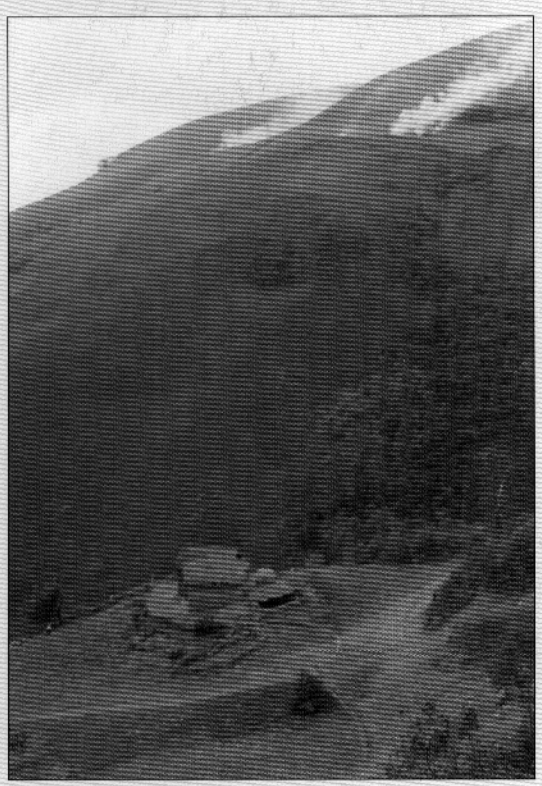

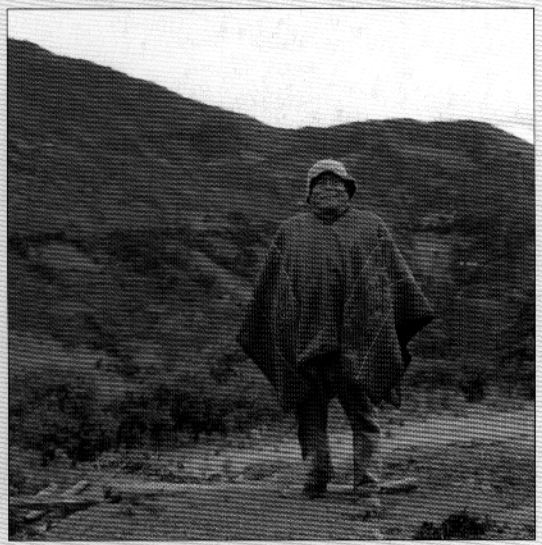

DIVA

TECHNICAL REPORT NO 4

Avian diversity in the Ecuadorian Andes

- an atlas of distribution of Andean forest birds and conservation priorities

DIVA, Technical Report No 4

Centre for Research on the Cultural and Biological Diversity of Andean Rainforests (DIVA)

The Danish Environmental Research Programme

Front cover: Pictures from Cordillera Carpish
The top ridge, almost constantly wrapped in clouds, is one of the many centres of evolution of endemic biodiversity in the Andes, and this habitat also provides stable water supply for the human population living in the warm and sunny adjacent mountain basin, with the town og Huànuco.

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Data sheet

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Contents

Center for Research on the Cultural and Biological Diversity of Andean Rainforests (DIVA)

DIVA is a multi-disciplinary research centre funded since 1994 by the Danish Environmental Research Programme. The purpose of the centre is to investigatge regional patterns of biodiversity, land-use, and human perception of the environment, to improve strategies and to combine the obtained knowledge with recommendations for a balanced and sustainable use of the Andean forest ecosystems and natural resources. The research is carried out in Ecuador, Peru, and Bolivia in close collaboration with local institutions and organisations. The project is divided into eigh interconnected and interdisciplinary modules:

1. Establishment of project databases and a Geographical Information System.
2. Mapping envinronmental constraints.
3. Mapping biodiversity based on present day knowledge and new collections.
4. Development of methodologies for standardised sampling and for modelling biological distributions based on correlations with satellite imagery.
5. Studying environmental perception, local use of natural resources and land-use classificatgion and mapping.
6. Studying the influence of different cultural pressures on biodiversity.
7. Predicting socio-economic scenarios and future development trends.
8. Providing information for better planning.

DIVA involves:

- National Environmental Research INstitution, Department of Landscape Ecology.
- University of Aarhus, Department of Systematic Botany.
- Danish National Museum, Department of Ethnography.
- University of Copenhagen, Zoological Museum
- Several collaborating institutions in Ecuador, Peru, and Bolivia.

Preface

During the initial stages of the DIVA project it became evident that good and reliable biological distribution maps were essential to define priorities for conservation and to plan for a sustainable use of montane rain forests. This report contains distribution maps for 230 montane forest bird species and thus represents a small contribution towards a better understanding of the complicated biodiversity patterns found in Ecuador.

The maps are based on information from numerous written and oral sources and we wish to thank all contributors. We are particularly grateful for the land-use and vegetation maps kindly provided by the IUCN of Ecuador.

We hope that this atlas will be used by planners and conservationists as scientific evidence in the decision making process. We also hope that the maps will be useful to everybody that wish to explore and enjoy the rich avian fauna of Ecuador.

The DIVA board of directors

Summary

Distribution maps of 230 bird species from the humid montane forest of Ecuador are presented. The distribution maps were generated in a Geographic Information System (GIS) using detailed information of individual bird species' habitat requirements and altitudinal tolerances.

Total species richness was fairly uniform along the eastern slope of the Andes. Maximum values were found west of the continental divide in Loja near Cajanuma and southwards to the Peruvian border. The Pacific slope has considerably less species and show a pronounced decrease in species richness from the humid north towards the drier south.

Conservation priorities are presented as a minimum set of conservation areas in Ecuador. This area is compared to the existing network of formally protected area. The comparison shows that many high priority areas are poorly protected.

The priority data were compared with human population data and it was found that many of the ornithologically most unique areas are situated close to large human populations. One possible reason for this is that a close link exists between high bird endemism and montane ridges with high humidity and climatic stability. Such areas provide a predictable water supply in adjacent montane valleys making them suitable for human settlements.

Finally, a list of Ecuadorian regions is presented where conservation efforts should be concentrated.

Request for additional information

We hope that this report will stimulate further exploration of the montane forests of Ecuador. All distribution maps, however, are preliminary and are based on present day knowledge. In order to update the maps we would appreciate any additional information that users of this report might provide. Information can be send to:

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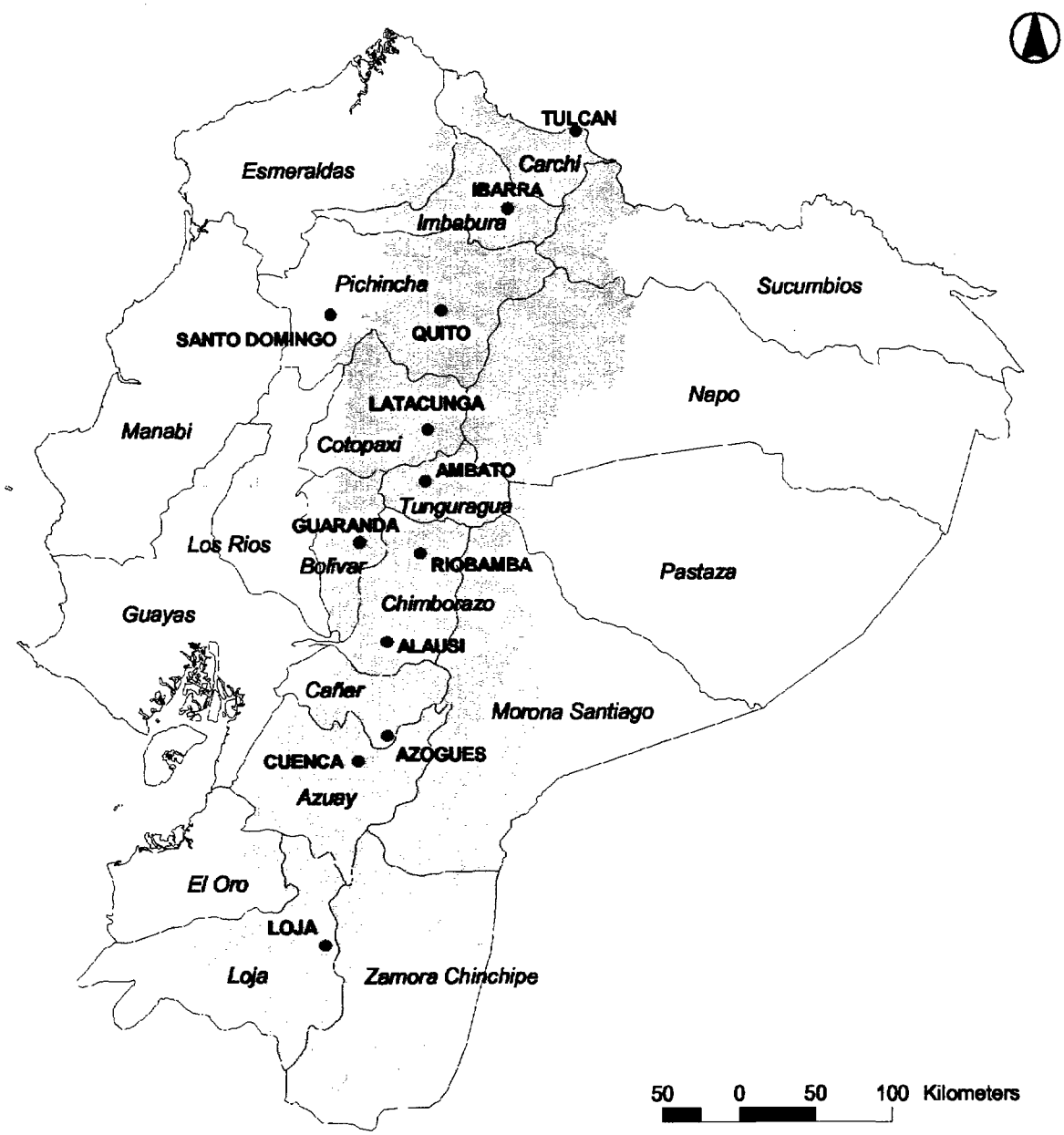


Provinces of Ecuador and major cities.
Shaded area shows elevations above 1200 meters and thus indicates the limits of the present study.

Avian diversity in the Ecuadorian Andes

- an atlas of distribution of Andean forest birds and conservation priorities

by Niels Krabbe, Flemming Skov, Jon Fjeldså and Ib Krag Petersen

The purpose of this publication is to map the distribution of 230 species of birds from the humid montane forests of Ecuador and try to bridge the collecting gaps and estimate the true richness of birds throughout these forests. This will be done using existing knowledge accumulated over the years combined with spatial modelling using modern GIS technology (Geographical Information Systems).

The purpose of these maps is twofold:

1) They can be used by birdwatchers and ornithologists to plan birdwatching outings and research trips to unsurveyed areas.
2) They can be used for planning efforts to conserve biodiversity. Either for identifying areas which could have populations of rare and endangered species, or for identifying areas of overall importance. It is thus possible to identify places which are particularly rich or unique and where high attention must be given to the quality of environmental impact assessments for development projects.

We will provide an estimate of the variation in total species richness for the humid montane forest of Ecuador, together with an analysis for identifying the minimum number of target areas needed to keep all species.

Why study bird distributions?

Birds are interesting components of the biological diversity, *per se*, and as a much used indicator group. Birds are used as bioindicators mainly because they have been described and charted more completely than any other group of living organisms. At least within the humid part of the tropics, the variation in species richness and endemism of birds reflects fairly well that of other organismal groups (e.g., Thirgood and Heath 1994). Because some data about ecological requirements exist for the majority of bird species, bird data also permit fairly precise interpretations about the state of the environment. However, in a topographically complex country like Ecuador, only a small fraction of the land area has been explored ornithologically. The most obvious reason for this is the difficult access to many places. It also plays a role that many ornithologists go to places which are already known to be promising as study sites.

Bird exploration in Ecuador

The ornithological exploration of Ecuador started late. Well up into the early 20th century, most material was obtained through native collectors, whose patron was L. Söderström. In 1913-25 the American Museum of Natural History organised eight expeditions in Ecuador, and hired the famous native collectors of the Olalla family from 1922. The results of this effort were reviewed in *The Distribution of Birdlife in Ecuador* (Chapman 1926). Since then the ornithological exploration activity in Ecuador was modest, until around 1980s. In recent years, there has been an upsurge of exploration by various European groups and by the Academy of Natural Sciences of Philadelphia. The first author of this publication has lived in Ecuador since 1990, and has explored the montane forests intensively, while the Philadelphia teams to a larger extent worked in the lowland

Box 1. Data sources and acknowledgements

Information of habitat requirements, altitudinal limits and end points in distribution is based on our own field work and on ornithological literature (for earlier references see the bibliography in Paynter 1993; see also Hilty and Brown 1986, Ridgely & Tudor 1989, 199;; , Fjeldså & Krabbe 1990, Krabbe 1991, Best & Clarke 1991, Bloch et al. 1992, Best 1992, Collar et al. 1992, Marín & Stiles 1993, Williams & Tobias 1994, Krabbe &Sornoza 1994, Krabbe et al. 1994, 1997; Robbins et al. 1994 abcd, Robbins & Howell 1995, Stotz et al. 1996, Best et al. 1997, Schulenberg & Awbrey 1997, Poulsen & Krabbe 1997 ab).

New distributional data or aid in the assesment of absence and regular occurrence was given as personal comments by P.J. Greenfield, R.S. Ridgely, R.A. Rowlett, J. Arwin, M.B. Robbins, T.S. Schulenberg, G.R. Graves, M.J. Braun, G.H. Rosenberg, T.A. Parker, M. Marín, B. Whitney, P. Coopmans and M. Lysinger.

and Andean foothills. A considerable activity also took place in the southwest, because of the severe threats to the forest habitats in this part of the country and the needs for conservation initiatives here (Best 1992, Bloch *et al.* 1992, Parker & Carr 1992, Williams & Tobias 1994, Best & Kessler 1995; Wege & Jong 1995; Pople *et al.* 1997). However, vast areas remain unknown, mostly because they are difficult to access.

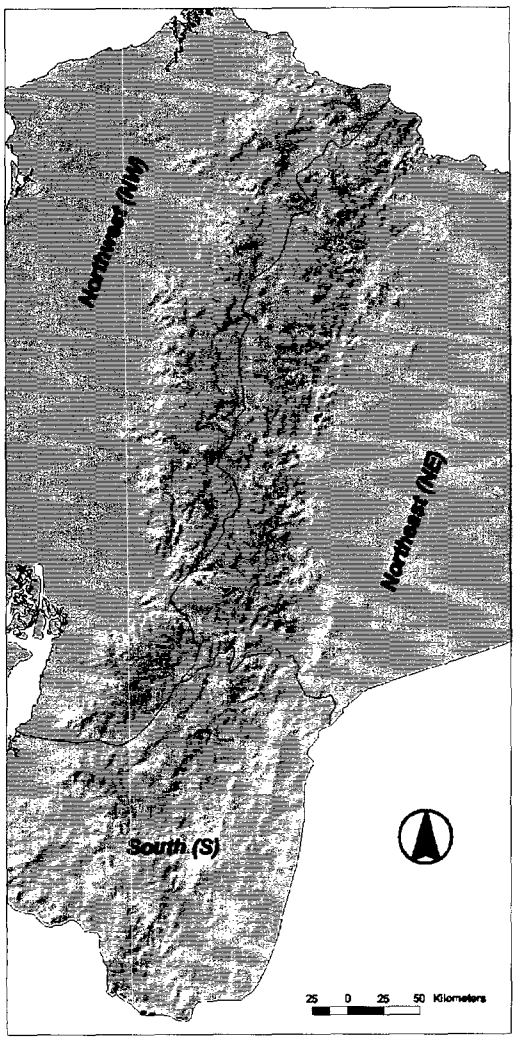
Methods

Distribution maps

The aim of the present study was to map the distribution of bird species belonging to the humid montane forests of the Ecuadorian Andes above 1200 m.

Distribution maps were modelled by imposing birds' habitat requirements and altitudinal and geographical tolerances upon digitized maps of vegetation and topography. These maps that represent potential distribution ranges were then checked with positive and negative records from well studied sites and corrected when necessary. Although some southern limits on the Pacific slope may not yet have been determined, the latitudinal and altitudinal limits are fairly well known for most Ecuadorian birds of montane forests. The species were presumed to occur in all suitable habitat within the elevational and geographical limits known, except for areas where there are negative records from well studied sites in the appropriate zone. Isolated records from areas where the species was not predicted to exist by the modelling procedure are shown as point records (dots). See Box 1 for references.

Figure 1. Topography of Ecuador and biogeographic zones



Ecuador was divided into three bio-geographical zones to map the distribution of species more precisely: a north-western zone, a north-eastern zones and a southern zone. The exact zonation is shown in Fig. 1. The central Andean basin forms the division between the north-eastern and north-western zone. The southern zone is here defined as the zone south of the Paute-Cuenca-Giron valley.

Models are based on a topographic map from the Military Geographic Institute in Ecuador and a vegetation map produced by the IUCN of Ecuador that shows the major vegetation types of the Andes of Ecuador above 1200 m.a.s.l. Both maps were in the scale of 1:250.000 and were digitised for the DIVA project and converted into regular cell-based grids with a resolution of 1x1 km. Spatial modelling was done by using the GIS packages ArcInfo and ArcView. The methodology used is known as spatial query: If the habitat requirements of a species are known, its potential range can be calculated as those cells that (I) have elevations between the minimum and maximum limits for the species AND (II) belong to certain vegetation types.

The vegetation map is shown in Fig. 2. Field data support the accuracy of the map but for a few cases: all patches of primary forest on the west slope from Volcán Iliniza south to the Azuay/El Oro boundary are given as secondary forest. The same applies for the east slope between Río Paute and Río Zamora, and in the Cordillera Las Lagunillas. This has been somewhat compensated for by including secondary forest as habitat for primary forest birds known to exist in these areas. In the southwest many patches of humid forest are too small to figure on the base maps, and for many species it was necessary to indicate presence there by dots. The field data indicate considerable inaccuracies in the classification of the non-forest habitats.

Choice of species

The species featured are those inhabiting humid forest and which in Ecuador are restricted to elevations above 1200 m. Thus not all the avian elements of upper subtropical and temperate, humid Andean forest were included. Box

2 shows which species we have chosen to exclude from this study and why.

The following species are included despite frequenting humid woodland and scrub, rather than humid forest: *Aglaeactis cupripennis*, *Chalcostigma stanleyi*, *Leptasthenura andicola*, *Grallaria quitensis*, *Phyllomyias uropygialis*, *Elaenia obscura*, *Elaenia albiceps*, *Anairetes parulus*, *Anairetes nigrocristatus*, *Ochthoeca fumicolor*, *Ampelion rubrocristata*, *Turdus fuscater*, *Conirostrum cinereum*, *Diglossa humeralis* and *sittoides*, *Tangara viridicollis*, *Saltator nigriceps* and *Atlapetes seebohmi*. Their distributions proved difficult to encompass with the vegetation base map that was too inaccurate for these habitats. For example, the distributional range of *Grallaria quitensis* was found to be most closely matched by including evry kind of habitat at the relevant elevations. The few records from below 1200 m of *Oroaetus isidori*, *Colibri delphinae*, *Columba fasciata*, *Lepidocolaptes lacrymiger*, *Drymophila caudata* and *Phyllomyias cinereiceps* appear to be anomalous, so these six species were included. We have included newly described species of *Scytalopus* (Krabbe & Schulenberg 1997).

'Negative' data

Absence was easy to determine for conspicuous birds in well-known areas. For inconspicuous or erratic birds in less well-known areas, it was more difficult. *Hapaloptila castanea* for example, was not recorded in Cordillera de Cutucú, despite intensive work in these mountains by experienced ornithologists. Neither has it been reported from the less well-known Cordillera del Condor. These mountains were therefore deleted from its range, though with some doubts, as it is an erratic and rare species. It was also with some hesitancy that *Ochthoeca diadema* and especially the erratic *Catamenia homochroa* and *Haplospiza rustica* were omitted from the Pacific slope in Azuay. All three quite possibly range south to El Oro, and the latter two might even occur irregularly in the Celica mountains, Loja Province.

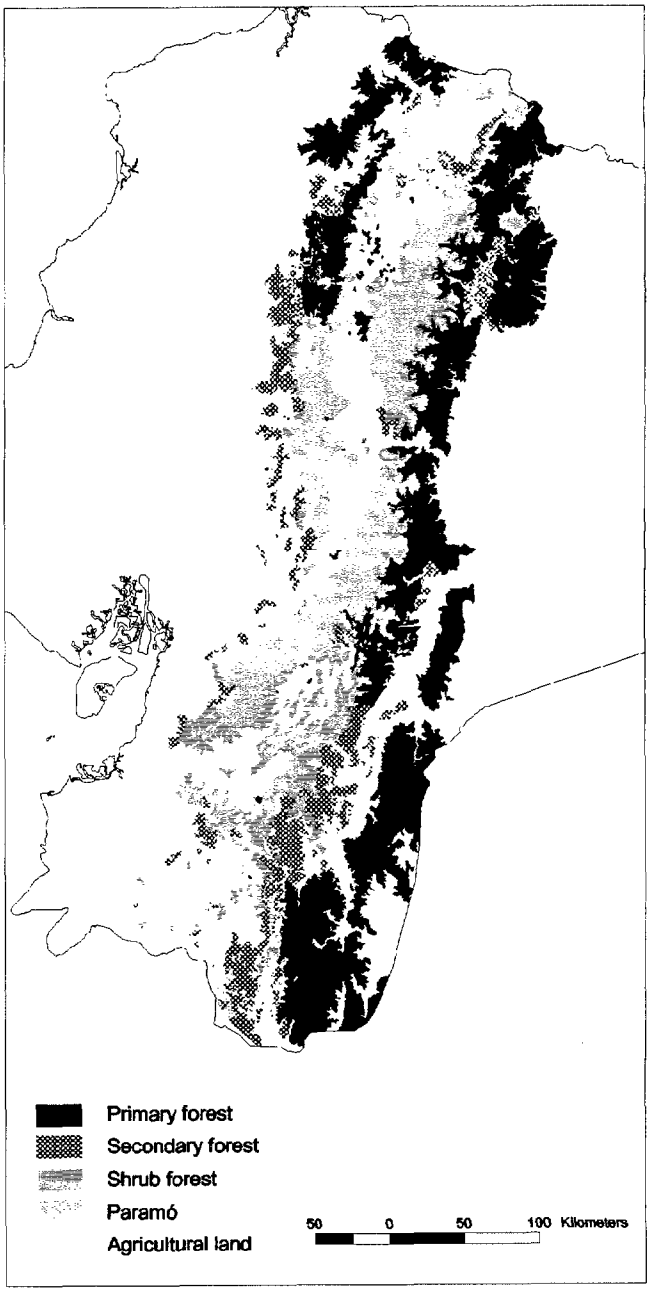


Figure 2. Major vegetation types in Andean Ecuador (above 1200 m). Based on vegetation mapping made available by the IUCN of Ecuador.

Conservation priorities

For this analysis we used presence-absence data in a 15'x15' grid system covering the entire tropical Andes region (see Fjeldså *et al.* in press). This huge dataset was adjusted (manually) to obtain full agreement with the modelled Ecuadorian distributions in the present publication. For the regional analysis we included all highland birds as well as all species with restricted distributions in the sub-Andean zone and in the western lowlands. We assumed that, in order to maintain viable populations of the rare and local species, a realistic network of conservation initiatives should secure five representations (five 15'x15' cells) for each species. The minimum set of areas selected will comprise **irreplaceable areas** (which are determined by the distribution of those species which inhabit only 1–5 cells) and **flexible areas**. However, selecting alternative cells means that a larger total area (than the minimum set) may be needed in order to cover all species.

For the analysis we used the WorldMap computer software, which is a PC-based graphical tool designed for interactive assessment and handling of data for large numbers of species (Williams 1994, see http://www/nhm.ac.uk/science/projects/worldmap). This programme makes a network of complementary areas which secures the conservation of all species

Box 2. Species not included in the study

Montane forest birds not included
Some of these have large populations in the lowlands: *Leptotila verreauxi, Xiphocolaptes promeropirhynchus, Grallaria guatimalensis, Myiarchus tuberculifer, Amblycercus holosericeus* and *Cyclarhis gujanensis*. All but the latter two are widely distributed on the Andean slopes of Ecuador.

Thirty-eight others have almost their entire distribution above 1200 m, but range slightly lower. These are: *Chamaepetes goudotii, Claravis mondetoura, Aratinga wagleri, Touit stictoptera, Pionus sordidus, Cypseloides rutilus, Phaethornis syrmatophorus, Heliodoxa rubinoides, Adelomyia melanogenys, Heliangelus strophianus, Pharomachrus antisianus, Pharomachrus auriceps, Synallaxis azarae, Cranioleuca antisiensis, Premnoplex brunnescens, Syndactyla ruficollis, Thripadectes virgaticeps, Elaenia pallatangae, Mionectes striaticollis, Contopus fumigatus, Myiodynastes chrysocephalus, Pipreola riefferii, Pipreola lubomirskii, Cyanocorax yncas, Troglodytes solstitialis, Henicorhina leucophrys, Vireo leucophrys, Pipraeidea melanonota, Tangara xanthocephala, Tangara parzudakii, Tangara ruficervix, Tangara nigroviridis, Anisognathus somptuosus, Chlorospingus ophthalmicus, Atlapetes leucopterus, Buarremon brunneinuchus*, and *Buarremon torquatus*.

Montane birds of other habitats
Not included were 49 Ecuadorian species only nesting above 1200 m, but inhabiting dry primary forest, dry scrub, grassland, páramo or disturbed areas (nine species occasionally seen at edge of humid forest and scrub are marked °): *Nothoprocta curvirostris, Vultur gryphus, Circus cinereus, Geranoaetus melanoleucus, Buteo poecilochrous, Phalcoboenus megalopterus* (incl. *carunculatus*), *Falco femoralis, Falco peregrinus, Attagis gayi, Columbina passerina, Metriopelia melanoptera, Bubo virginianus, Asio stygius*°, *Asio flammeus, Aegolius harrisii*°, *Caprimulgus longirostris*°, *Caprimulgus cayennensis, Aeronautes montivagus, Colibri coruscans*°, *Oreotrochilus estella, Oreotrochilus chimborazo, Patagona gigas,* , *Lesbia victoriae, Lesbia nuna, Myrtis fanny, Acestrura mulsant*°, *Geositta tenuirostris, Asthenes wyatti, Asthenes flammulata, Pseudocolopteryx acutipennis, Cnemarchus erythropygius*°, *Myiotheretes striaticollis*°, *Agriornis montana, Agriornis andicola, Muscisaxicola alpina, Muscisaxicola maculirostris, Notiochelidon murina, Cistothorus platensis, Turdus chiguanco, Anthus bogotensis, Diglossa sittoides*°, *Euphonia cyanocephala*°, *Thraupis bonariensis, Pheucticus aureoventris, Catamenia analis, Catamenia inornata, Sicalis luteola, Phrygilus unicolor, Ammodramus savannarum*, and *Carduelis spinescens* (non-forest birds nearly restricted to this zone are: *Nothoprocta pentlandii, Falco sparverius, Serpophaga cinerea, Cinclus leucocephalus, Notiochelidon cyanoleuca, Tangara vitriolina*, and *Zonotrichia capensis*).

Also not included were 13 Andean waterbirds: *Podiceps occipitalis, Theristicus melanopis, Merganetta armata, Anas andium, Anas georgica, Anas cyanoptera, Oxyura ferruginea, Rallus limicola, Pardirallus sanguinolentus, Vanellus resplendens, Gallinago nobilis, Gallinago jamesoni* and *Larus serranus*.

(Pressey *et al.* 1993). See also Fjeldså & Rahbek (1997, *in press*) for South American data. Complementarity has been shown to be the best performing principle, in terms of representing as much biodiversity as possible on a minimum area (Williams *et al.* in press). The computer finds the minimum set of areas which will cover all species, starting with the most unique area (with many species found nowhere else).

