyensis, Eleutherodactylus leoncei, Wetmorena haetiana) are restricted to the Massif de la Selle and adjoining ranges in the south-central mountains of southern Haiti and adjacent Republica Dominicana. The remaining five species are more generally distributed forms, including Anolis armouri which we also found in Parc National Macaya.

During the course of conducting field work in Parc La Visite we found several frogs which we presume to be undescribed. They are currently under study. The possible new frogs plus those taxa already established suggest that the creation of Parc national La Visite is warranted in order to conserve the quickly disappearing montane herpetofauna associated with high elevations in the Massif de la Selle. Most of these species occur in rather specialized environments and therefore it is essential that the native vegetations, especially the Cloud Forests, remain intact.

Expansion of the proposed boundaries to include Morne D'Enfer and several isolated tracts southwest of Seguin is recommended. This would add many taxa on the Annotated List not presently included in the park. The lower elevation sites southwest of Seguin are remnants of Wet Forest on Limestone which is a forest type that has nearly disappeared from the Massif de la Selle. Much of that which remains occurs on isolated limestone ridges that extend south of the road between Seguin and Marigot. Only limited agriculture is possible on these rugged limestone outcrops. With their addition to the park concept, the

over-all species richness of the park would be greatly enhanced. However, we suggest that an inventory of these ridges be undertaken first in order to preserve the most unique of them.

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