Results

Patterns of species richness

Although some inaccuracies may still remain, the details of the maps presented on pp 15–129 far supercedes those of any previously published maps for Ecuadorian birds, and clearly illustrate how narrow or patchy the ranges of many species are. They also show certain poorly known species to have large potential ranges on inaccessible and unexplored slopes. To the extent that typical population densities are known, these maps may also

permit a rough estimate of the total population.
Within the montane forest zone, the species richness is fairly uniform along the entire eastern slope of the Andes (see Poulsen & Krabbe 1997ab for Ecuador and Fjeldså *et al.* in press for the entire tropical Andes region). Figure 3 shows that the maximum values (potentially up to 212 species of montane forest birds) are found just west of the continental

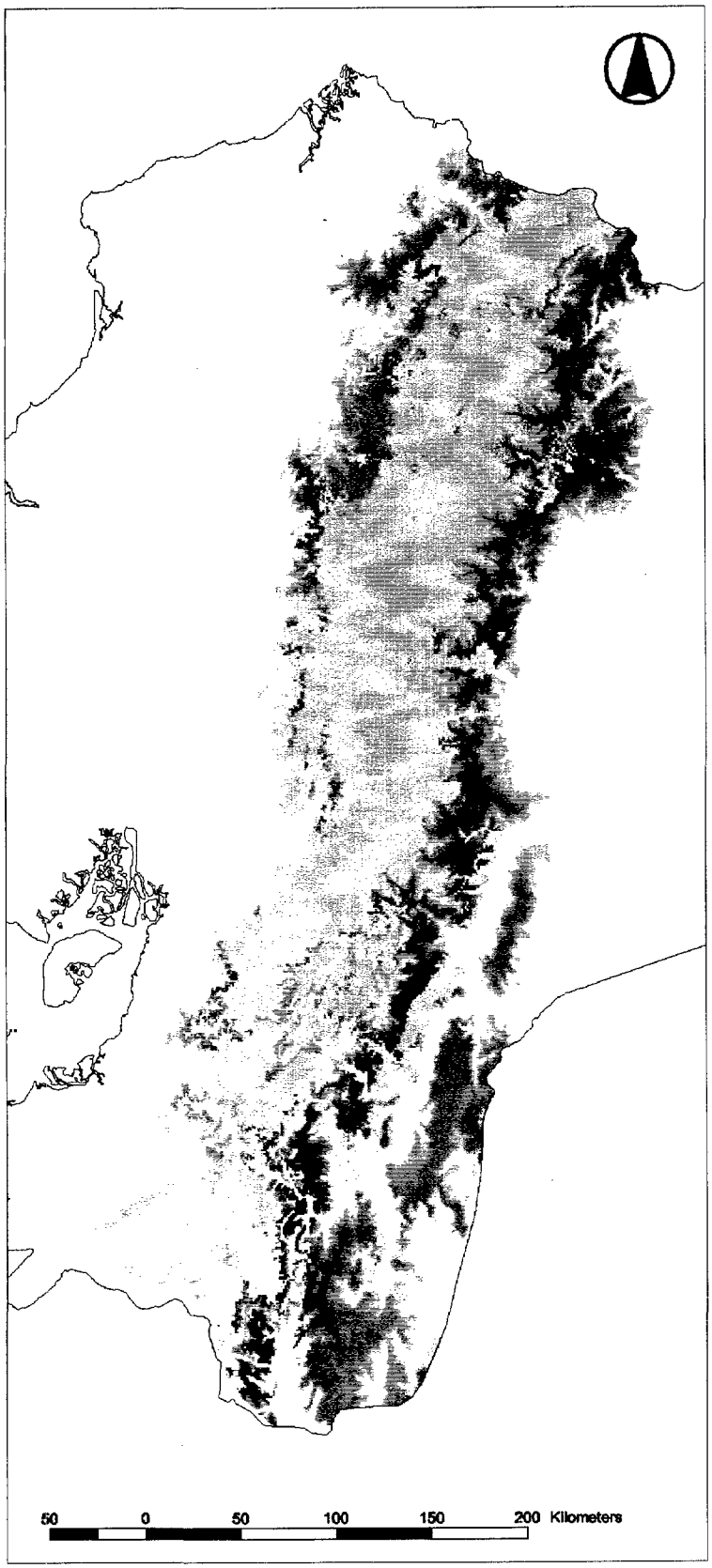


Figure 3. Patterns of richness of Andean forest birds in Ecuador. The dark to black areas are the most species rich.

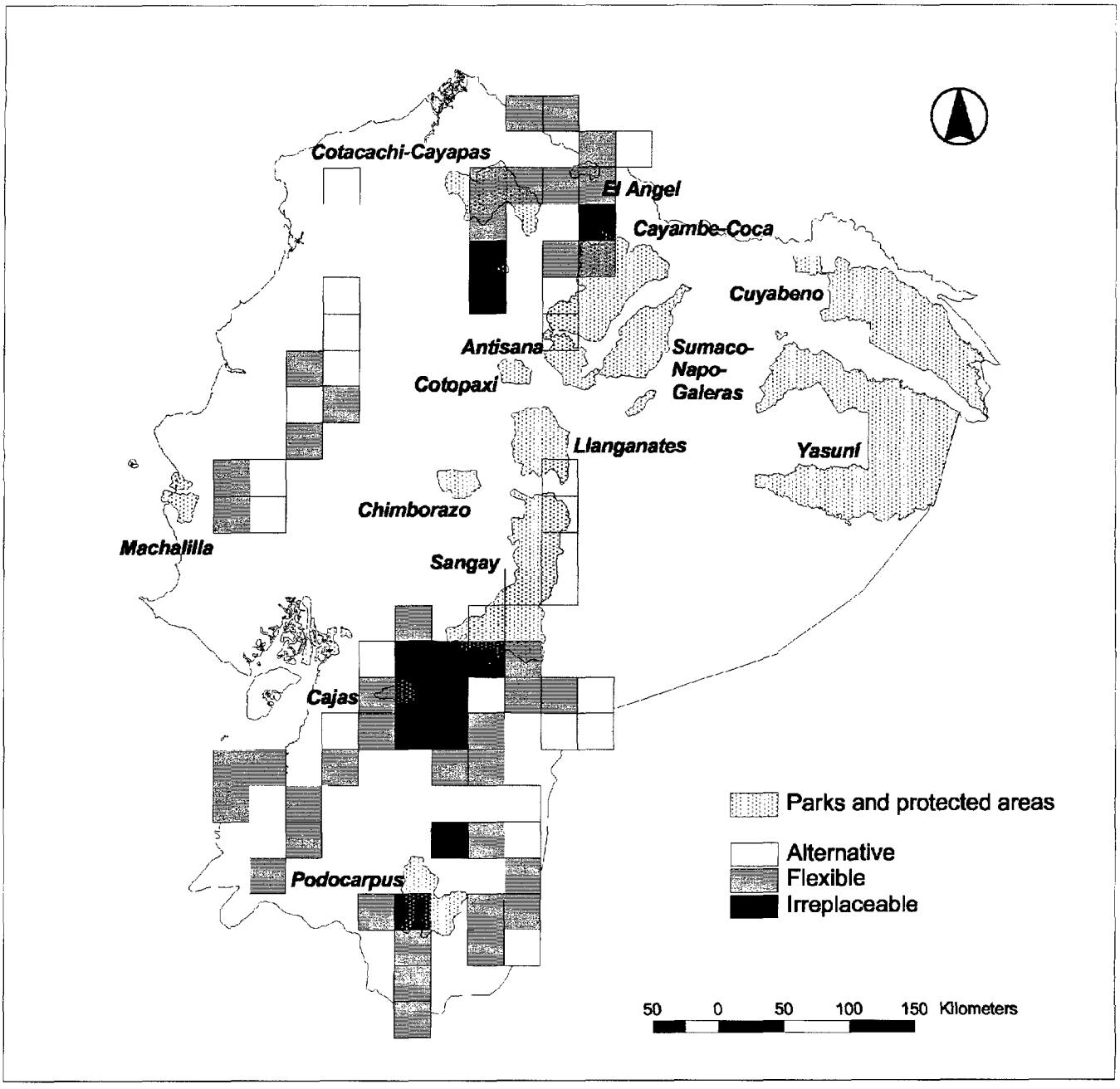


Figure 4. The minimum set of areas needed to keep all Andean forest birds. The conservation priorities were analysed using the WorldMap computer programme and a 15'x15' grid system covering the entire tropical Andes region. The computer analyses the complementarity of species ranges and identifies the smallest possible number of cells needed to keep all species. This comprises irreplaceable cells and flexible cells which could be exchanged by other areas although this may mean a higher total number of cells.

divide in Loja (near Cajanuma, in Podocarpus National Park, and southwards to the Peruvian border; see Bloch *et al.* 1992). The Pacific slope has a considerably poorer fauna, with a declining diversity from the humid north towards the south. The tiny remnants of montane forests in the southwest have a very low richness of montane forest birds, although part of the void is filled by submontane birds (Bloch *et al.* 1992, Best & Kessler 1995). These tendencies (Fig. 3) are in full agreement with the results of constant-effort field studies (Poulsen and Krabbe 1997ab).

The main endemic bird areas (modified from Stattersfield *et al.* 1998) are outlined below, with due attention to species living below the elevational zone charted in this publication: (1) Alltogether 63 bird species are endemic to the humid Chocó forest of Colombia and Ecuador, with a few of these being almost restricted to the Ecuadorian part (and adjacent Colombia up to the Paría Valley). (2) Ca. 20 species are endemic to the Central Andes of Colombia and Ecuador; this group includes several different patterns, with some species restricted to northern Ecuador and adjacent Colombia, whereas others are more widely or disjunctly distributed. (3) 16 species are restricted to the humid submontane and lower montane forests on the eastern Andean slope of Ecuador (some of these extending slightly into Colombia or to the Cordillera Oriental of Moyobamba in northern Peru. (4) 8

species are endemic to the Central Andes south of Río Paute, some of these extending into northern Peru. (5) Ca. 57 species are endemic to the Tumbesian region of southwestern Ecuador and adjacent parts of Peru, with the majority of these inhabiting submontane evergreen to dry tropical forests below the elevational zone considered in this atlas. (6) 8 species are endemic to the fairly low Andean ridgetops of extreme southeastern Ecuador and adjacent Peru. These elements can also be recognized for plants (Borchsenius 1997). However, the moist forest belt in Pacific Ecuador is more unique botanically than ornithologically, there is considerable local plant endemism in the central western premontane belt and in the Cuenca, Loja and Azuay inter-Andean basins. A similar pattern is also found for frogs (Lynch & Duellman 1997) (although in this case there are no data from the southwestern part of the country).

Recurring present boundaries

A comparison of all the maps illustrates mutual boundaries of distribution at arid valleys intersecting the humid slopes. In the west the most common boundaries are the rivers Mira, Toachi, Chanchán, and Rircay, to a lesser degree the rivers Guayllabamba, Angamarca, Puyango, and Catamayo. Along the east slope of the Andes, common boundaries are found at the rivers Pastaza, Paute and Zamora, as well as the rivers that isolate Cordillera de Cutucú (Río Upano) and Cordillera del Condor (Río Zamora and Río Chinchipe).

Habitat bridges connecting the East and West Andes

Exchange between eastern and western temperate zone avifaunas may have occurred at four places in Ecuador: in northern Carchi, in the Mojanda mountains in Imbabura, in the Río Paute drainage in southern Cañar, and in the upper Río Zamora drainage in Loja. Some species (*Metallura williami*, *Scytalopus magellanicus*, *Hemitriccus granadensis*, *Mecocerculus minor*, *Creurgops verticalis*) that may have crossed to the Pacific slope via the "Carchi bridge", have apparently not been able to cross south over the Río Mira to the rest of the Pacific slope. Similarly, some species (*Andigena hypoglauca*, *Anisognathus lacrymosus*, *Chlorospingus ophthalmicus*, *Amblycercus holosericeus* no map shown for the latter two) that may have crossed via the "Cañar bridge", have not been able to cross north over the Río Chanchán; others (*Boissonneaua matthewsii*, *Coeligena iris*) have made it a little further north, whereas *Hemispingus verticalis* appears to have made it across only as far as to the east slope of the Cajas plateau. *Amblycercus holosericeus* also occurs in the deciduous southwestern lowlands, and this population might be in contact with the montane population on the Pacific slope in Azuay Province. The subspecies of *Basileuterus coronatus* found in the southwest probably arose from the dull, eastern birds crossing via the "Río Zamora bridge". All four possible "bridges" are now broken by farmland, least so the "Cañar bridge". All may have been temporarily disconnected by volcanism during the Quarternary (Barberi *et al.* 1988). The apparently isolated populations of *Campylorhamphus pucherani* and possibly *Cnemoscopus rubrirostris* on Volcán Pichincha are difficult to explain, unless they crossed via the "Mojanda bridge" and later became extinct or went unnoticed in Imbabura.

Conservation priorities

The formulation of priorities for biodiversity conservation is country-driven, according to the Biodiversity Convention. However, an optimal conservation plan requires a regional analysis which considers how the individual species are distributed also outside the national boundaries. Fig. 4 shows the minimum set of conservarion areas in Ecuador and adjacent territories in Colombia and Peru based on an analysis of species distributions in the entire tropical Andes region. The figure also shows the existing network of formally protected areas.

It is apparent from Figure 4 that the planning of protected areas was guided by where there was little conflict (with other ministeries or with local people) more than by explicit

analysis of biological data. Luckily, some of the existing reserves are very well targetted: The Cajas National Recreation Area is 'irreplaceable' from an ornithological point of view, and this conservation initiative now seems to function well as it was supplemented by a conservation initiative by local communities. The Podocarpus National Park is extremely species rich (Bloch *et al.* 1992) and was identified as 'irreplaceable' in our analysis. The various threats to the Podocarpus National Park (encroachment for agriculture and grazing, gold-mining, plans to build roads etc.) seem to be regulated at present, and they have scarcely affected the upper montane forest. The environmental awareness in this area has improved greatly. Also Machalilla National Park, the Cotacachi-Cayapas and Cayambe-Coca Ecological Reserves and the Awa Forest Reserve are in very suitable positions for conserving birds (and other elements of biodiversity). Other protected areas (e.g., Antisana and Sangay) harbour large numbers of bird species but mainly those which are widespread and therefore relatively safe. These areas were not identified as particularly important in our analysis.

Priority areas and human populations

In order to evaluate what is required for developing a strategy which prevents global loss of species, we compared our priority areas with human population data (Fig. 5). It is seen that many of the ornithologically most unique areas are densely populated or situated immediately adjacent to areas with many people (including the Cities of Quito, Cuenca, and Loja). If we could disregard human communities which arose because of modern external factors (government policies, international trade and investments, etc.) then the correlation between high human population pressures and biological uniqueness would be even more apparent.

The correlation between endemism and human population pressures is not an artefact of intensive collecting in densely populated areas. More probably it signals that special local conditions which caused high local endemism were also major determinants of human well being.

We can suggest a number of possible causes for this relationship. First of all, bird endemism appears to be closely linked with persistent cloud formation on the high ridges (Long 1994, Fjeldså 1995), and therefore means predictable water supply in adjacent montane valleys where humans prefer to settle. These areas are also characterised by low levels of inter-annual variability in ground conditions (Fjeldså *et al.* in press) and are often situated in areas with fertile soils caused by a balance between precipitation and evaporation. These relationships will be analysed in detail elsewhere. Some centres of bird endemism (especially in Apurímac and Cuzco in Peru) are also the centres of high genetic diversity of useful plants (e.g., potatoes and other tuber crops). We assume that specific local conditions which facilitated the evolution of wild species in the distant past also facilitated the cultivation of tuber crops and the production of maize under high-altitude conditions. Crop predictability may have been a major prerequisite for the past transition from a life as hunter-gatherers to resident farming systems, and also for the further advancement of agriculture. This relationship has been completely overlooked in the literature relating to relationships between conservation biology and development.

It is indeed surprising that the unique local aggregates of rare species persist, in spite of the human pressure. No bird species are definitely known to have gone extinct yet in Ecuador. One species, *Atlapetes pallidiceps* (p. 128) has not been seen since 1969 and may now be extinct (Collar *et al.* 1992) and only one small (wandering) group may still exist of the parrot *Ognorhynchus icterotis* (p. 21). Maybe, after thousands of years of strong human influence, the 'extinction filtering' is hidden in the distant past (Balmford 1996).

Obviously, a thoughtful conservation plan must rest on a good understanding of why so many people live next to the biologically most unique areas. More research is needed to elucidate how the special biological communities could persist up until the present time in the tiny habitat patches that are left today in some of these 'conflict zones'. Also, this knowledge needs to be turned into actions for sustainable natural resource management. This is not necessarily a question of establishing additional protected areas, but even more of targetting the support to environmentally sound rural development projects and help to villages to protect their own local forest patches. It is also a question of managing

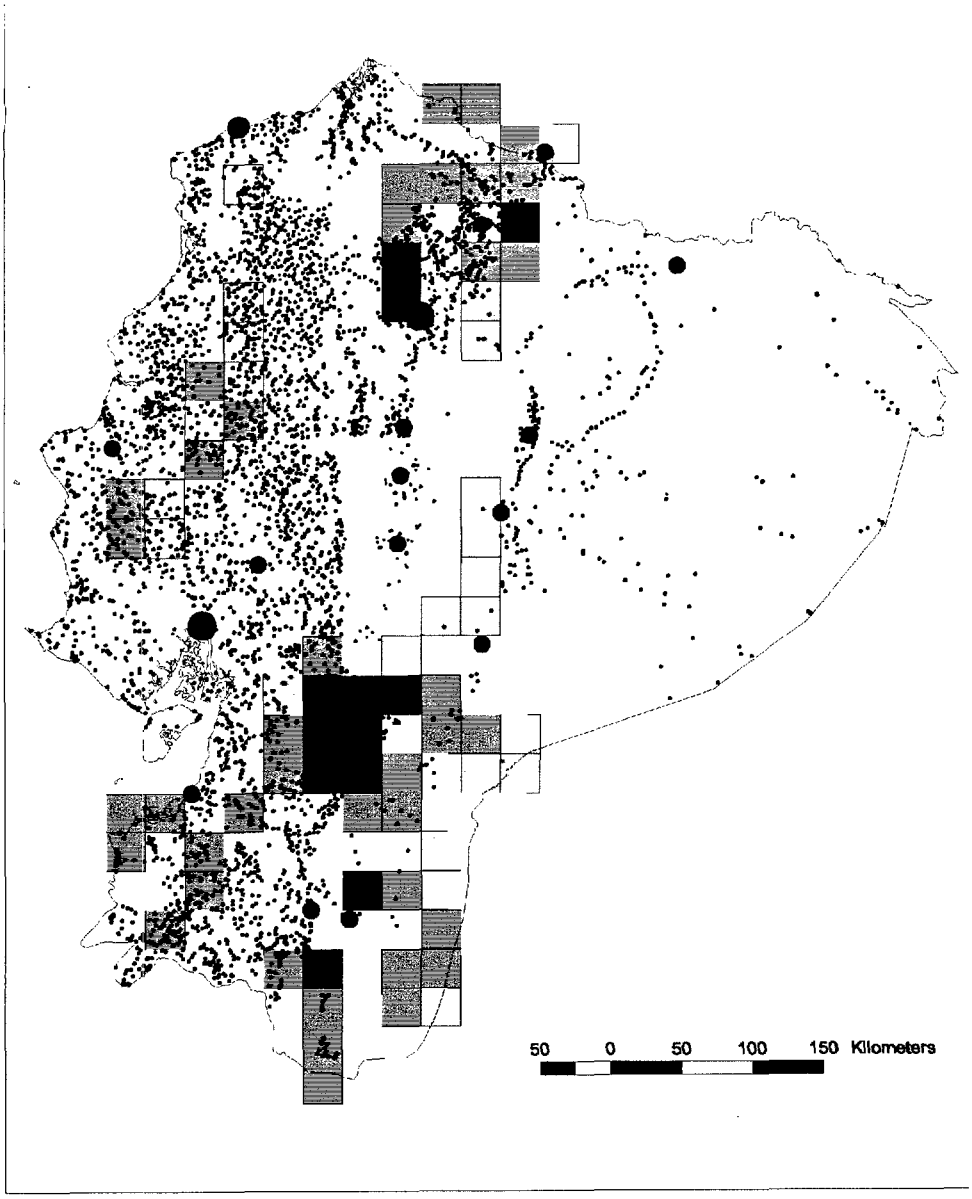


Figure 5. Density of populated places in Ecuador and the minimum set of protected areas (see Fig. 4 for futher explanation). Dots represent human settlements. Size of dots correlates roughly to number of inhabitants.

a political process, looking for links and connections within cultural landscapes and providing strong incentives for maintaining ecosystem functions which are essential for biodiversity and man alike.

Figure 5 suggests that efforts to protect montane forests and help local people to efficient and sustainable use of the land that has already been converted, should be concentrated in the regions of Cerro Golondrina reserve (Pacific slope in Carchi); the Guanera - Cerro Mongus reserve (west-slope of East Andes in Carchi); on Pichincha (Pacific slope in Pichincha); the Pacific slope in northern Cotopaxi; the Cajas plateau and all its upper slopes (eastern Azuay); the lower Pacific slopes in Azuay and El Oro; the Girón region (where deforestation is now nearly complete); on the Amazonian slope in the Antisana-Sumaco region and the Podocarpus National Park. Local communities in nearby dry valleys benefit from a constant water supply from the cloud-enshrouded forest zones on the adjacent steep slopes and high ridges, from a supply of wood for fire and construction, and from the biodiversity maintained in these forests. The natural habitats should also be protected in the humid zone in the Cóndor mountain range, which presently has a very low human influence. If we take into the Andean foothill zone into consideration then the principal problems for conserving biodiversity and valuable ecosystem functions is in the southwest of Ecuador. Less than 5% of the Ecuadorian Tumbes region remains forested.

Map legend

Altitudinal limits, habitat codes, total South American distribution and IUCN conservation category for each of the 230 species included in this volume.

For each map the following information is given:

Vernacular name in English

Vernacula name in Spanish

Latin name

Altitudinal range in meters above sea level in each of three bio-geographical zones:

northwest (NW)
northeast (NE)
south (S)

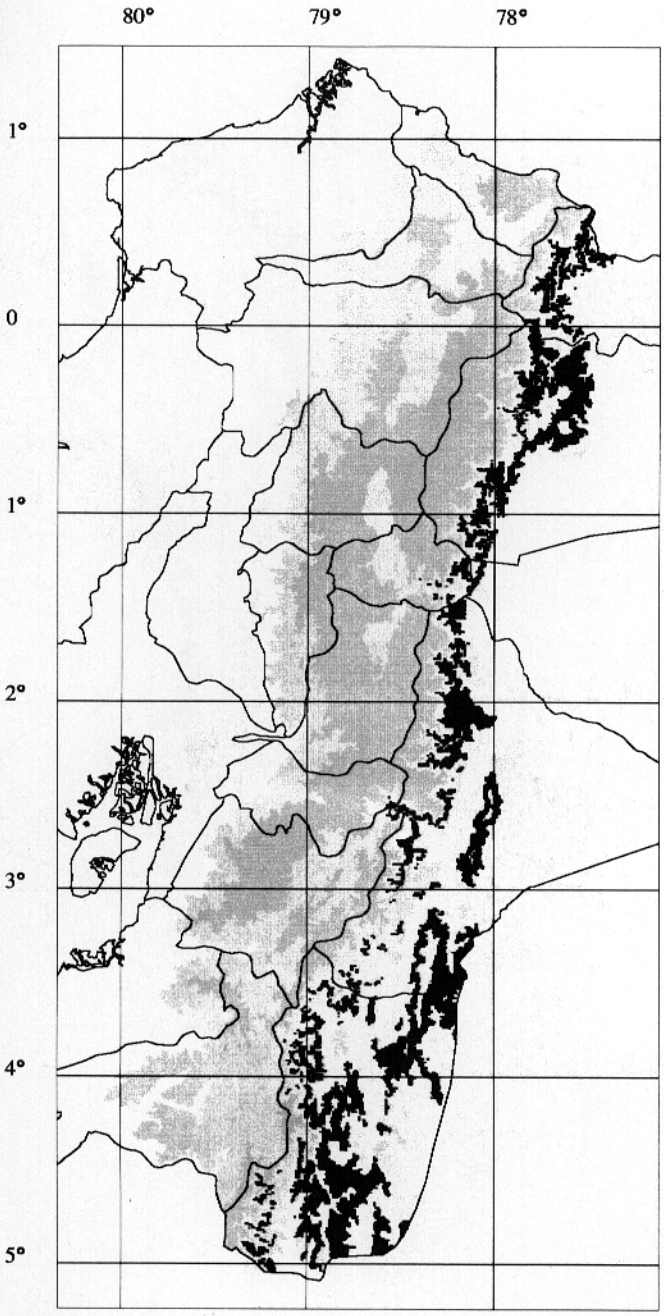
Birds known only from one or a few localities are marked "limited " and their altitudinal limits are preliminary.

Habitat codes. Abbreviations used: HPF: Humid primary forest.; HSF: Humid secondary forest; HS: Humid scrub; DPF: Dry primary forest; DSF: Dry secondary forest; DS: Dry scrub; DA: Disturbed areas.

Total distribution. Number of 1 degree cells occupied by the species in South America

IUCN status. The IUCN Red List Categories (IUCN 1994) are used:

Critically Endangered (CR): Facing extreme high risk of extinction in the wild in the immediate future.
Endangered (EN): Not Critically Endangered but is facing a very high risk of extinction.
Vulnerable (VU): Not CR or EN but is facing a high risk of extinction in the wild in the medium-term future.
Lower Risk (LR): Not any of the above mentioned categories. Taxa in the Lower Risk category can be separated into three subcategories: Conservation Dependent (cd); Near threatened (nt); and Least Concern (lc). (Not used for the present study).



Highland Tinamou
Tinamú Serrano

Nothocercus bonapartei

Altitudinal range:

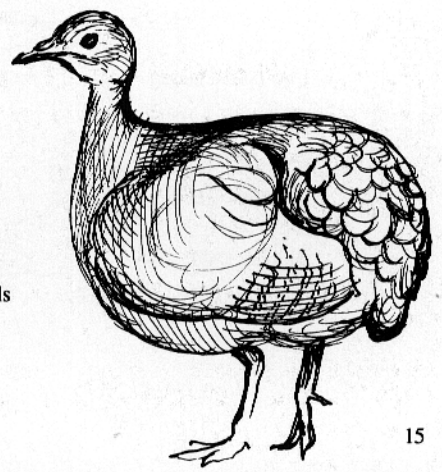
NW: Not found

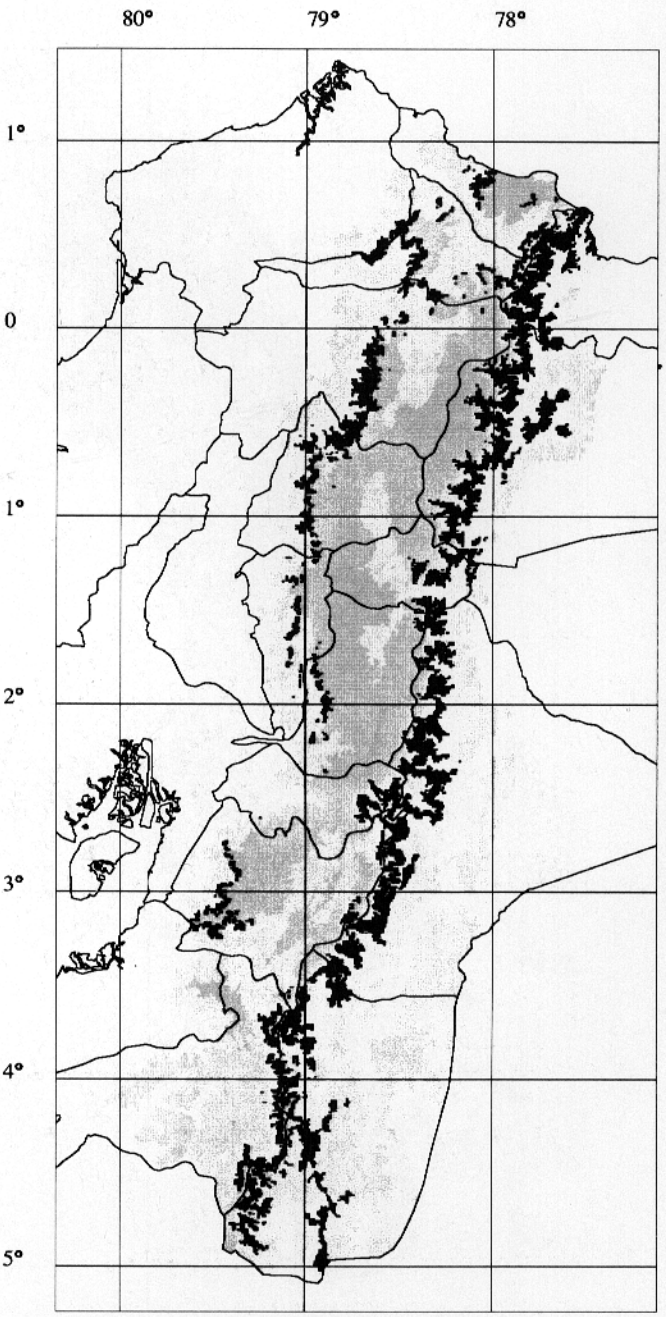
NE: 1600 –2200

S: 1600 –2200

Habitat: HPF

Total distribution: 39 cells





Tawny-breasted Tinamou
Tinamú Cabecirrojo

Nothocercus julius

Altitudinal range:

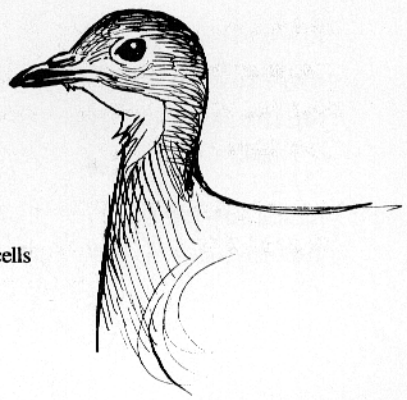
NW: 2500 –3400

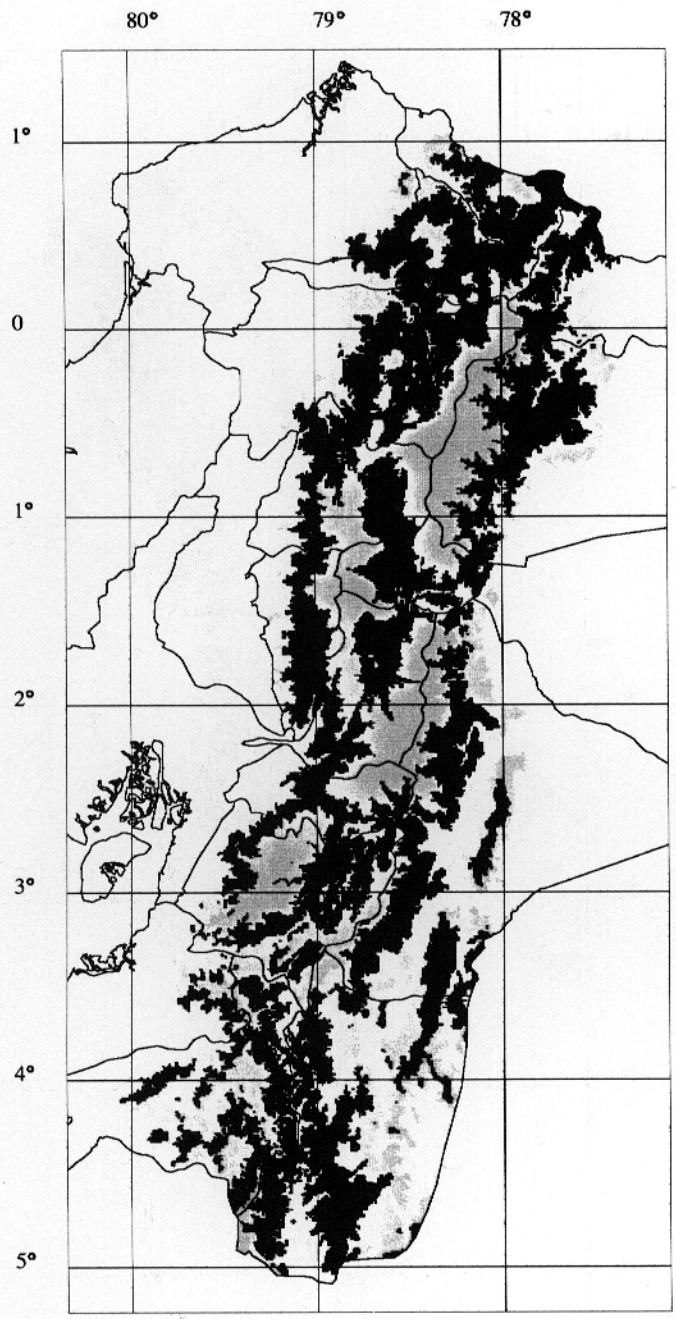
NE: 2400 –3400

S: 2400 –3200

Habitat: HPF HSF HS

Total distribution: 43 cells





Plain-breasted Hawk
Azor Pechillano

Accipiter ventralis

Altitudinal range:

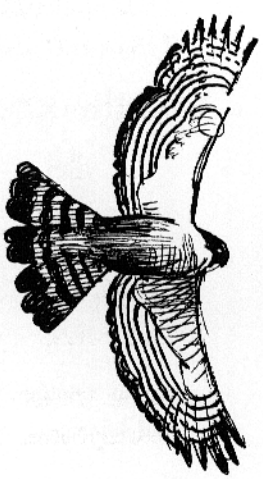
NW: 1700 –3500

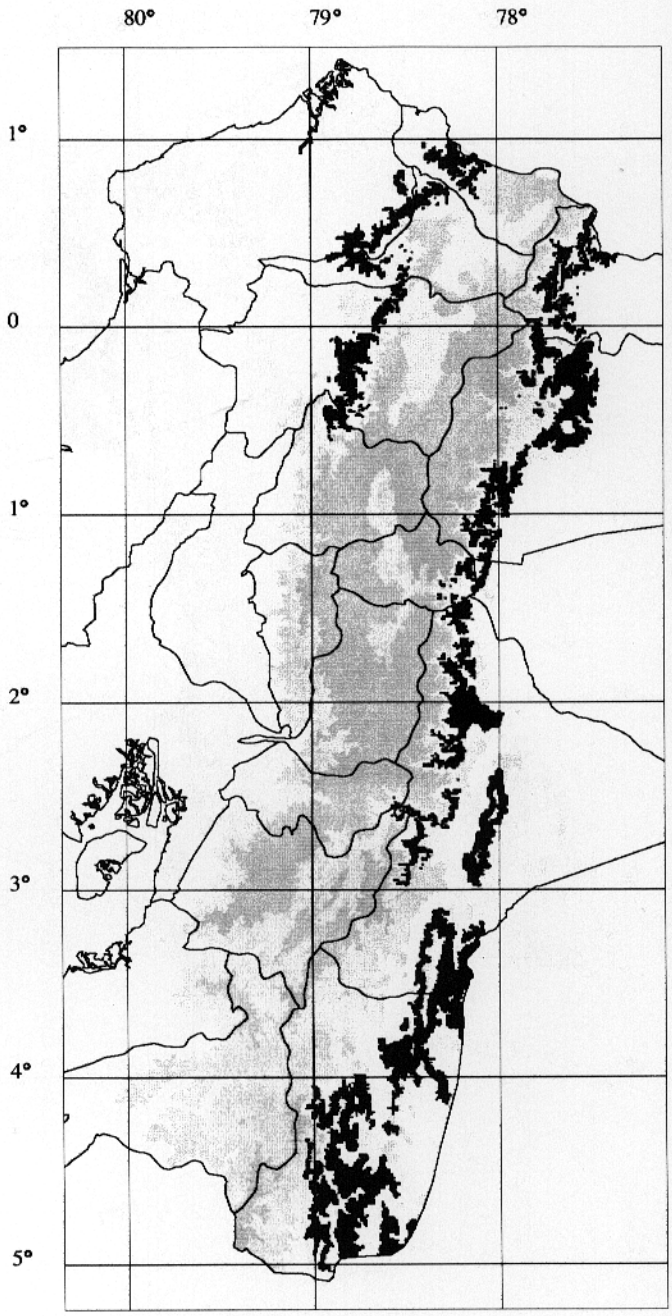
NE: 1700 –3500

S: 1700 –3300

Habitat: HPF HSF DA

Total distribution: 93 cells





Semicollared Hawk
Azor Semicollarejo

Accipiter collaris

Altitudinal range:

NW: 1500 –2200

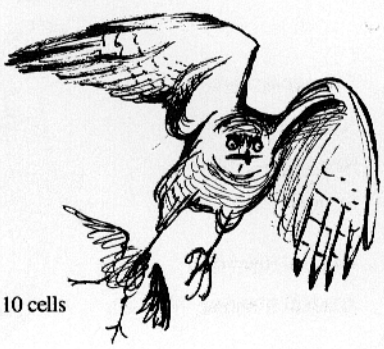
NE: 1500 –2200

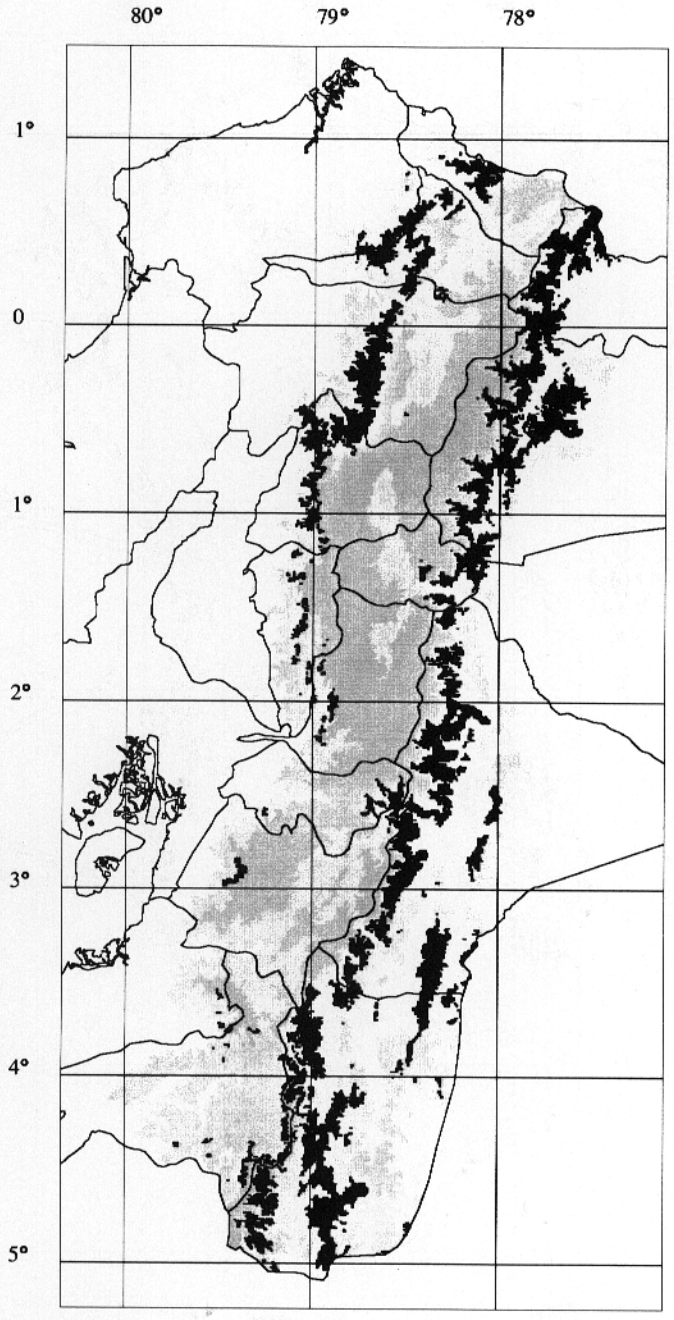
S: 1500 –2200

Habitat: HPF

Total distribution: 10 cells

Near –threatened





White-rumped Hawk
Gavilán Lomiblanco

Buteo leucorrhous

Altitudinal range:

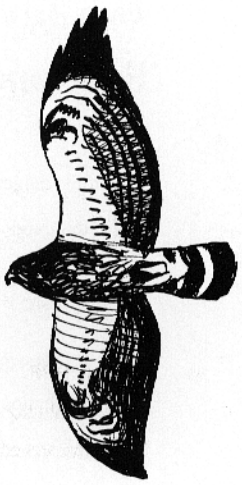
NW: 2000 –3300

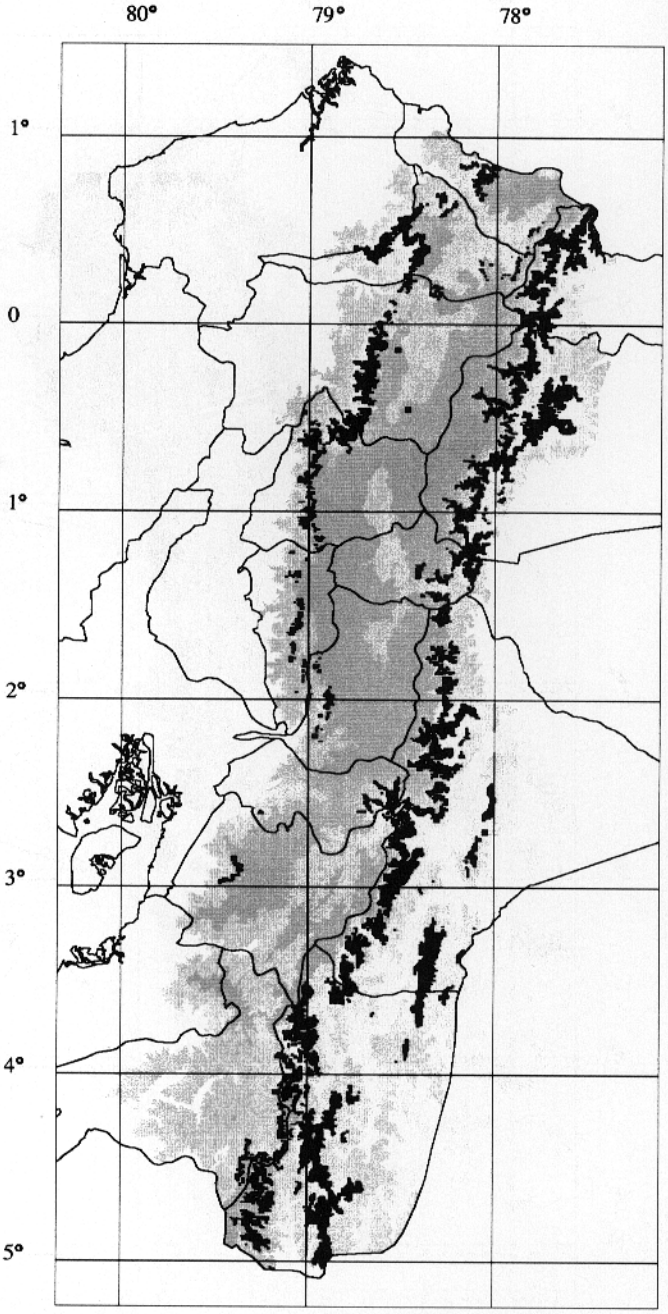
NE: 2000 –3200

S: 2000 –3000

Habitat: HPF HSF

Total distribution: 195 cells





White-throated Hawk
Gavilán Colicorto

Buteo albigula

Altitudinal range:

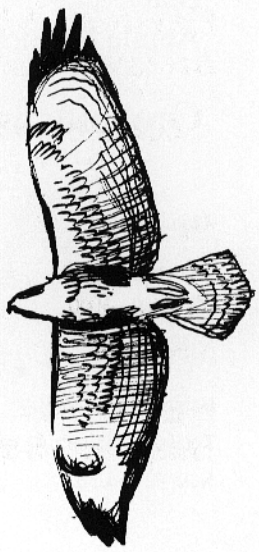
NW: 2400 –3250

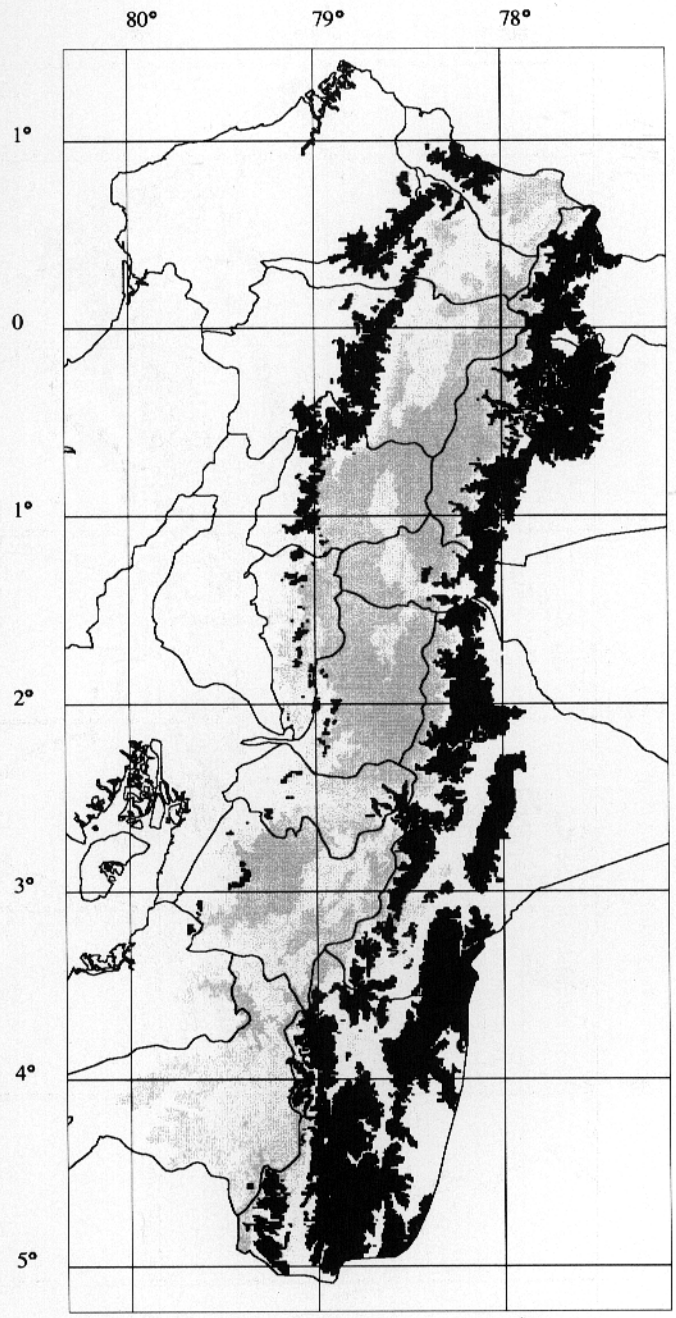
NE: 2100 –3000

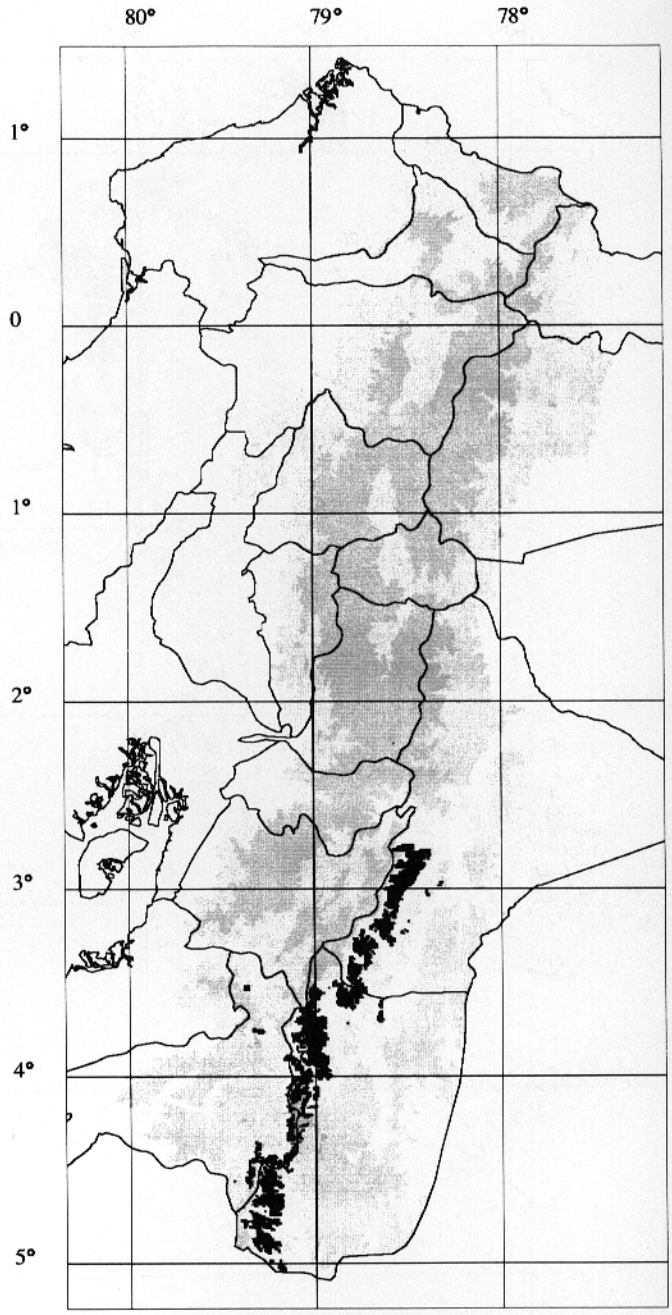
S: 2100 –3000

Habitat: HPF HSF

Total distribution: 32 cells

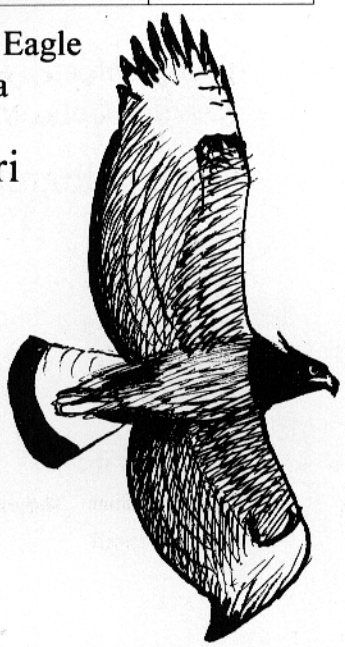






Black-and-chestnut Eagle
Aguila Negricastaña

Oroaetus isidori



Altitudinal range:

NW: 1500 –3000

NE: 1200 –3000

S: 1200 –3000

Habitat: HPF (HSF)

Total distribution: 61 cells

Near –threatened

Bearded Guan
Pava Barbada

Penelope barbata

Altitudinal range:

NW: Not found

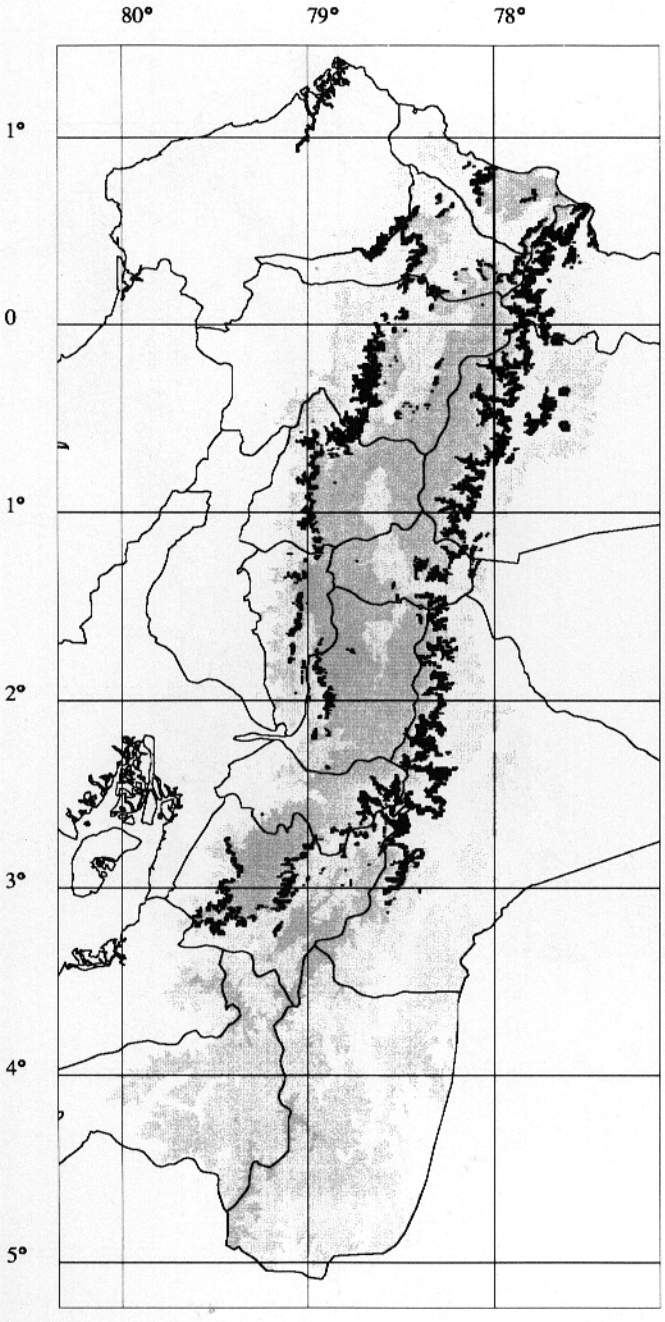
NE: Not found

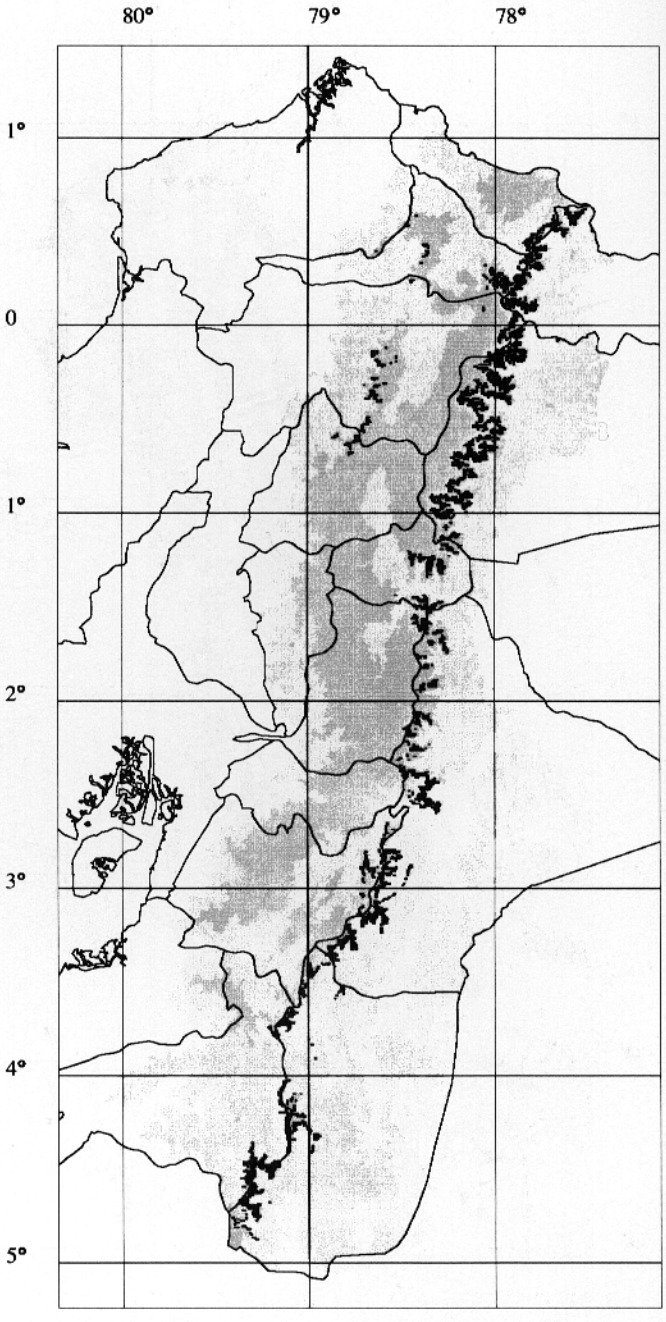
S: 1900 –3100

Habitat: HPF HSF

Total distribution: 11 cells

Vulnerable





Andean Guan
Pava Andina

Penelope montagnii

Altitudinal range:

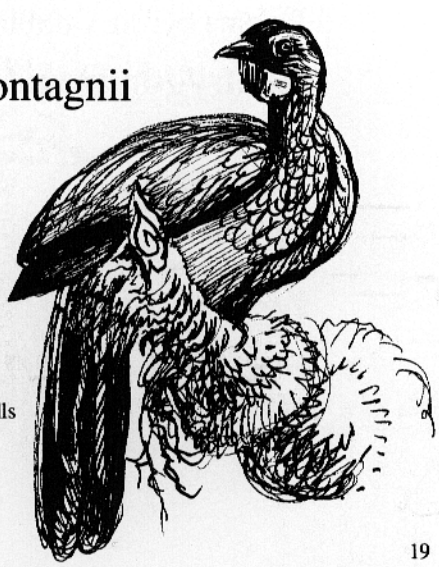
NW: 2500 –3500

NE: 2500 –3300

S: Limited: 2000 –2500

Habitat: HPF HSF HS

Total distribution: 57 cells



Imperial Snipe
Becasina Imperial

Gallinago imperialis

Altitudinal range:

NW: 3350 –3800

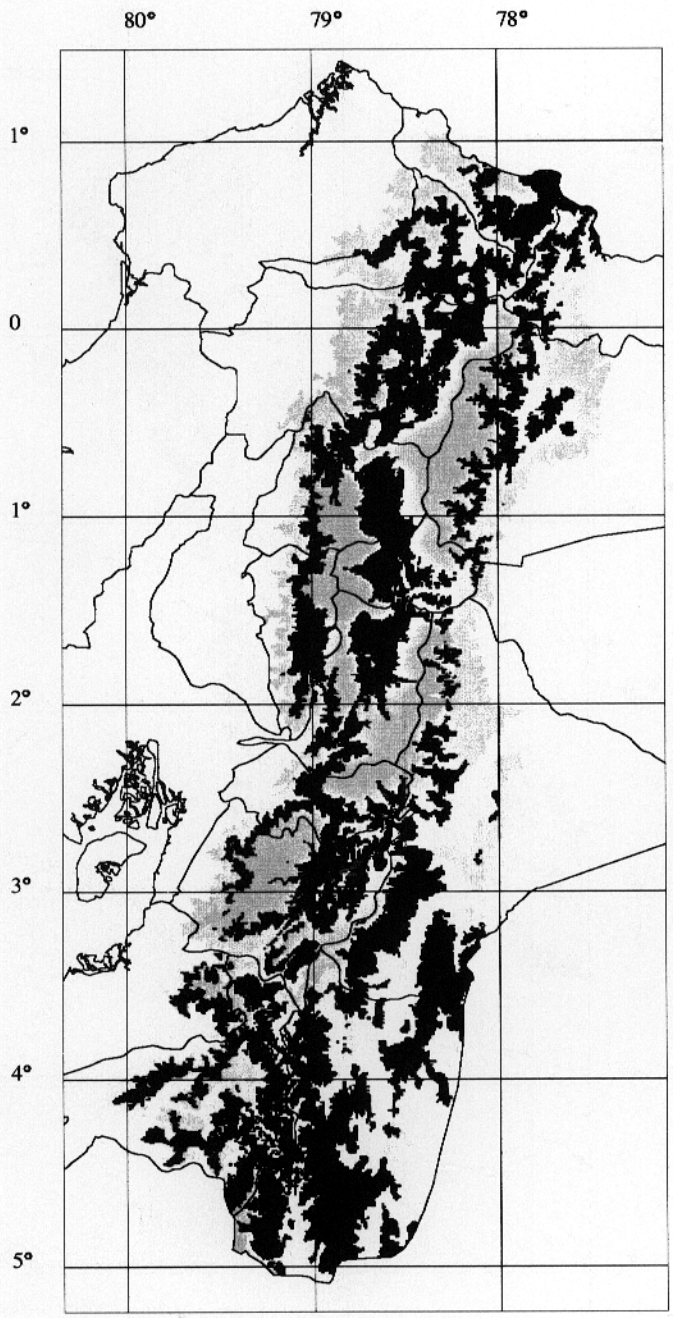
NE: 3350 –3800

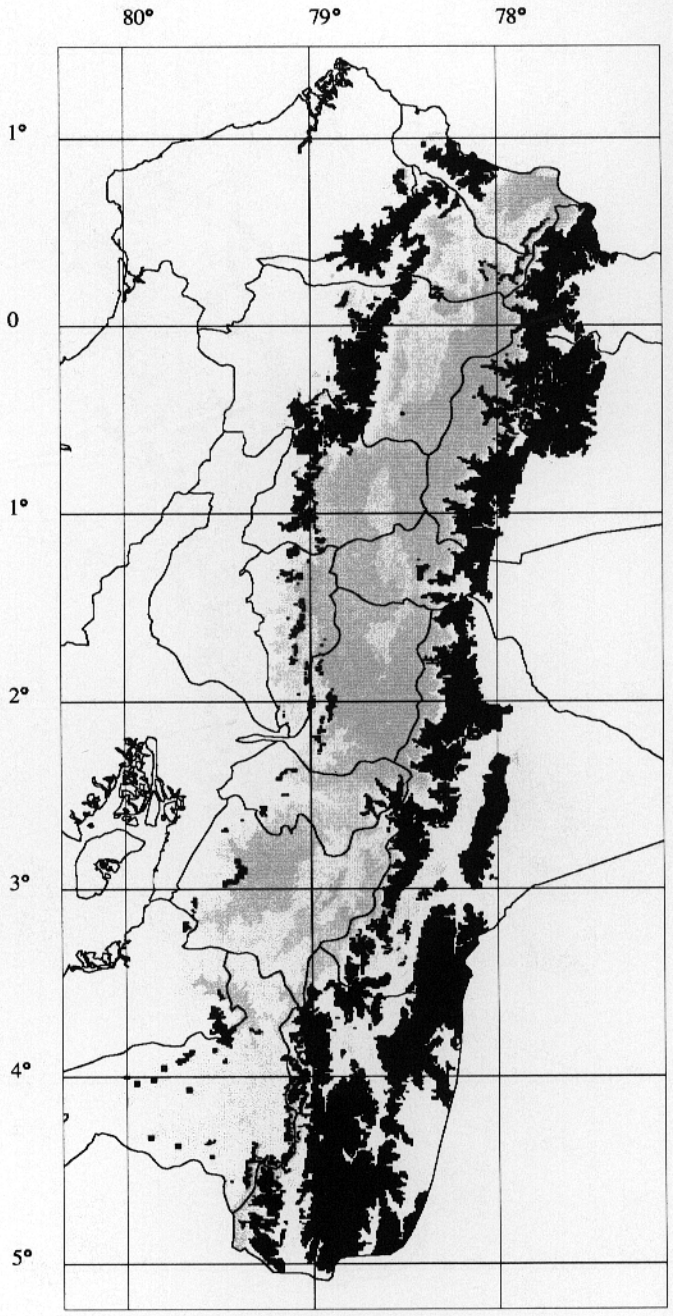
S: 3000 –3400

Habitat: HPF

Total distribution: 7 cells

Near –threatened





Band-tailed Pigeon
Paloma Collareja
Columba fasciata

Altitudinal range:

NW: 2300 –3500

NE: 2300 –3500

S: 1500 –3300

Habitat: HSF DA

Total distribution: 163 cells

White-throated Quail-dove
Paloma-perdíz Goliblanca
Geotrygon frenata

Altitudinal range:

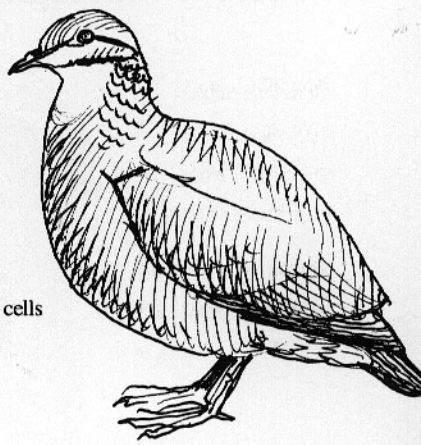
NW: 1500 –3300

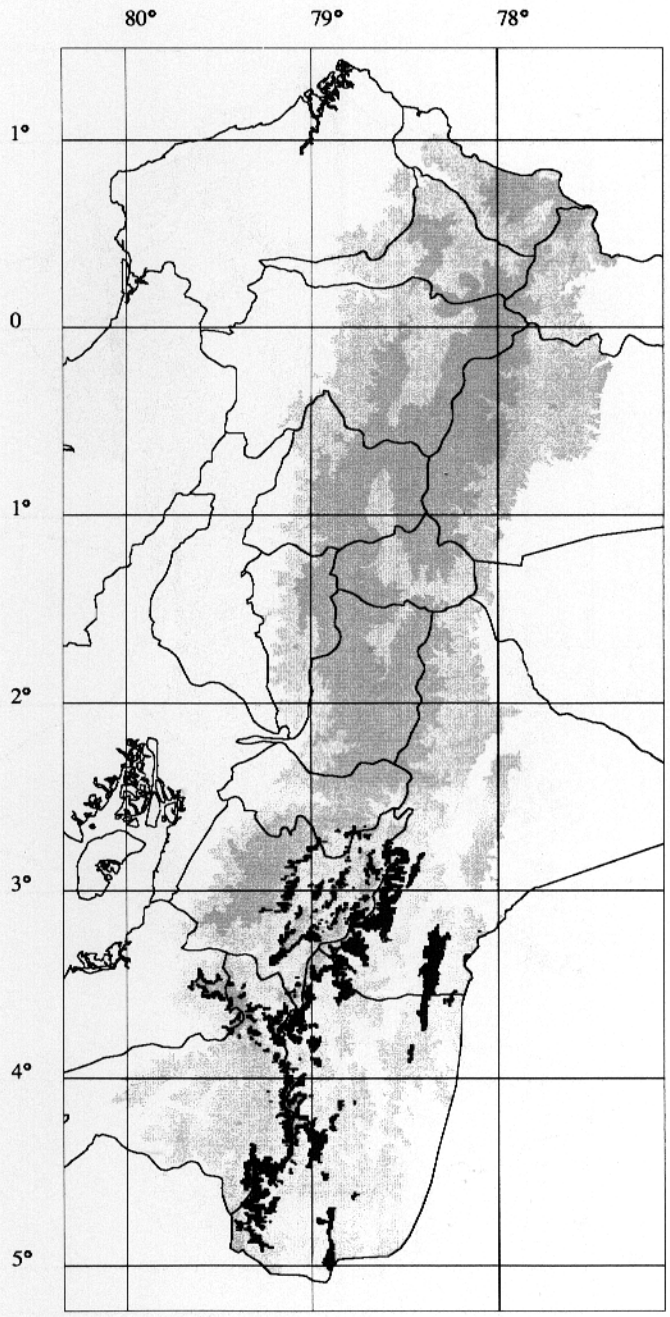
NE: 1300 –3200

S: 1200 –3000

Habitat: HPF HSF

Total distribution: 68 cells





Golden-plumed Conure
Perico Cachetidorado

Leptosittaca branickii

Altitudinal range:

NW: 3000 –3400

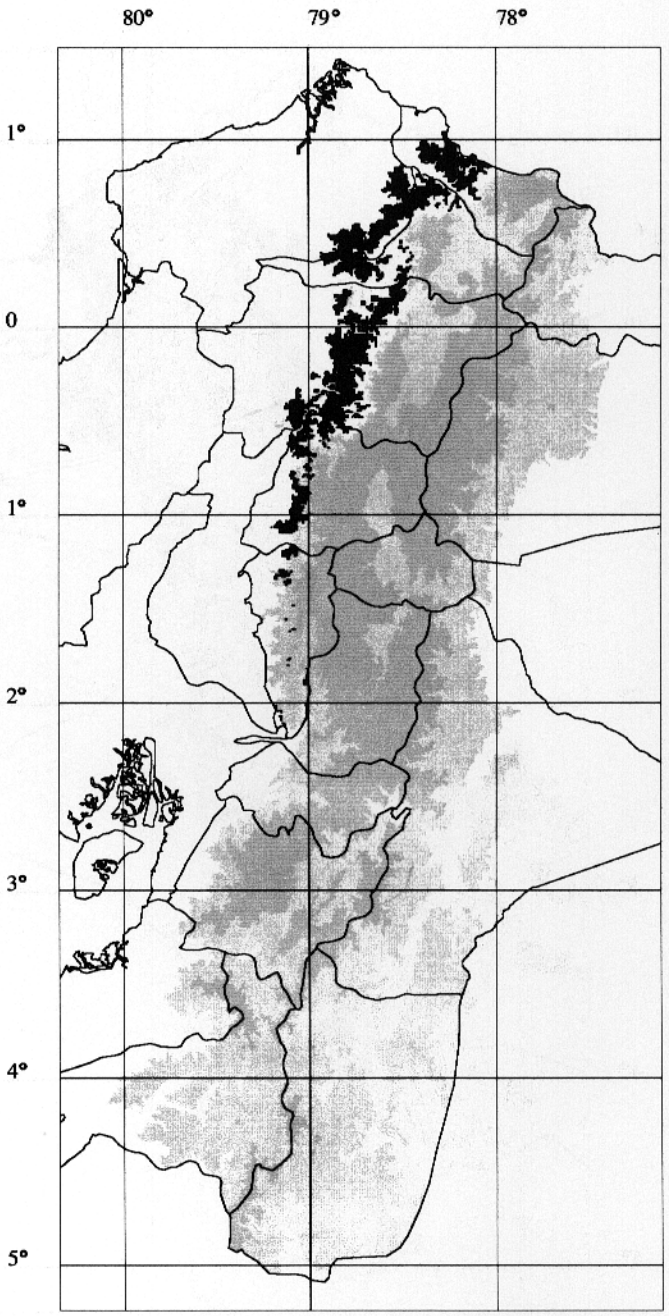
NE: 3000 –3400

S: 2500 –3400

Habitat: HPF HSF HS

Total distribution: 24 cells

Vulnerable



Yellow-eared Conure
Caripero

Ognorhynchus icterotis

Altitudinal range:

NW: 1200 –2700

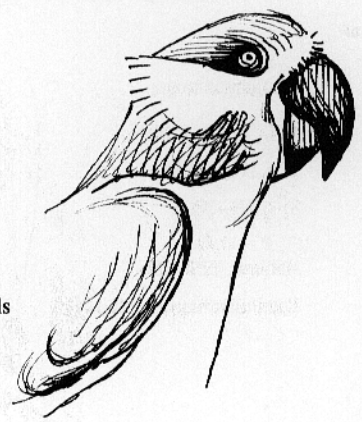
NE: Not found

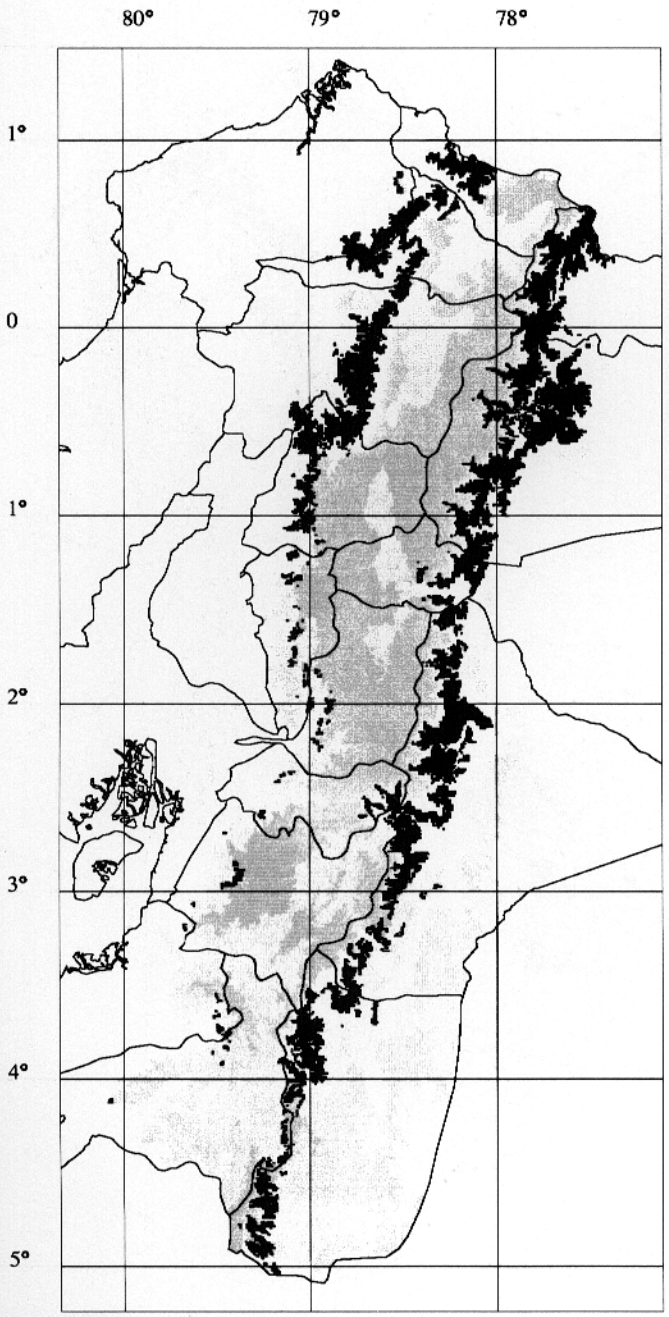
S: Not found

Habitat: HPF HSF

Total distribution: 19 cells

Critical





Barred Parakeet
Perico Listado

Bolborhynchus lineola

Altitudinal range:

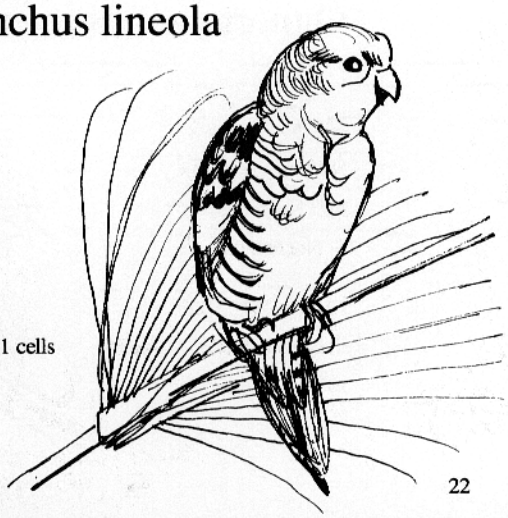
NW: 1700 –3100

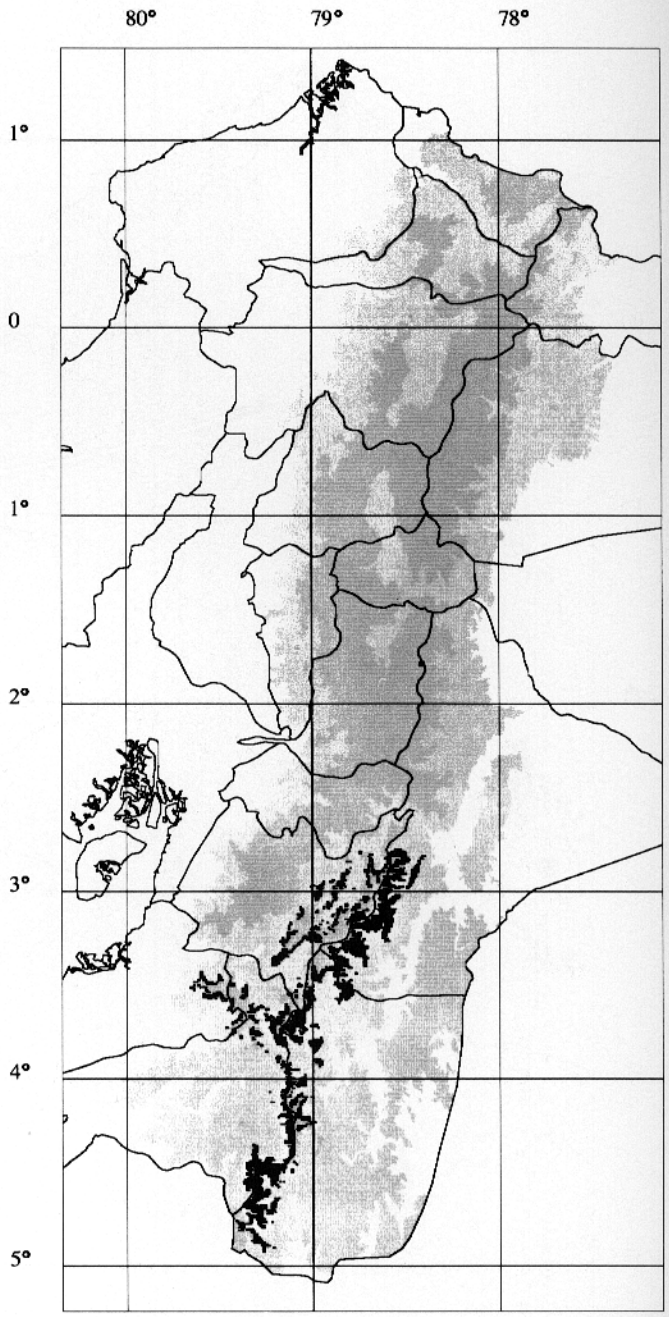
NE: 1700 –3100

S: 1800 –2800

Habitat: HPF HSF

Total distribution: 31 cells





Red-faced Parrot
Loro Carirrojo

Hapalopsittaca pyrrhops

Altitudinal range:

NW: Not found

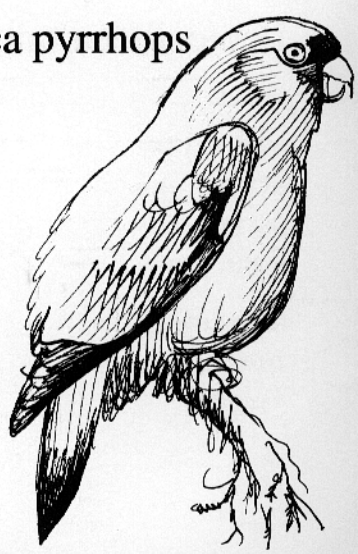
NE: Not found

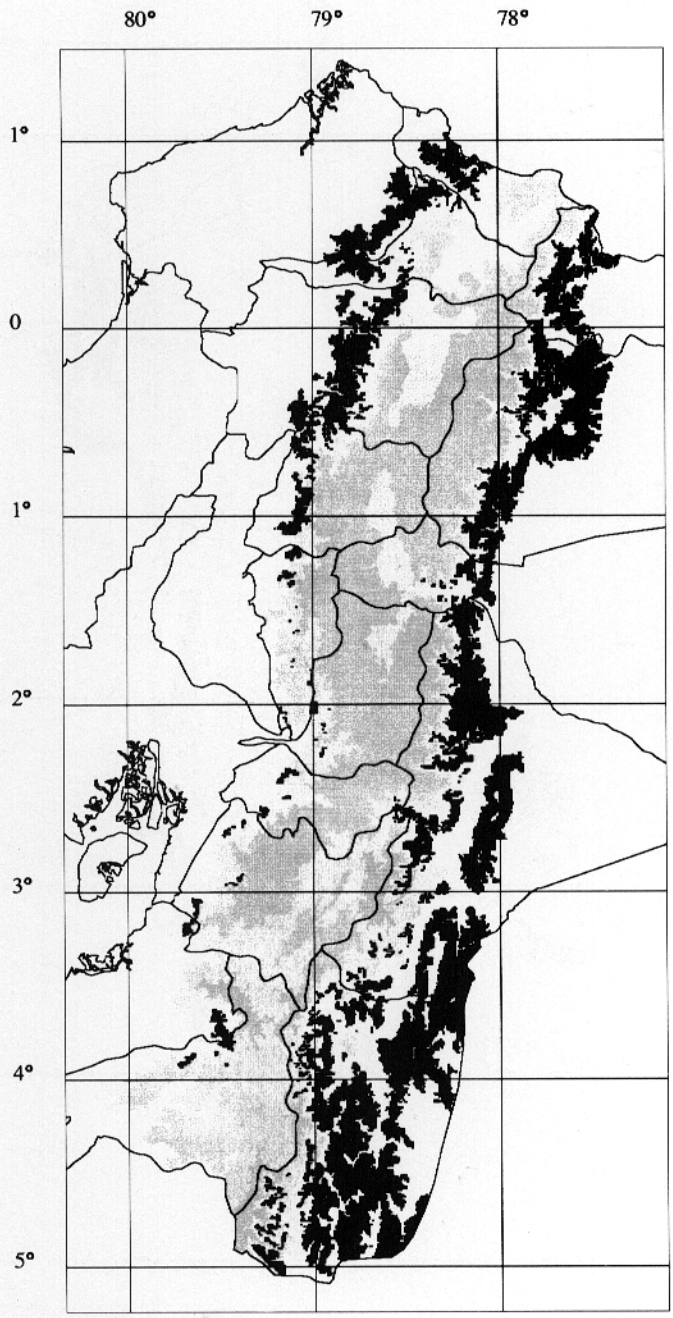
S: 2600 –3500

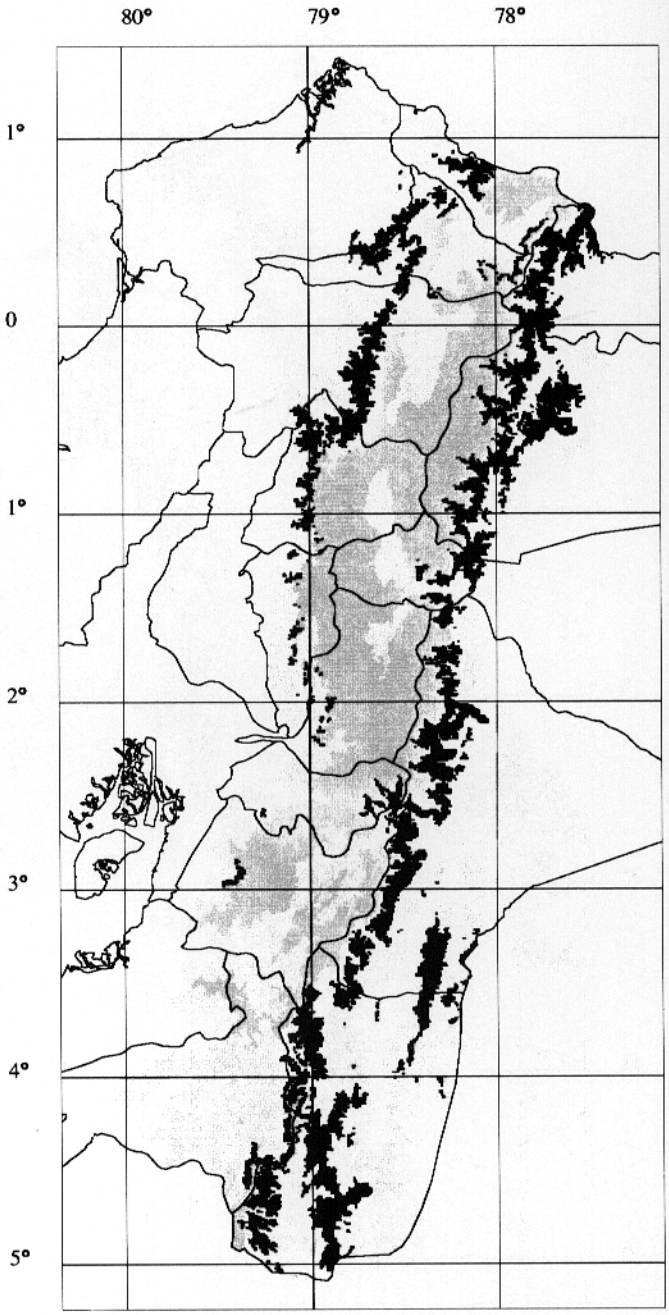
Habitat: HPF HSF HS

Total distribution: 9 cells

Endangered







Red-billed Parrot
Loro Piquirrojo

Pionus sordidus

Altitudinal range:

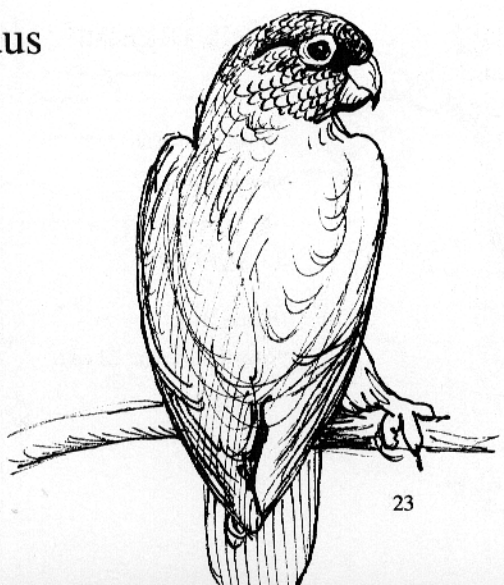
NW: 1200 –2300

NE: 1200 –2300

S: 1200 –2300

Habitat: HPF HSF

Total distribution: 32 cells



White-capped Parrot
Loro Gorriblanco

Pionus seniloides

Altitudinal range:

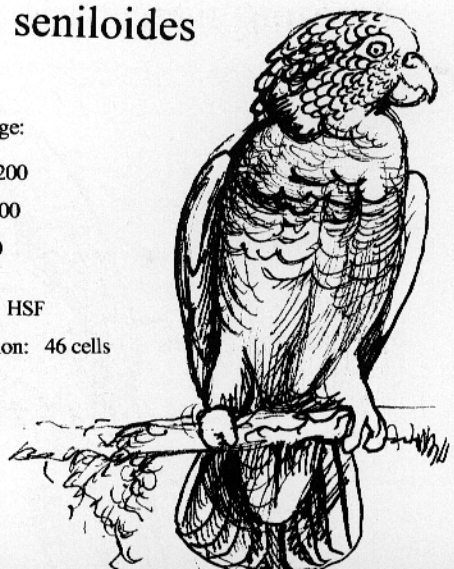
NW: 2000 –3200

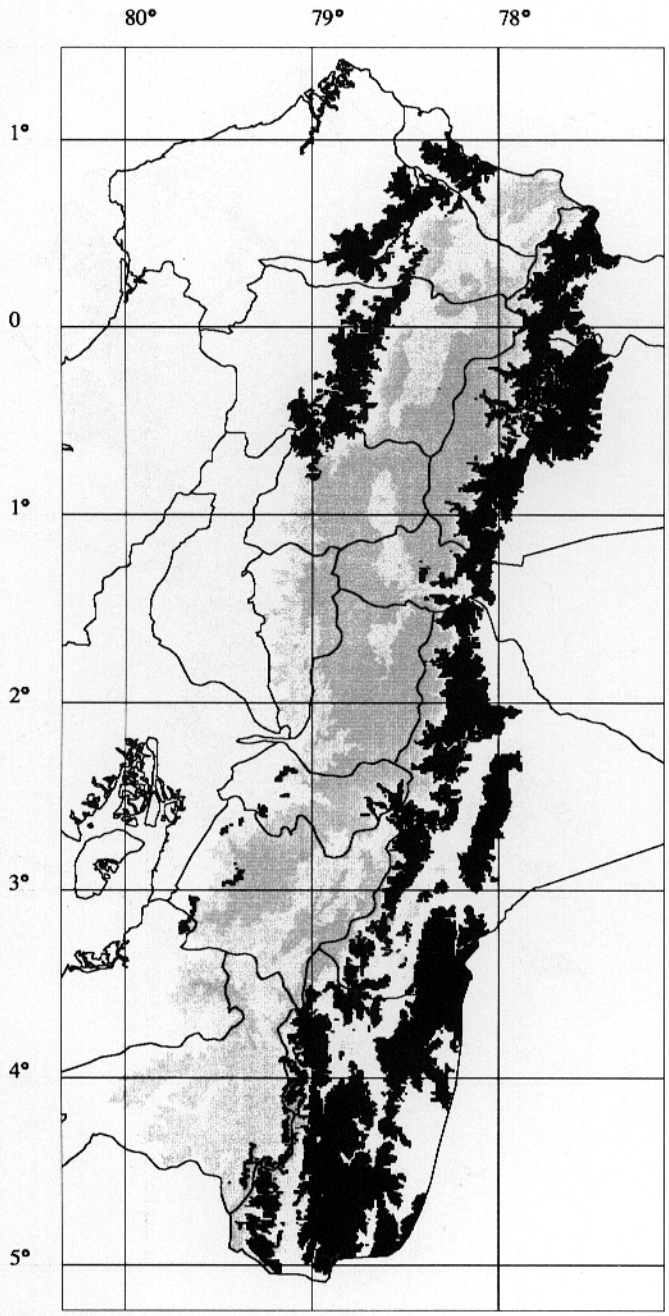
NE: 2000 –3200

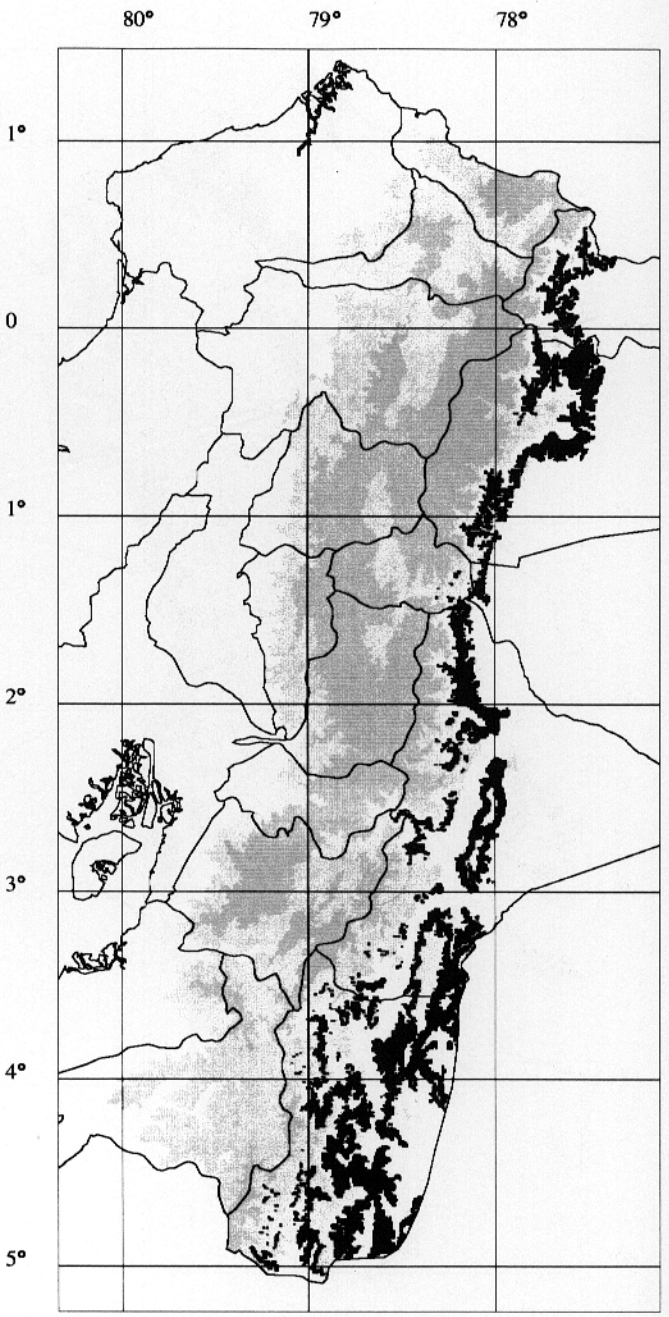
S: 2000 –3200

Habitat: HPF HSF

Total distribution: 46 cells







Scaly-naped Amazon
Amazona Nuquiescamosa

Amazona mercenaria

Altitudinal range:

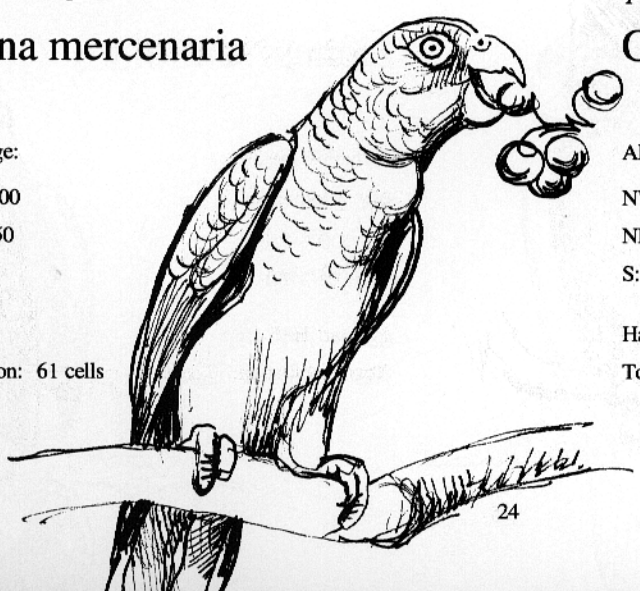
NW: 1200 –2700

NE: 1200 –3050

S: 1200 –3000

Habitat: HPF

Total distribution: 61 cells



Rufescent Screech-owl
Autillo Rufescente

Otus ingens

Altitudinal range:

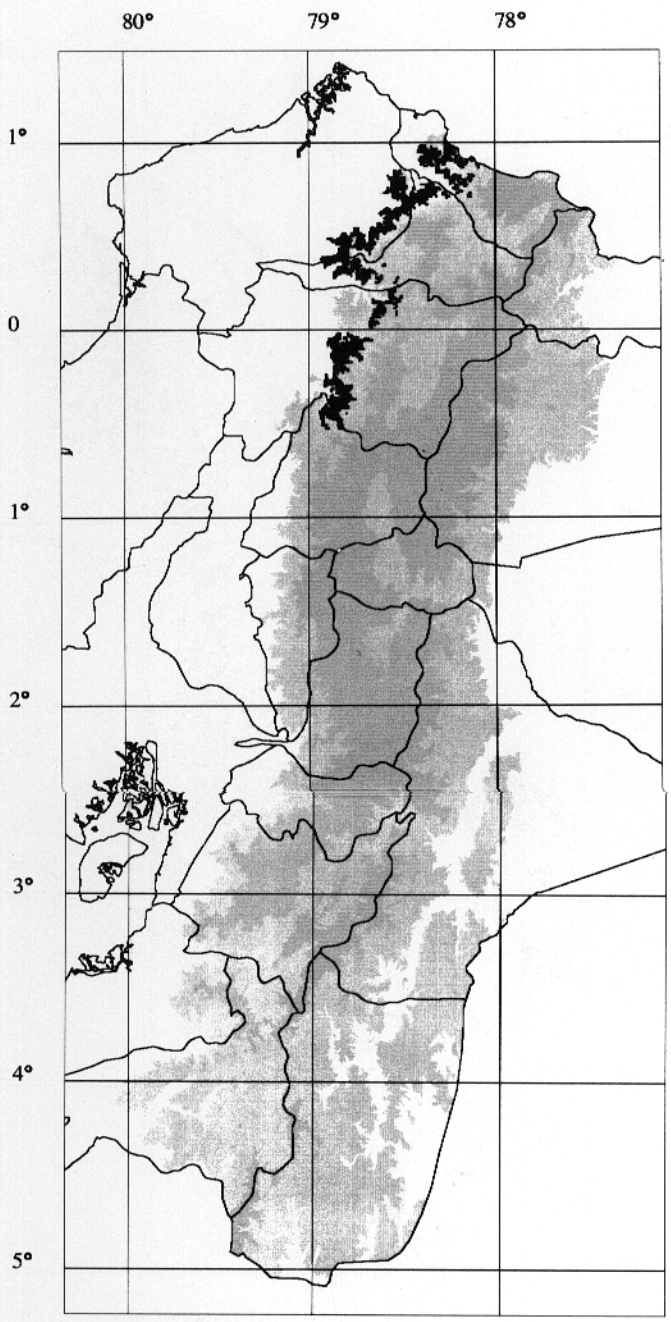
NW: Not found

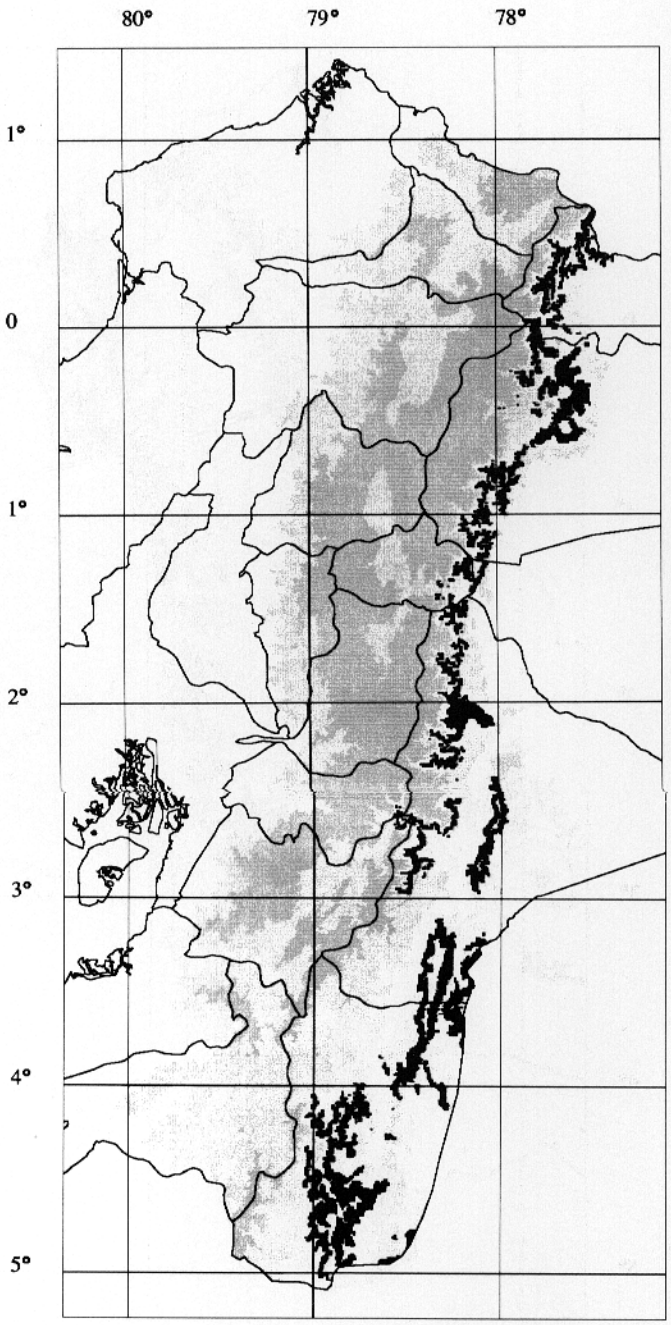
NE: 1300 –1950

S: 1300 –1950

Habitat: HPF

Total distribution: 31 cells





Colombian Screech-owl
Autillo Colombiano

Otus colombianus

Altitudinal range:

NW: 1300 –1850

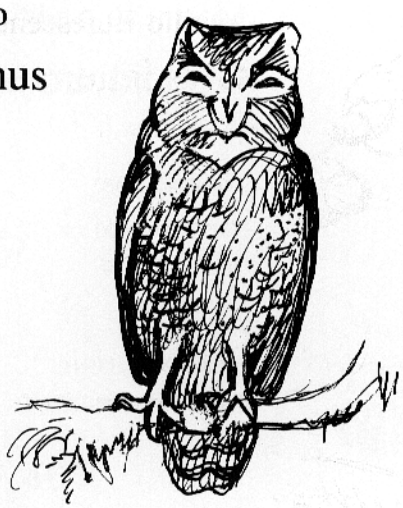
NE: Not found

S: Not found

Habitat: HPF

Total distribution: 8 cells

Near –threatened



Cinnamon Screech-owl
Autillo Canelo

Otus petersoni

Altitudinal range:

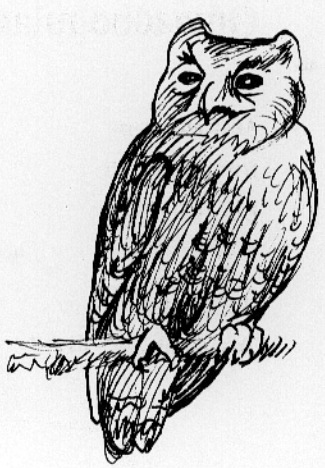
NW: Not found

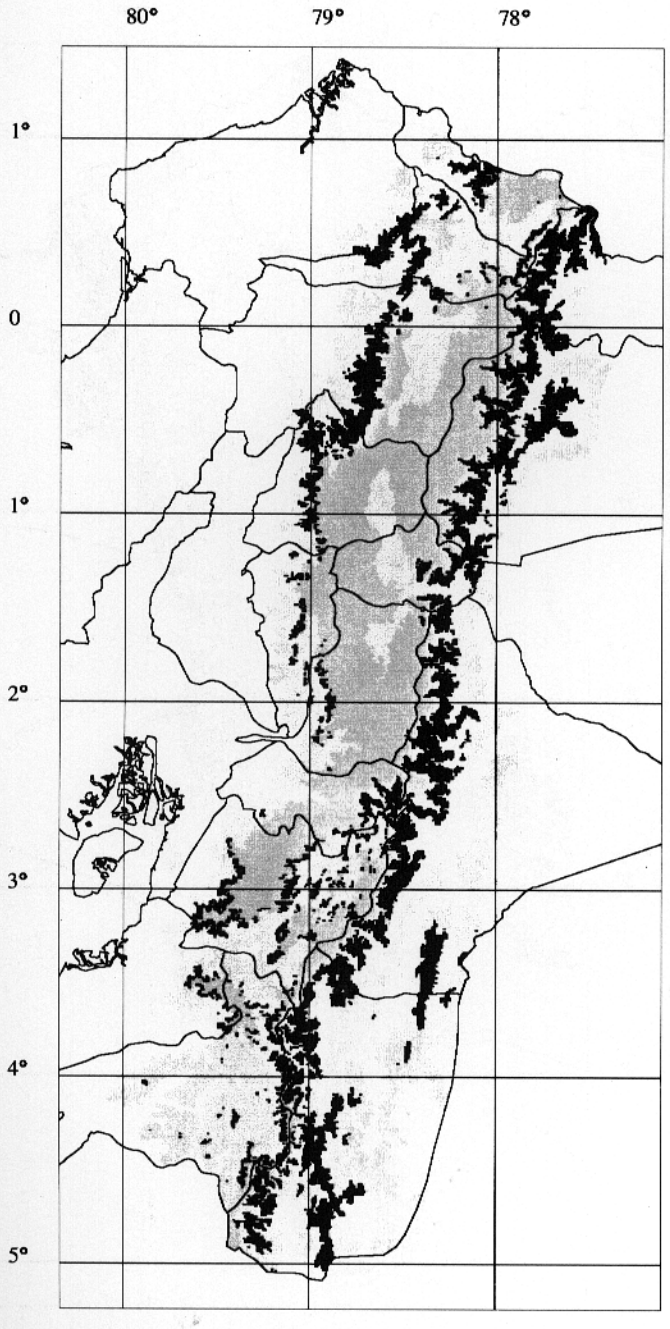
NE: 1700 –2225

S: 1700 –2300

Habitat: HPF

Total distribution: 7 cells





White-throated Screech-owl
Autillo Goliblanco

Otus albogularis

Altitudinal range:

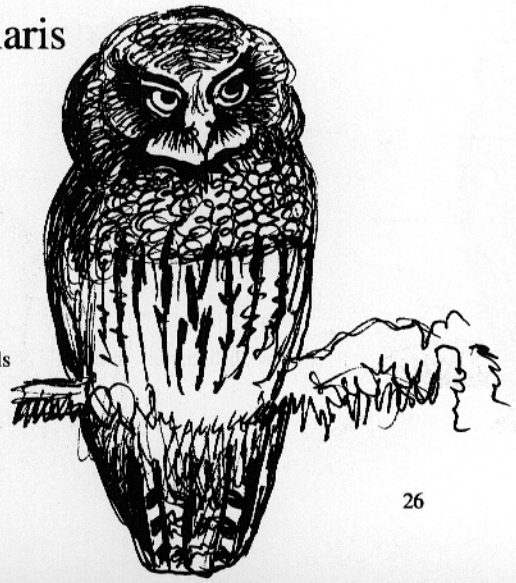
NW: 2100 –3300

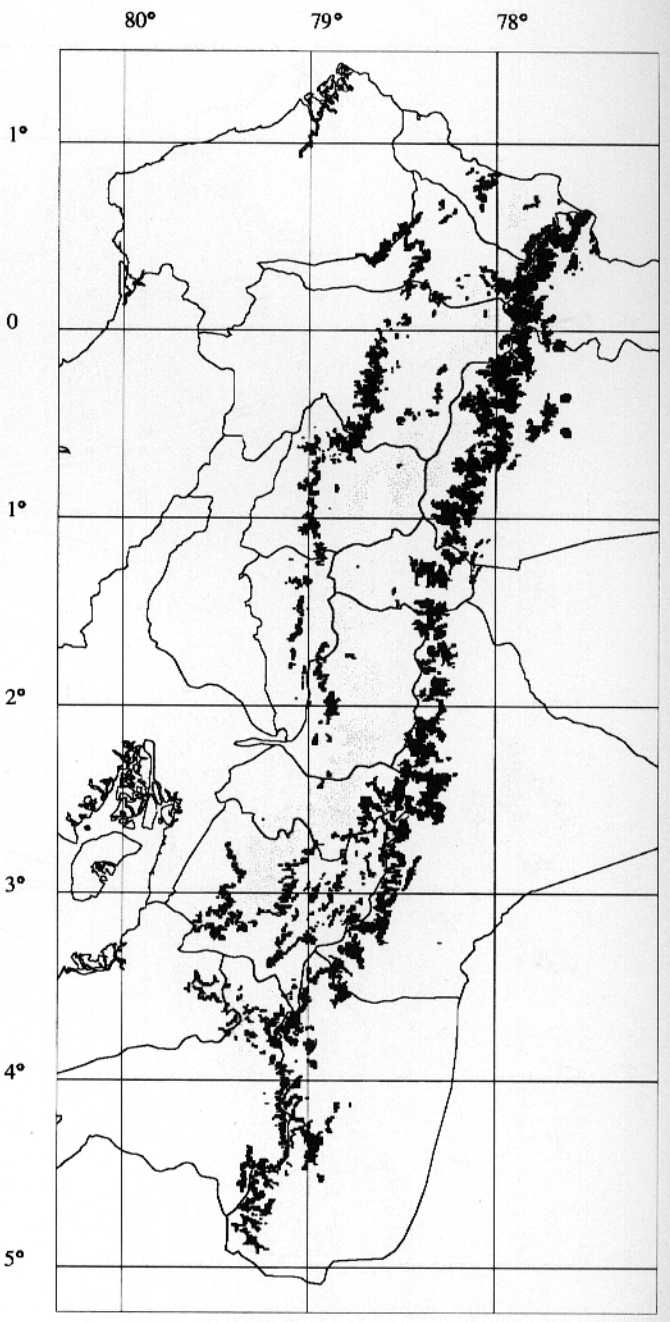
NE: 2100 –3300

S: 2100 –3000

Habitat: HPF HSF HS

Total distribution: 61 cells





Andean Pygmy-owl
Mochuelo Andino

Glaucidium jardinii

Altitudinal range:

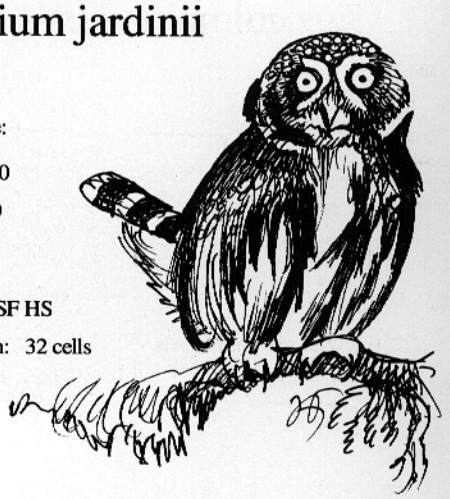
NW: 2500 –3800

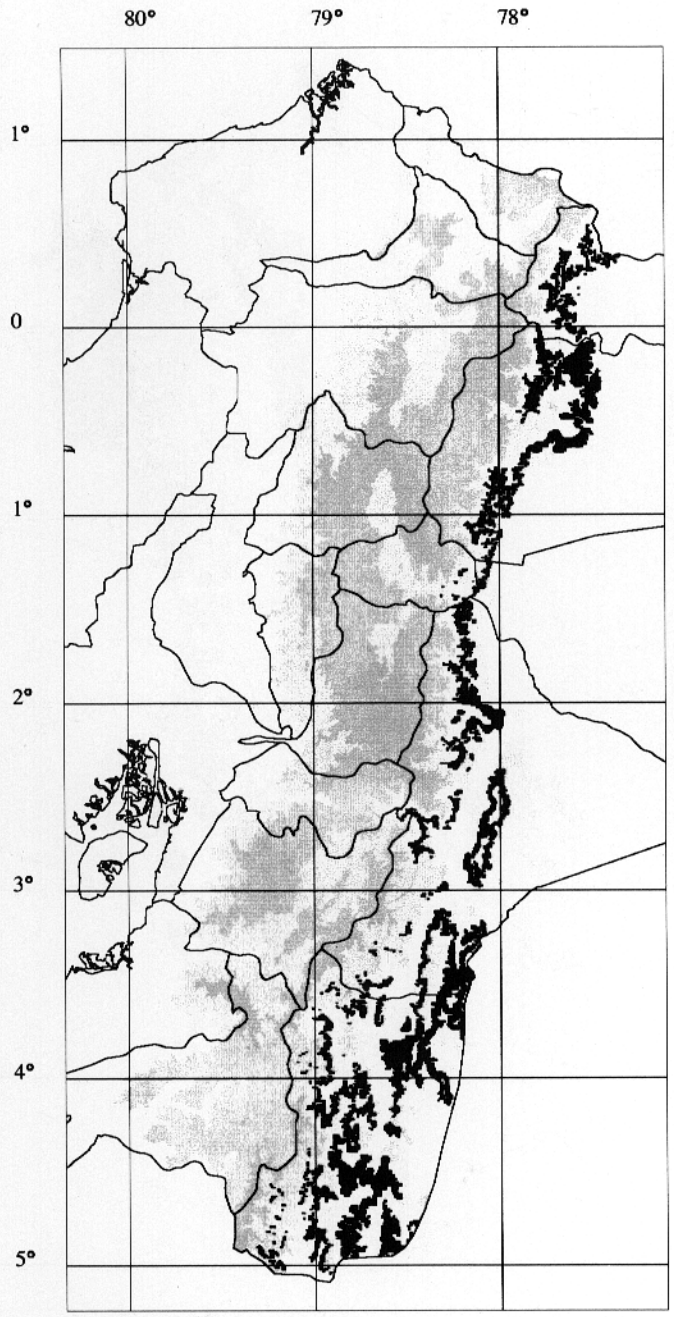
NE: 2500 –3800

S: 2500 –3200

Habitat: HPF HSF HS

Total distribution: 32 cells





Subtropical Pygmy-owl
Mochuelo Subtropical

Glaucidium parkeri

Altitudinal range:

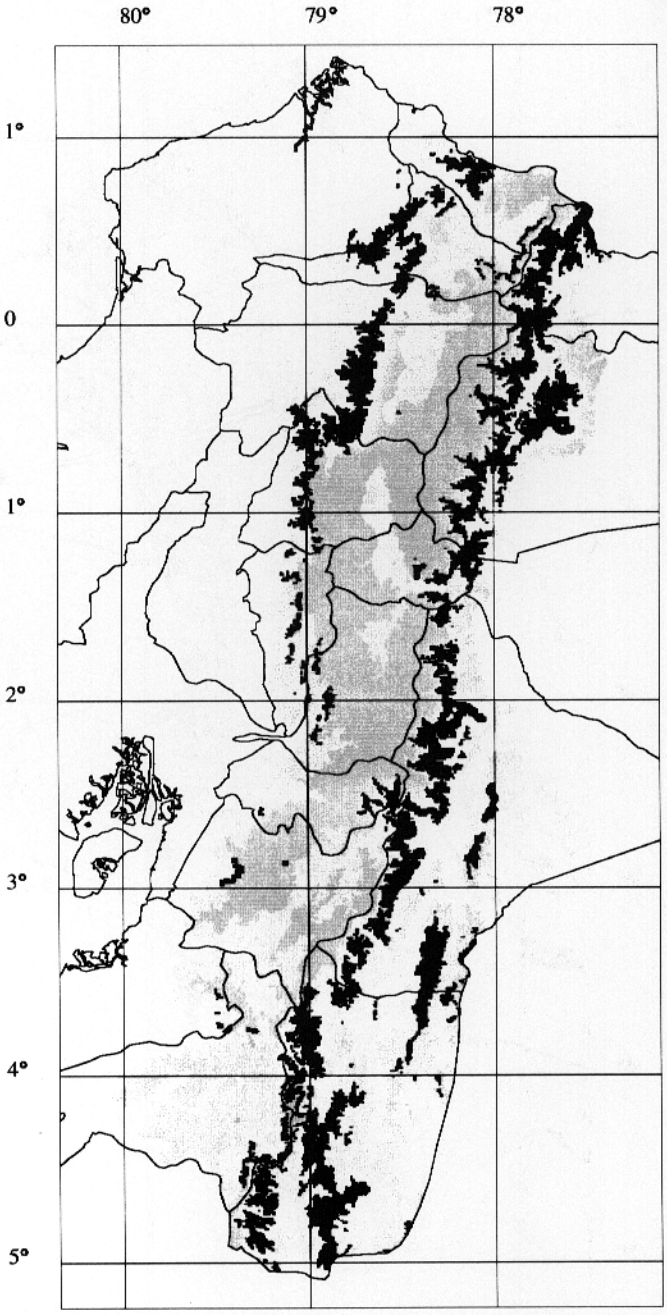
NW: Not found

NE: 1450 –1975

S: 1450 –1975

Habitat: HPF

Total distribution: 7 cells



Rufous-banded Owl
Lechuza Rufibandeada

Ciccaba albitarsus

Altitudinal range:

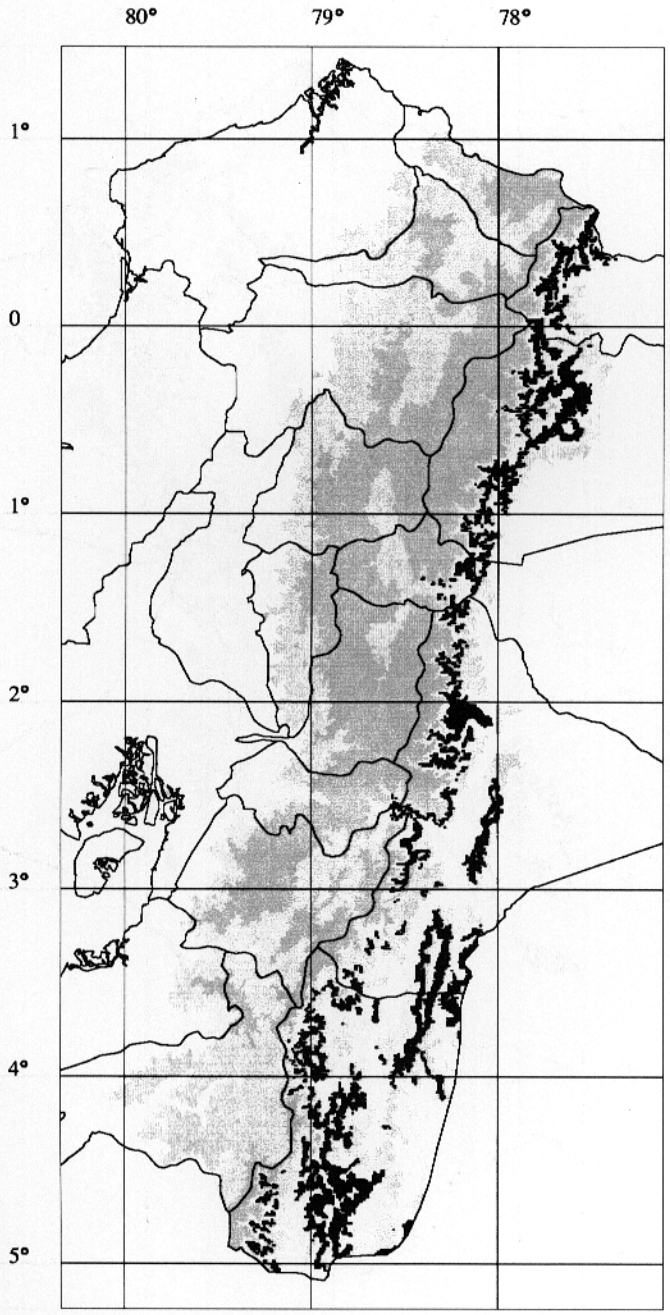
NW: 2000 –3500

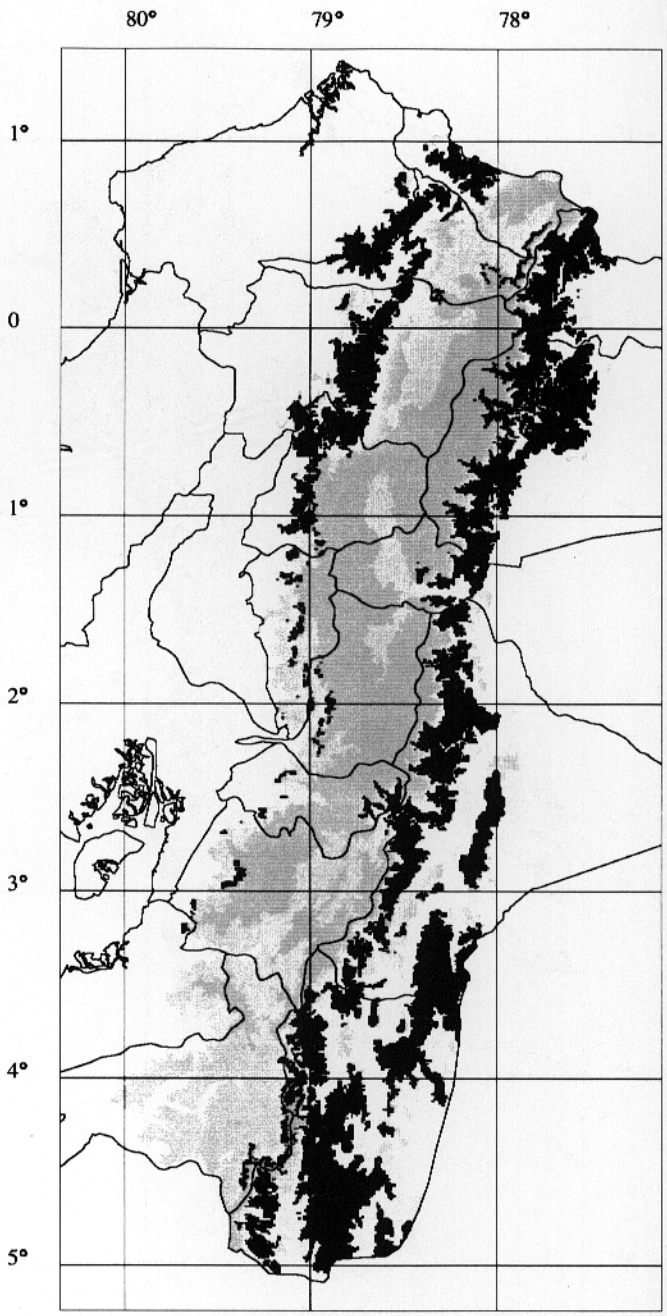
NE: 2000 –3200

S: 2000 –3100

Habitat: HPF HSF

Total distribution: 44 cells





Andean Potoo
Nictibio Andino

Nyctibius maculosus

Altitudinal range:

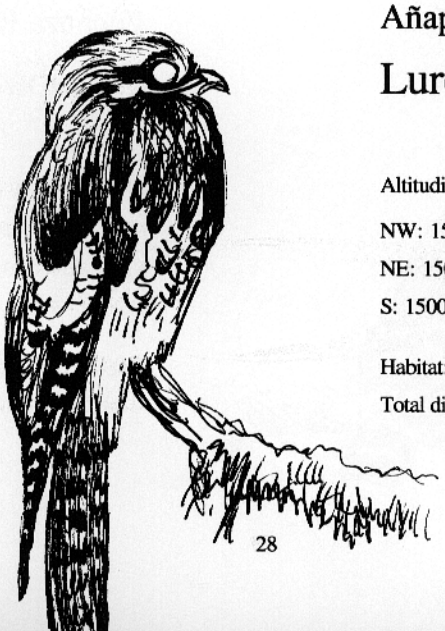
NW: Not found

NE: 1800 –2300

S: 1800 –2300

Habitat: HPF

Total distribution: 12 cells



Rufous-bellied Nighthawk
Añapero Ventrirrufo

Lurocalis rufiventris

Altitudinal range:

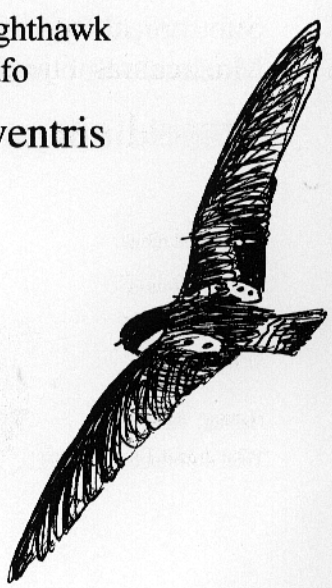
NW: 1500 –3200

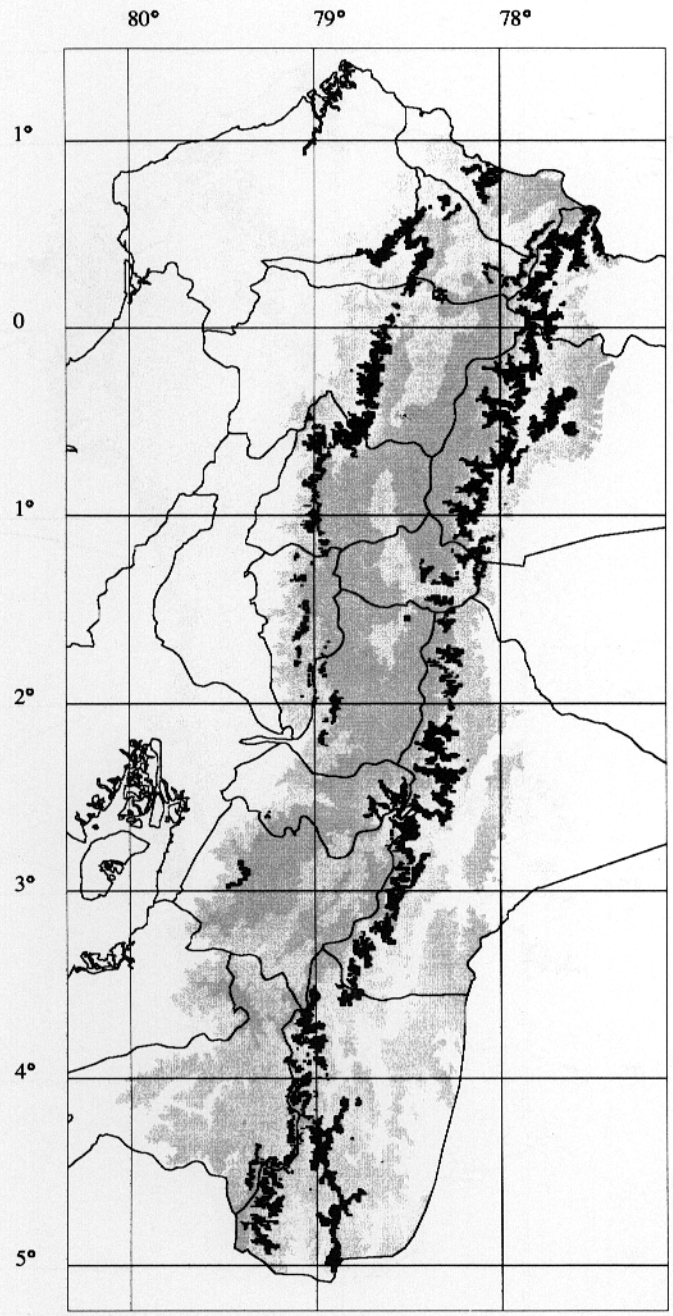
NE: 1500 –3200

S: 1500 –3000

Habitat: HPF HSF

Total distribution: 47 cells





Swallow-tailed Nightjar
Chotacabras Tijereta

Uropsalis segmentata

Altitudinal range:

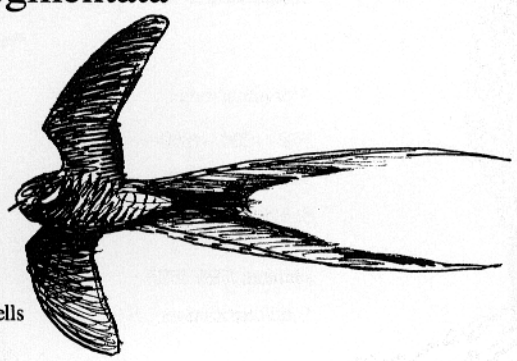
NW: 2300 –3350

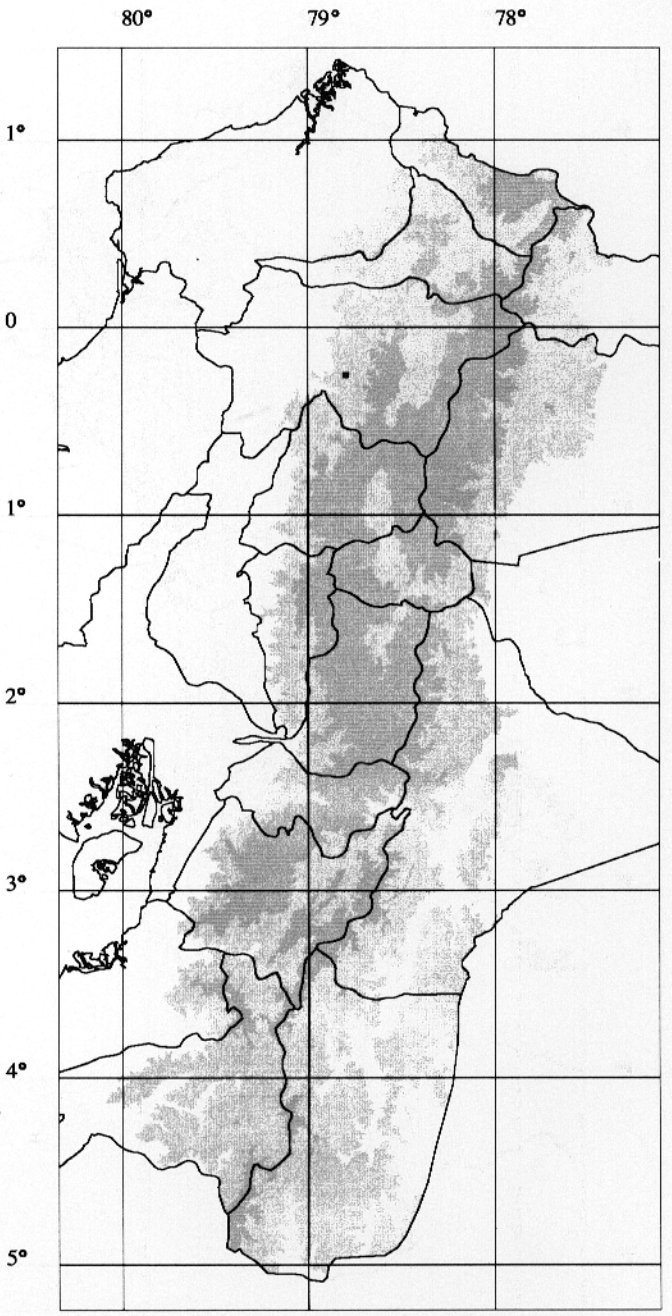
NE: 2300 –3350

S: 2300 –3100

Habitat: HPF HSF

Total distribution: 35 cells





Spot-fronted Swift
Vencejo Frentipunteado

Cypseloides cherriei

Altitudinal range:

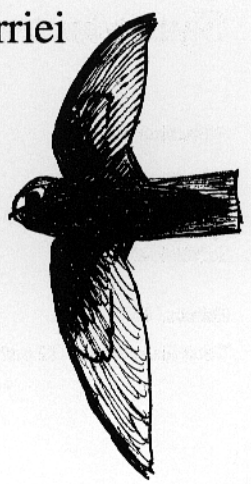
NW: Limited: 1900

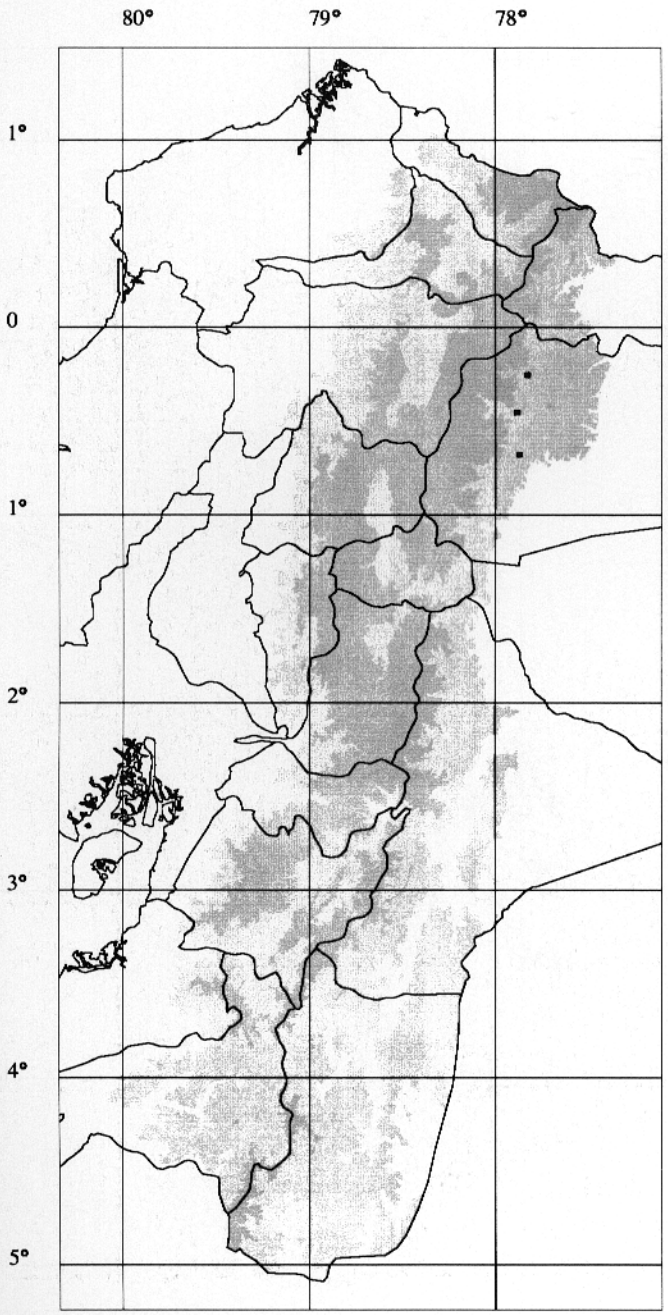
NE: Not found

S: Not found

Habitat: HPF

Total distribution: 5 cells





Lazuline Sabrewing
Alasable Azulino

Campylopterus falcatus

Altitudinal range:

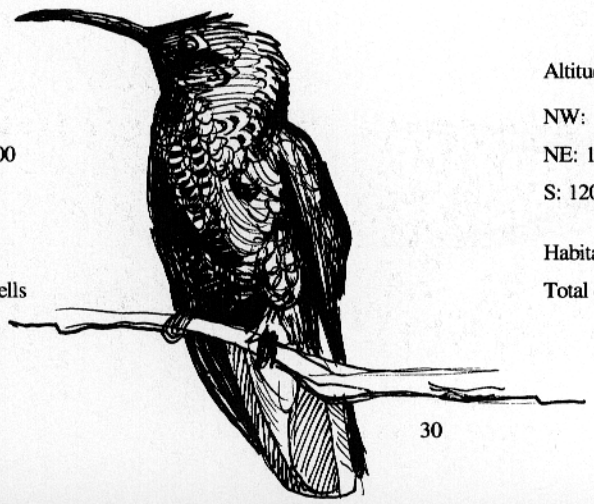
NW: Not found

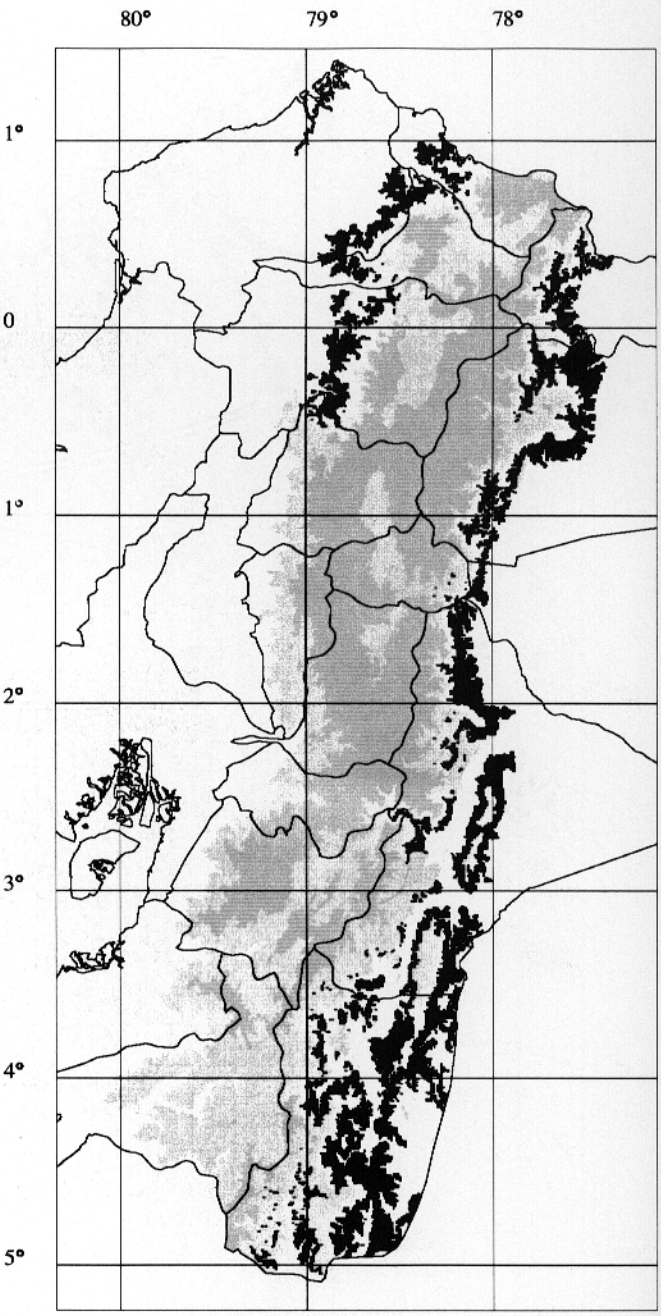
NE: Limited: 1500 –2500

S: Not found

Habitat: HPF

Total distribution: 28 cells





Brown Violetear
Orejivioleta Parda

Colibri delphinae

Altitudinal range:

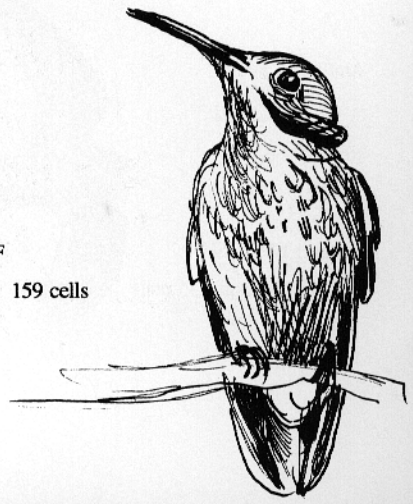
NW: 1200 –1800

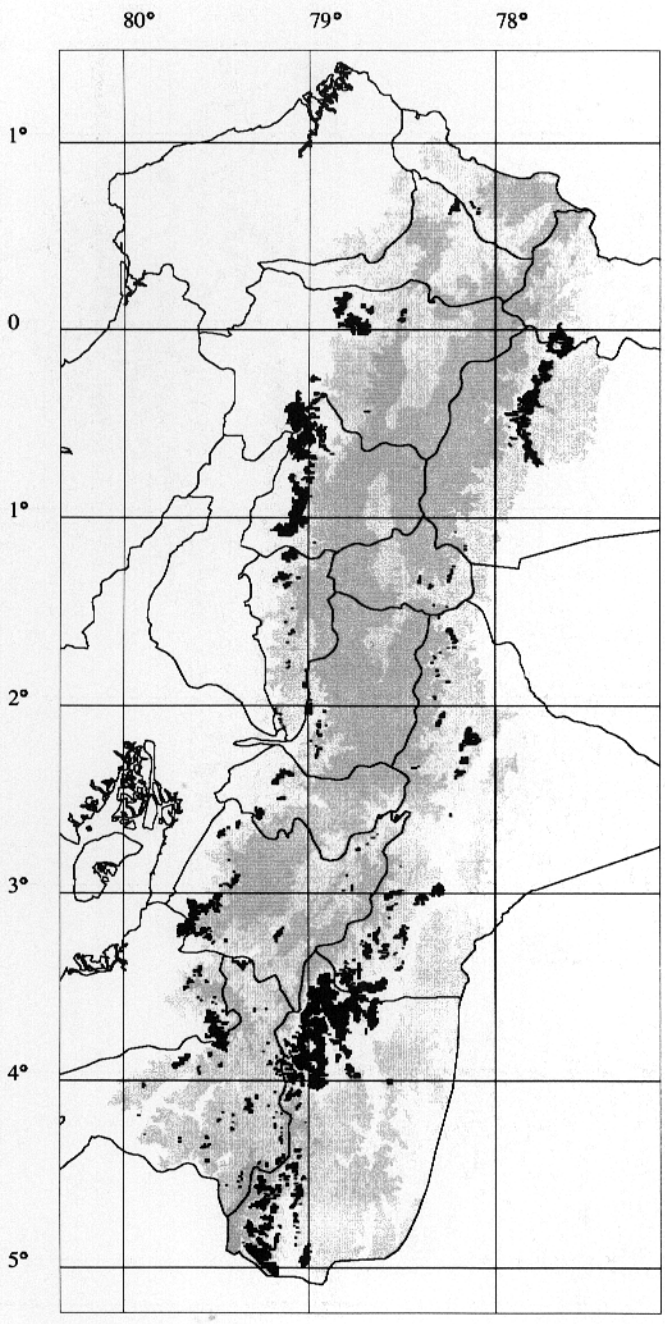
NE: 1200 –1800

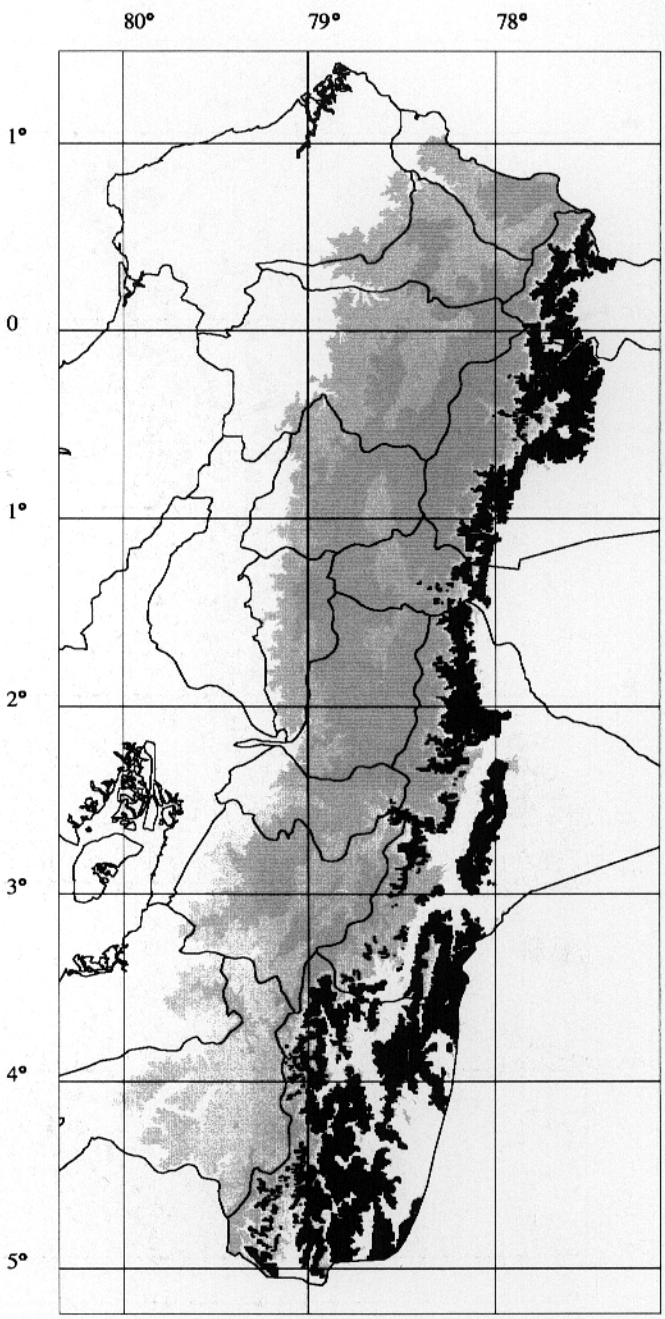
S: 1200 –1800

Habitat: HPF HSF

Total distribution: 159 cells







Green Violetear
Orejivioleta Verde

Colibri thalassinus

Altitudinal range:

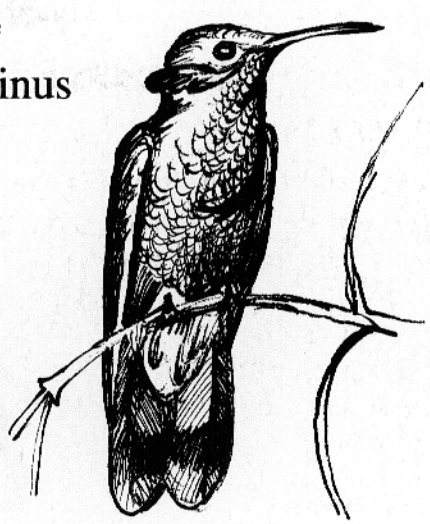
NW: 1200 –2500

NE: 1200 –2500

S: 1200 –2500

Habitat: HSF HS

Total distribution: 102 cells



Rufous-vented Whitetip
Puntablanca Analirrojiza

Urosticte ruficrissa

Altitudinal range:

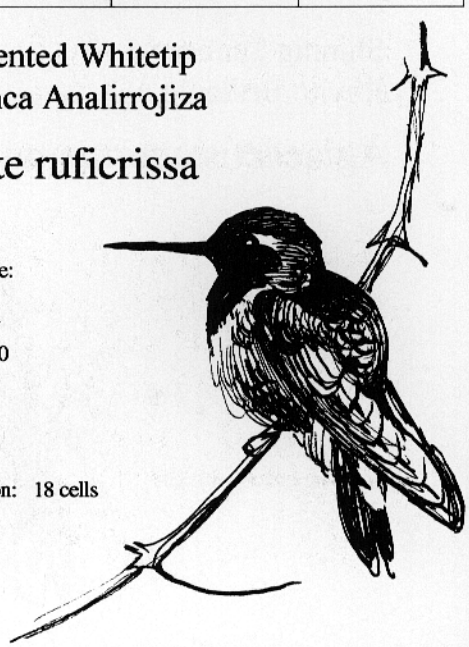
NW: Not found

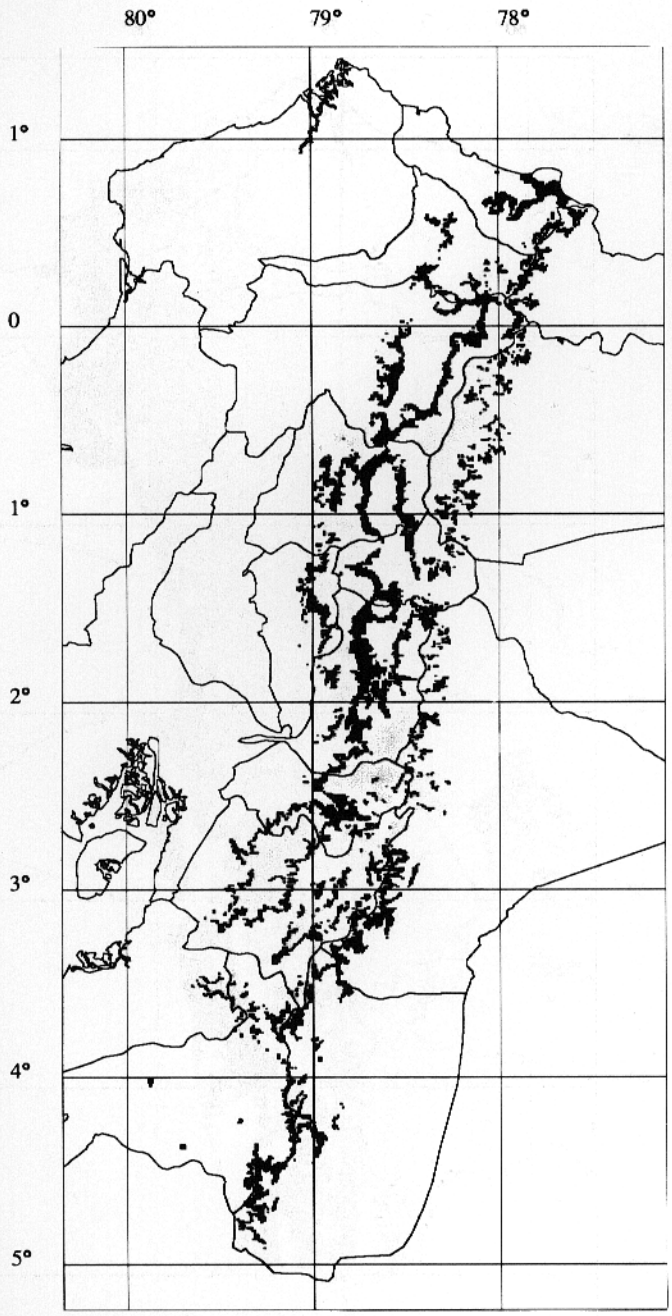
NE: 1300 –2300

S: 1300 –2300

Habitat: HPF

Total distribution: 18 cells





Shining Sunbeam
Rayito Brillante

Aglaeactis cupripennis

Altitudinal range:

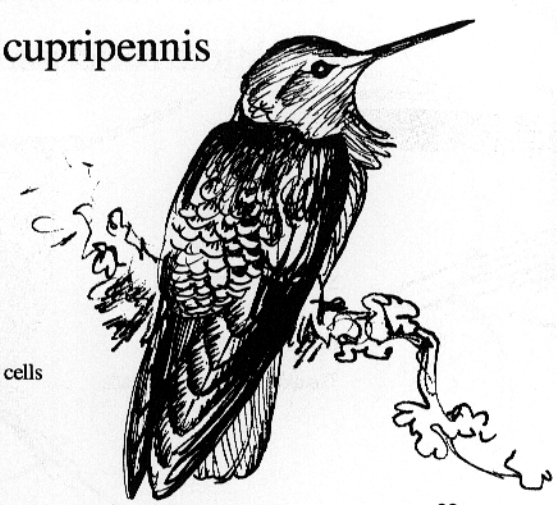
NW: 3100 –3600

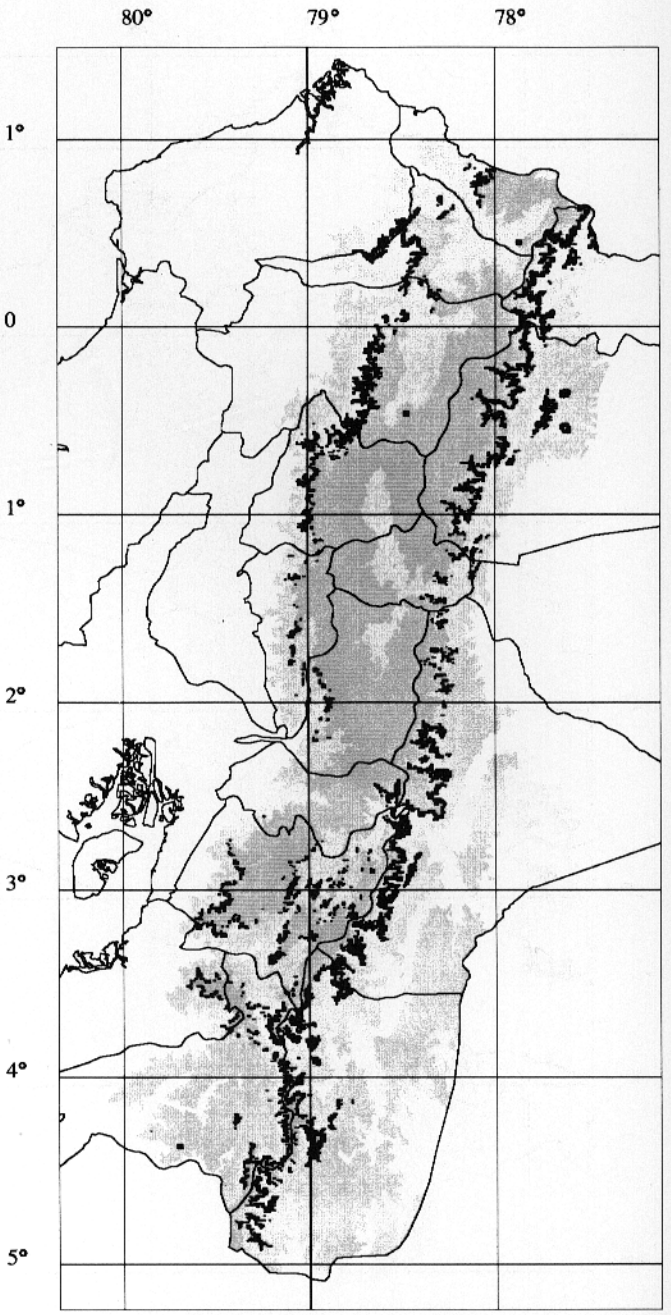
NE: 3100 –3600

S: 2800 –3500

Habitat: HS DA

Total distribution: 46 cells





Mountain Velvetbreast
Colibrí Terciopelo

Lafresnaya lafresnayi

Altitudinal range:

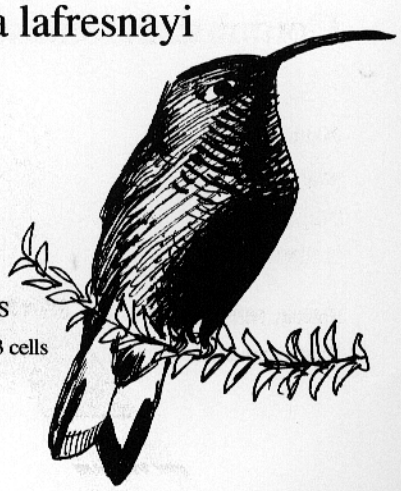
NW: 2500 –3100

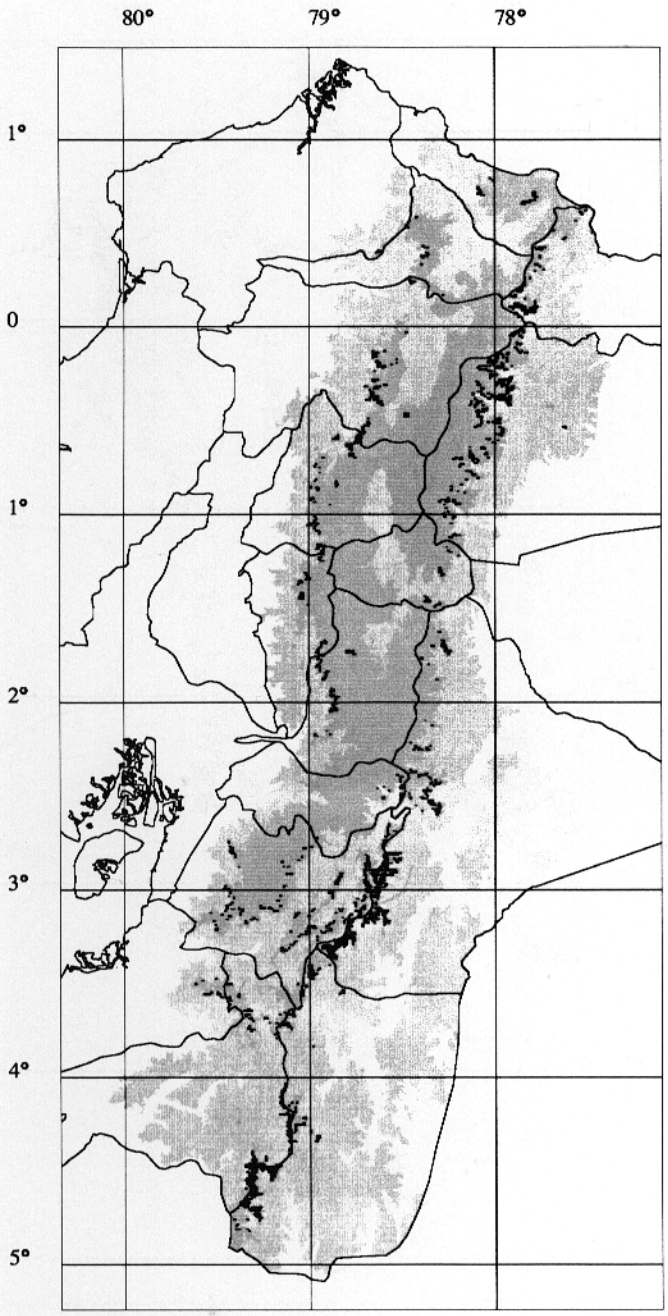
NE: 2500 –3200

S: 2500 –3000

Habitat: HPF HSF HS

Total distribution: 43 cells





Great Sapphirewing
Alazafiro Grande

Pterophanes cyanopterus

Altitudinal range:

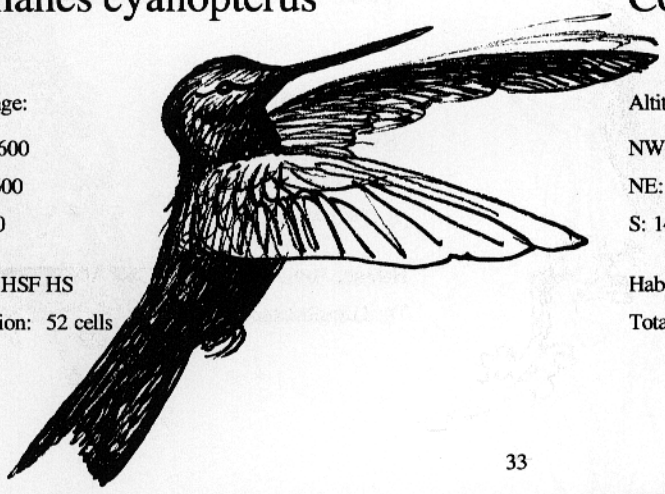
NW: 3300 –3600

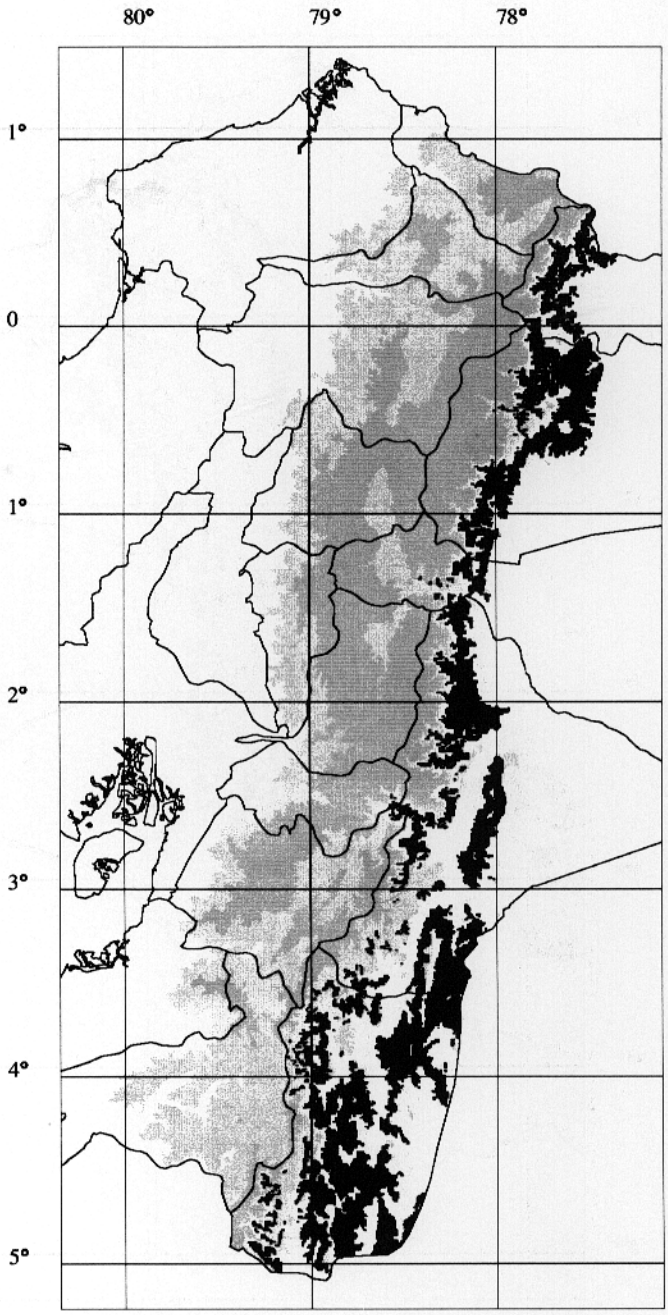
NE: 3300 –3600

S: 3100 –3600

Habitat: HPF HSF HS

Total distribution: 52 cells





Bronzy Inca
Inca Bronceado

Coeligena coeligena

Altitudinal range:

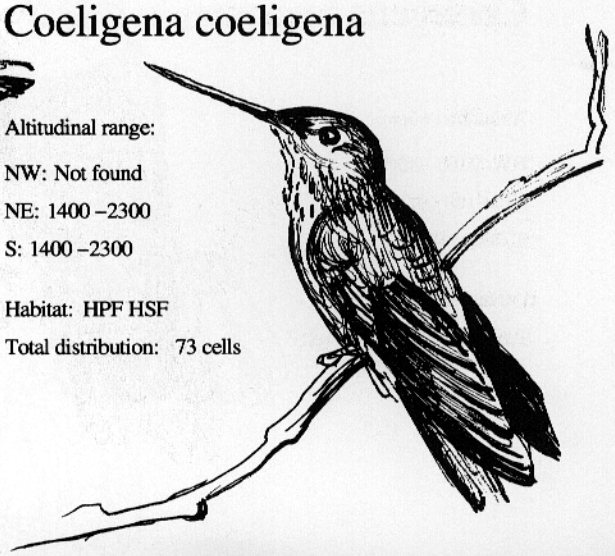
NW: Not found

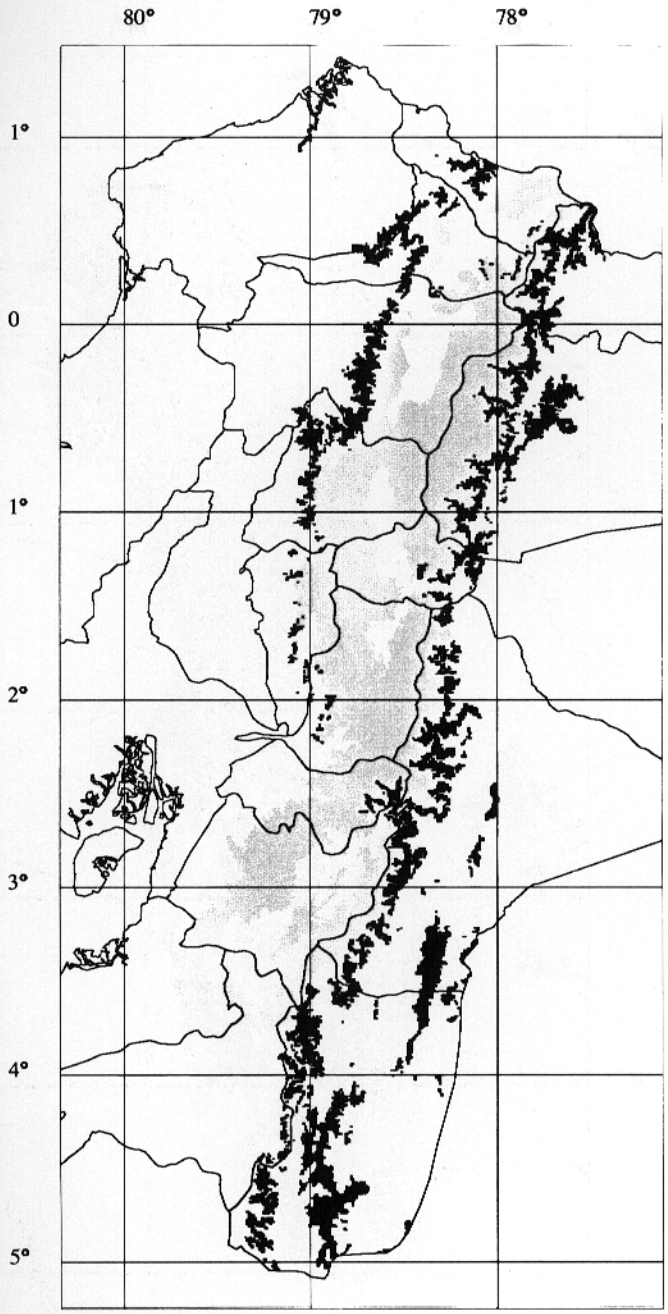
NE: 1400 –2300

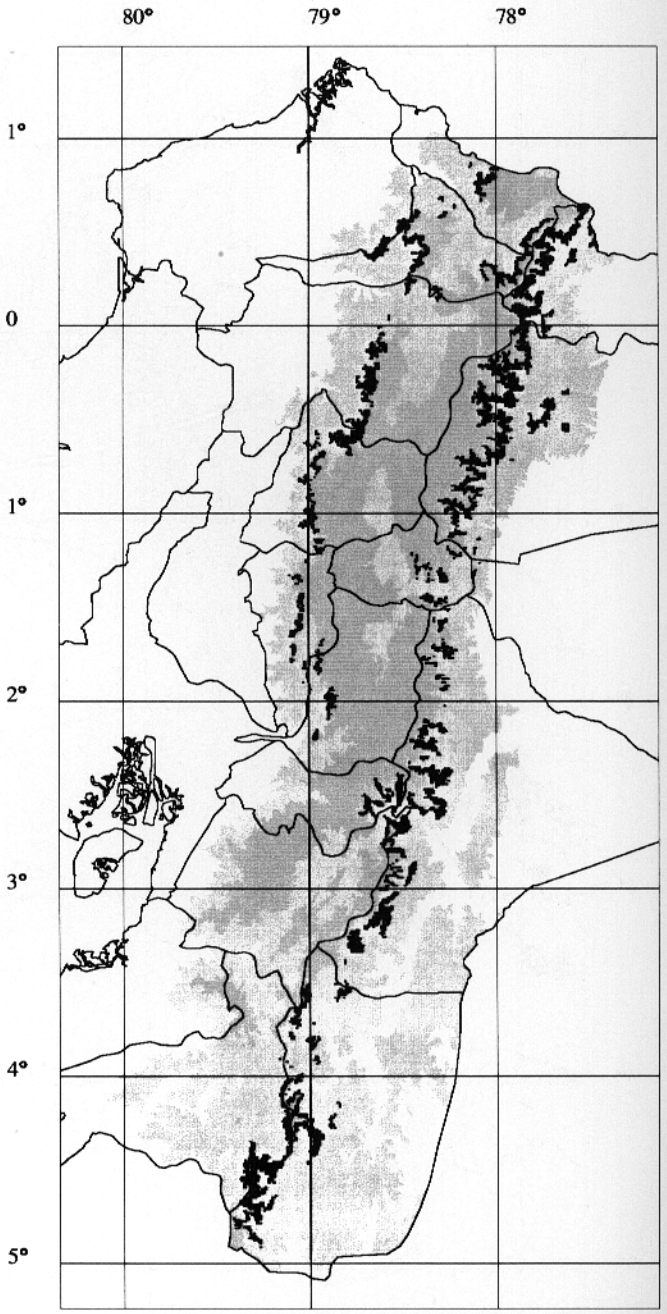
S: 1400 –2300

Habitat: HPF HSF

Total distribution: 73 cells







Collared Inca
Inca Collarejo

Coeligena torquata

Altitudinal range:

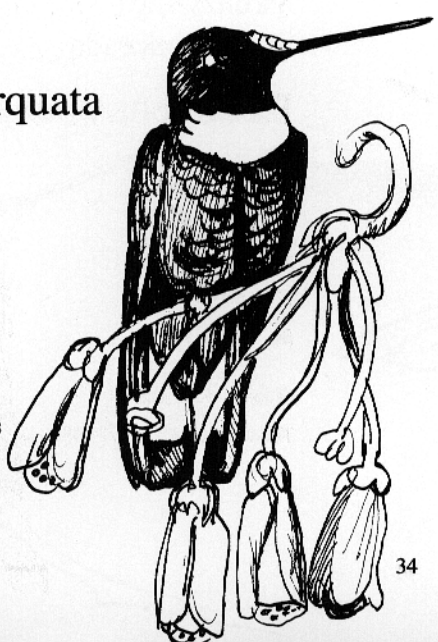
NW: 2100 –3000

NE: 2100 –3000

S: 2000 –2800

Habitat: HPF HSF

Total distribution: 66 cells



Buff-winged Starfrontlet
Inca Alihabano

Coeligena lutetiae

Altitudinal range:

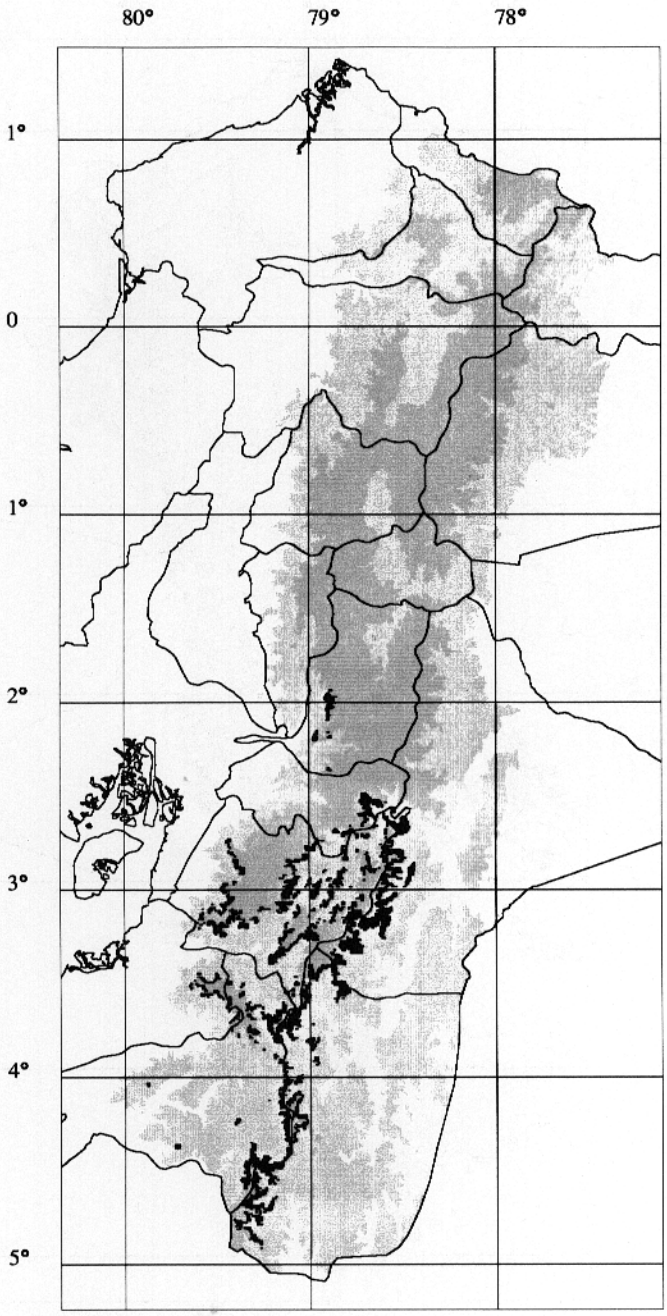
NW: 2700 –3500

NE: 2700 –3500

S: 2700 –3500

Habitat: HPF HSF

Total distribution: 20 cells



Rainbow Starfrontlet
Inca Arcoiris

Coeligena iris

Altitudinal range:

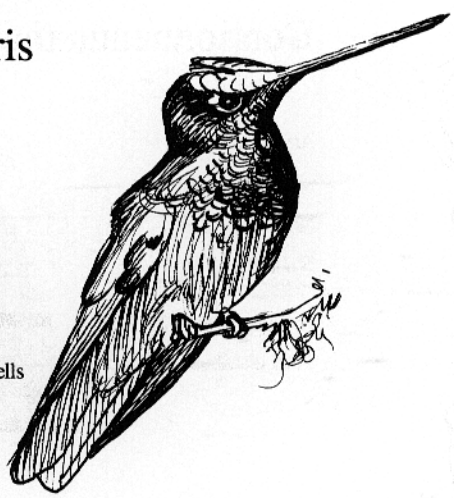
NW: 2700 –3350

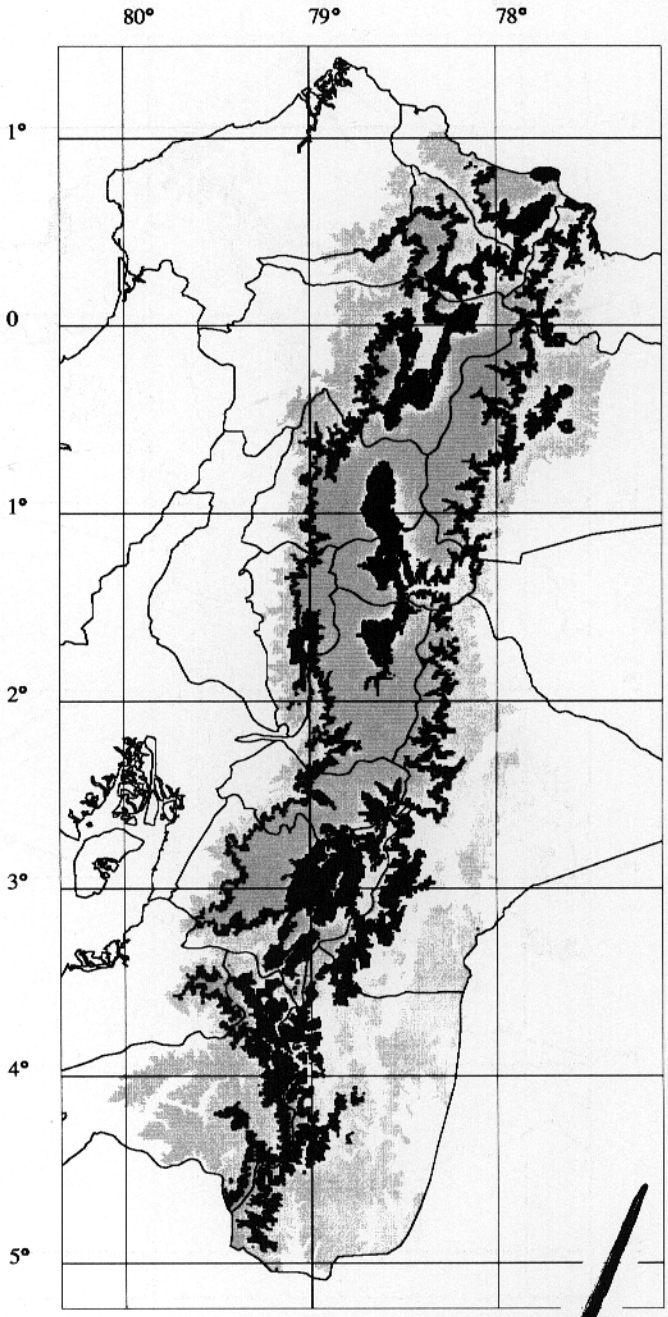
NE: 2700 –3300

S: 2000 –3300

Habitat: HPF HSF HS

Total distribution: 15 cells





Sword-billed Hummingbird
Colibrí Pico Espada

Ensifera ensifera

Altitudinal range:

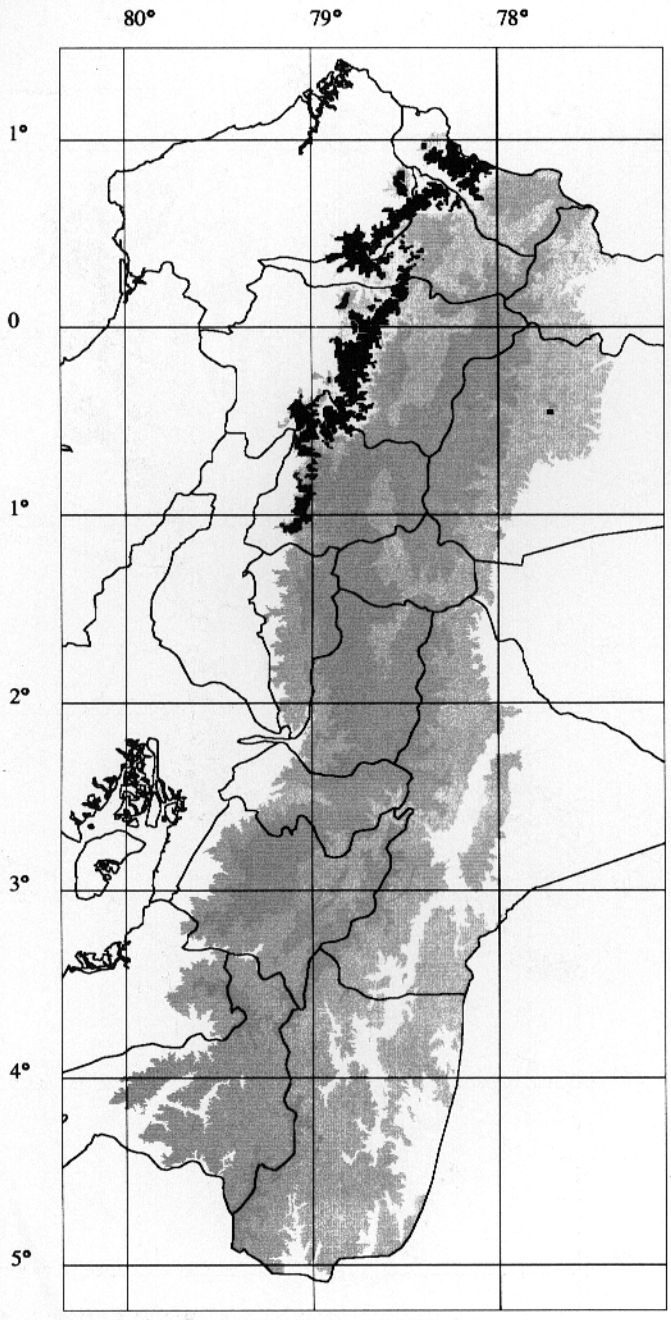
NW: 2500 –3100

NE: 2300 –3100

S: 2150 –3050

Habitat: HPF HSF HS DA

Total distribution: 57 cells



Buff-tailed Coronet
Coronita Colihabana

Boissonneaua flavescens

Altitudinal range:

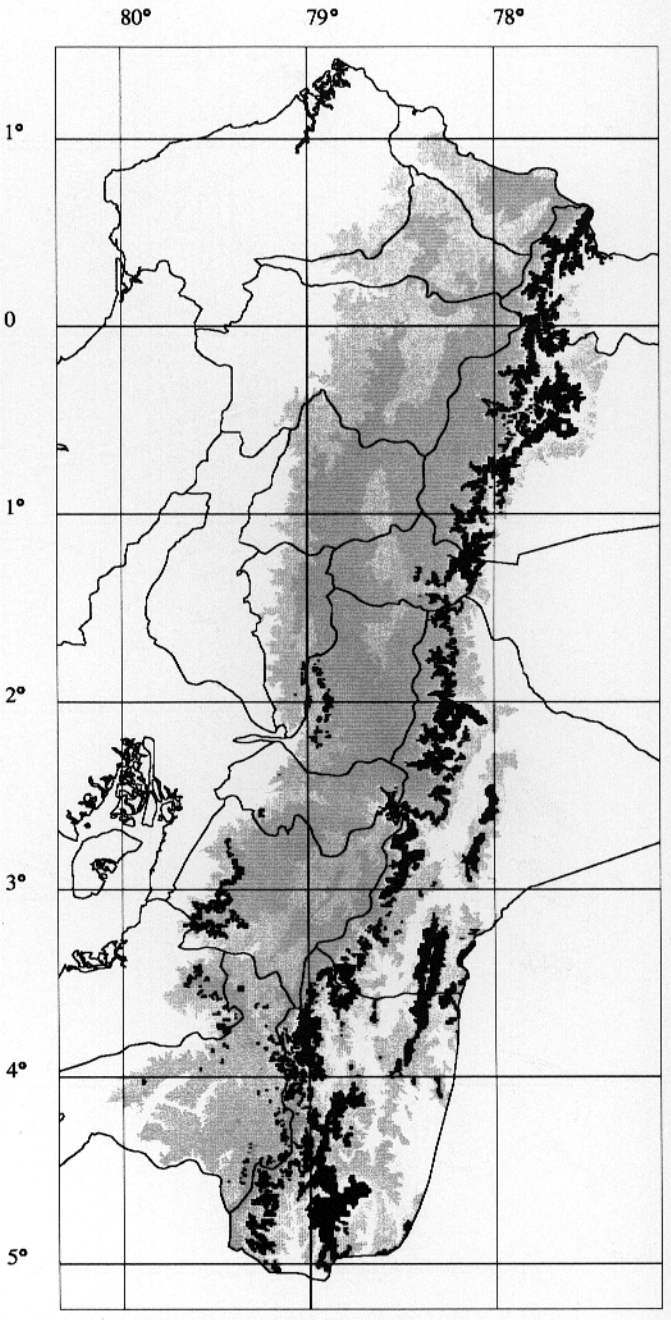
NW: 1500 –2400

NE: Limited: 2500 –2900

S: Not found

Habitat: HPF

Total distribution: 28 cells



Chestnut-breasted Coronet
Coronita Pechicastaña

Boissonneaua matthewsii

Altitudinal range:

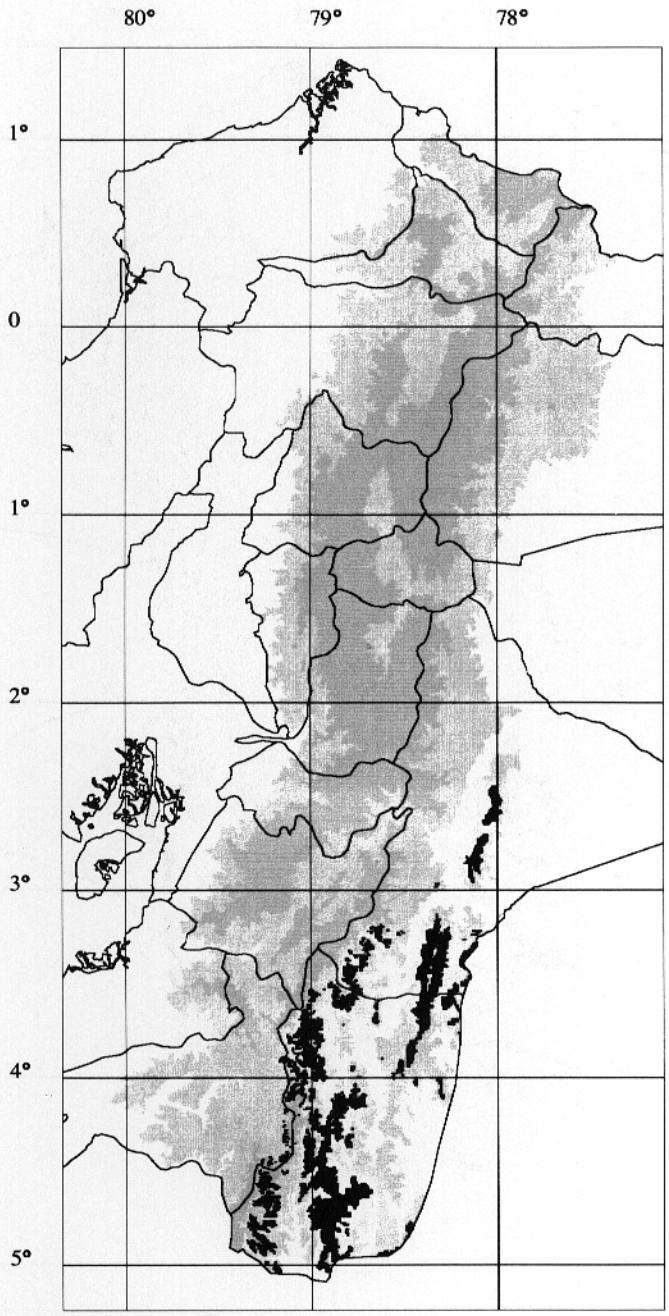
NW: 1900 –3250

NE: 1900 –2700

S: 1900 –2700

Habitat: HPF HSF HS

Total distribution: 29 cells



Amethyst-throated Sunangel
Solángel Gorjiamatista

Heliangelus amethysticollis

Altitudinal range:

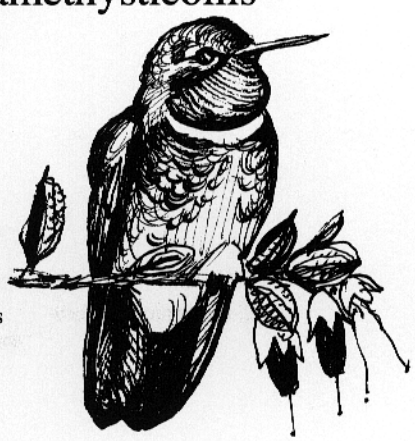
NW: Not found

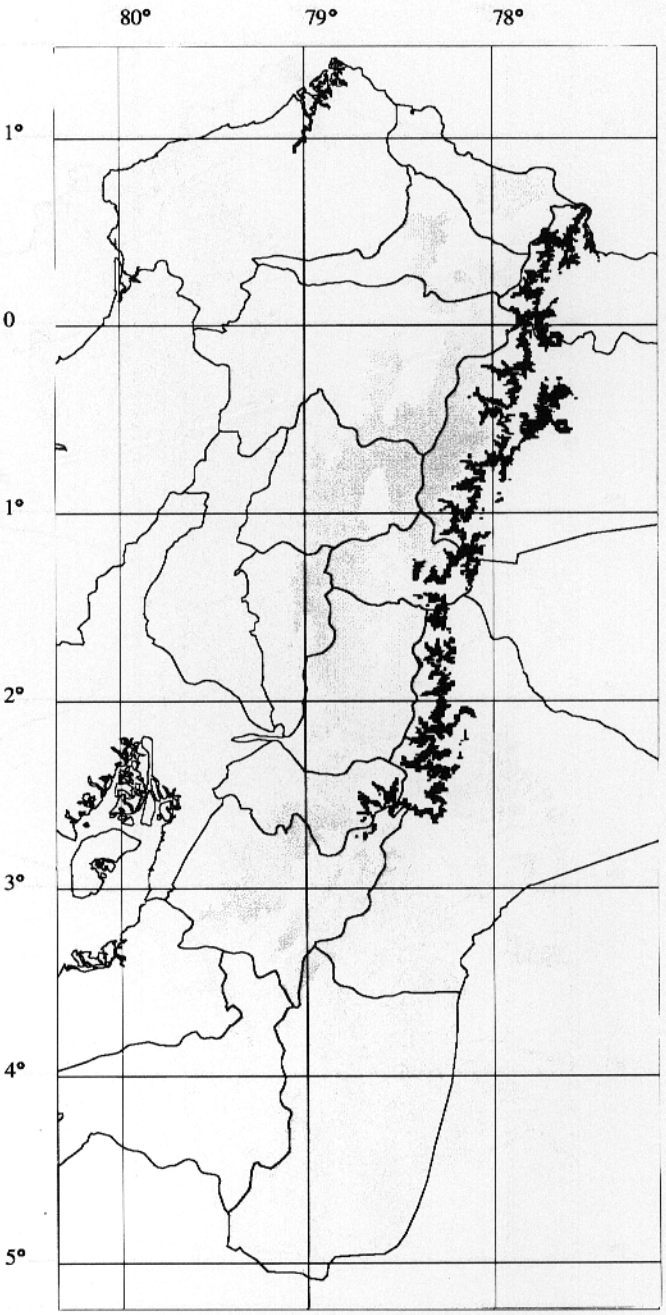
NE: 1900 –2400

S: 1900 –2700

Habitat: HPF

Total distribution: 33 cells





Tourmaline Sunangel
Solángel Turmalino

Heliangelus exortis

Altitudinal range:

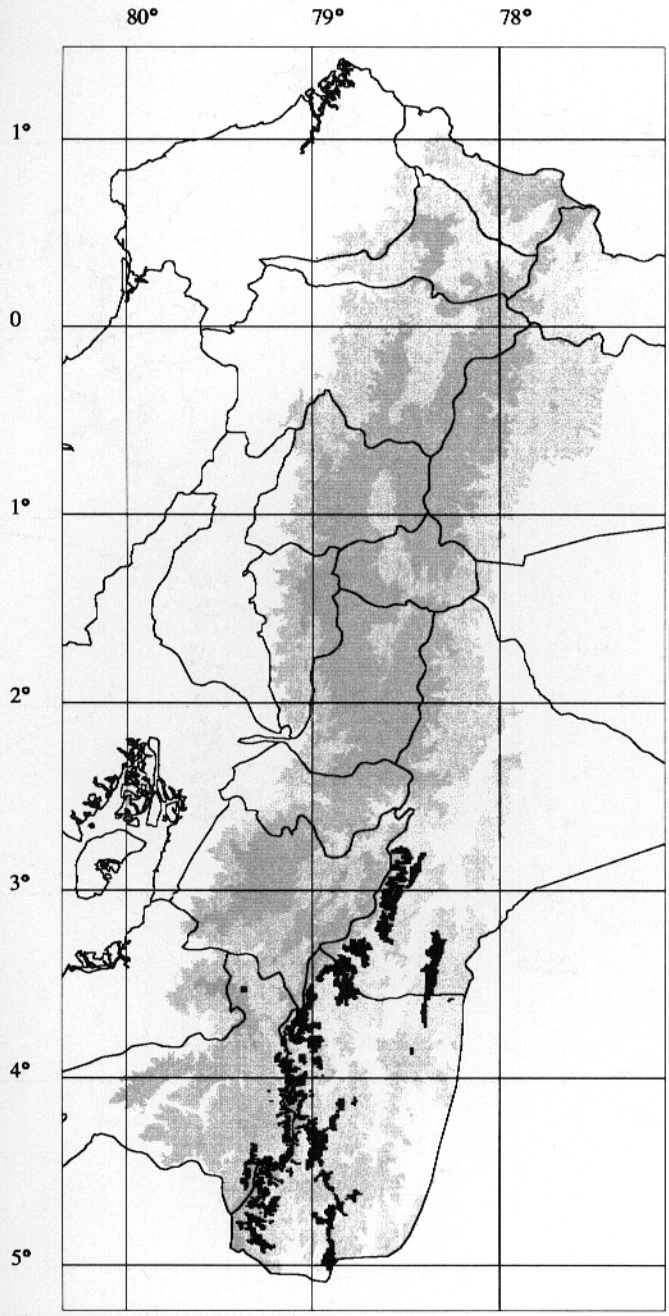
NW: Not found

NE: 2200 –3050

S: Not found

Habitat: HPF HSF HS

Total distribution: 21 cells



Flame-throated Sunangel
Solángel Gorjidorada

Heliangelus micraster

Altitudinal range:

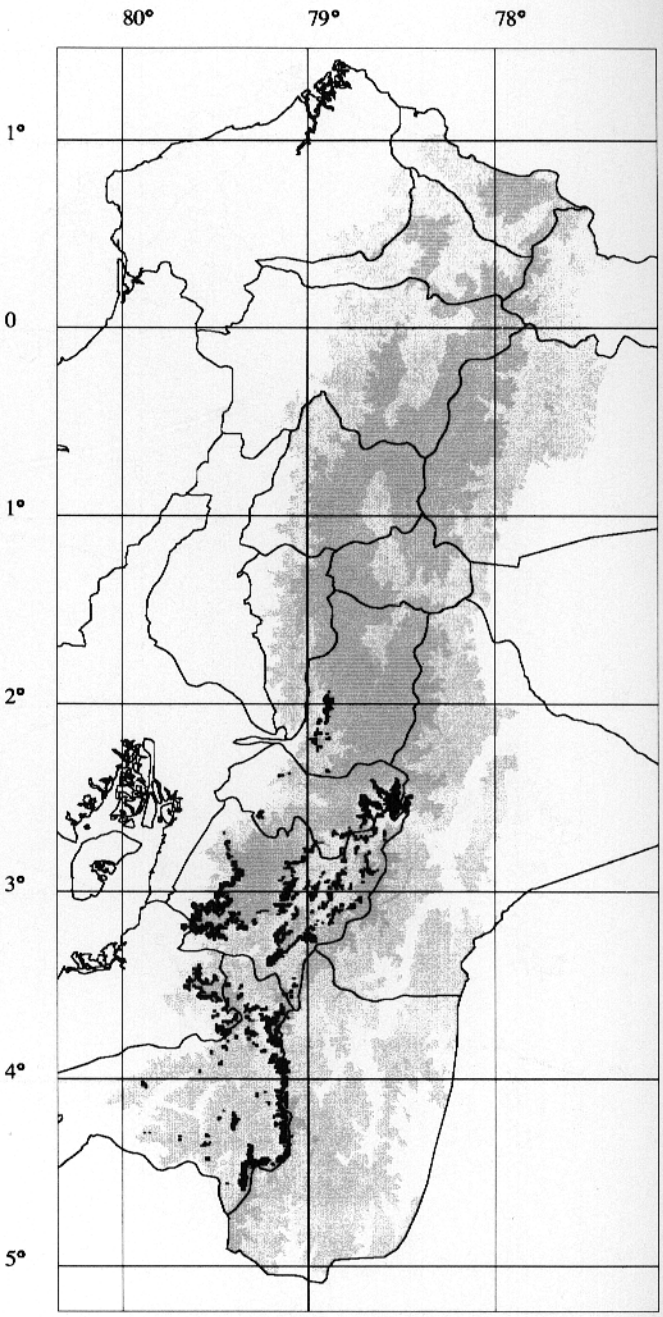
NW: Not found

NE: Not found

S: 2400 –3100

Habitat: HPF HSF HS

Total distribution: 8 cells



Purple-throated Sunangel
Solángel Gorjipúrpura

Heliangelus viola

Altitudinal range:

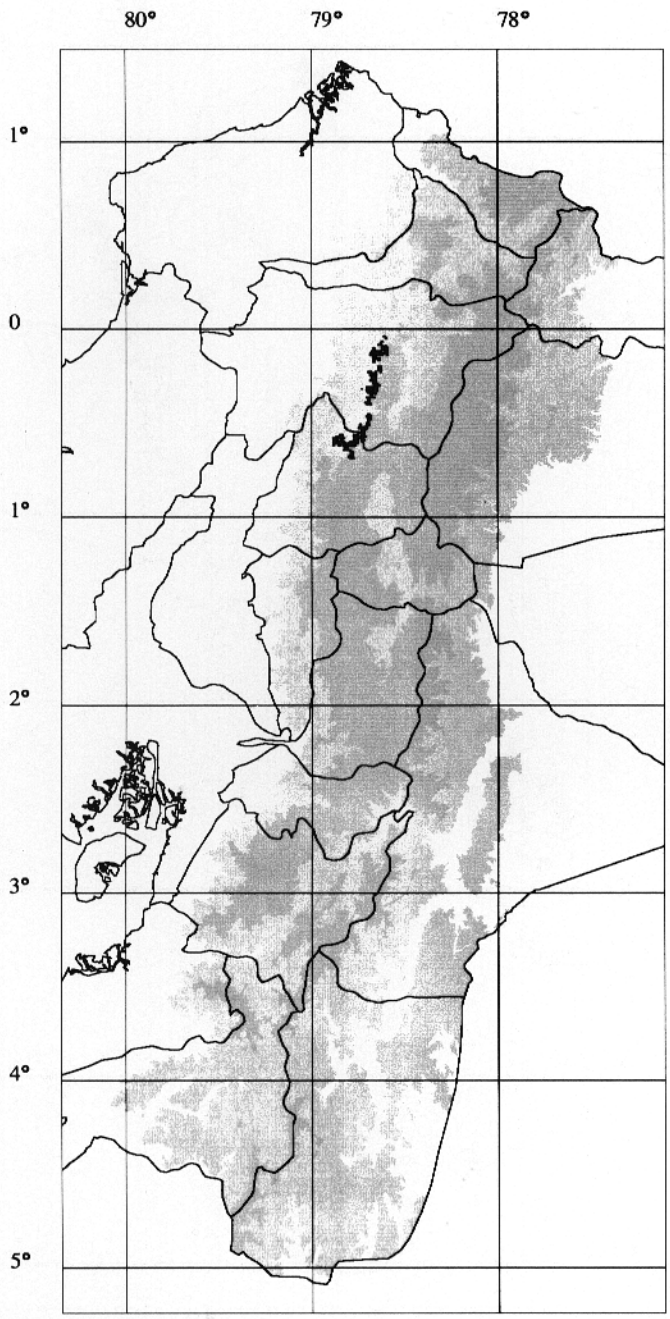
NW: 1800 –3300

NE: 1800 –3300

S: 1800 –3300

Habitat: HPF HSF HS

Total distribution: 17 cells



Black-breasted Puffleg
Zamarrito Pechinegro

Eriocnemis nigrivestis

Altitudinal range:

NW: 2850 –3400

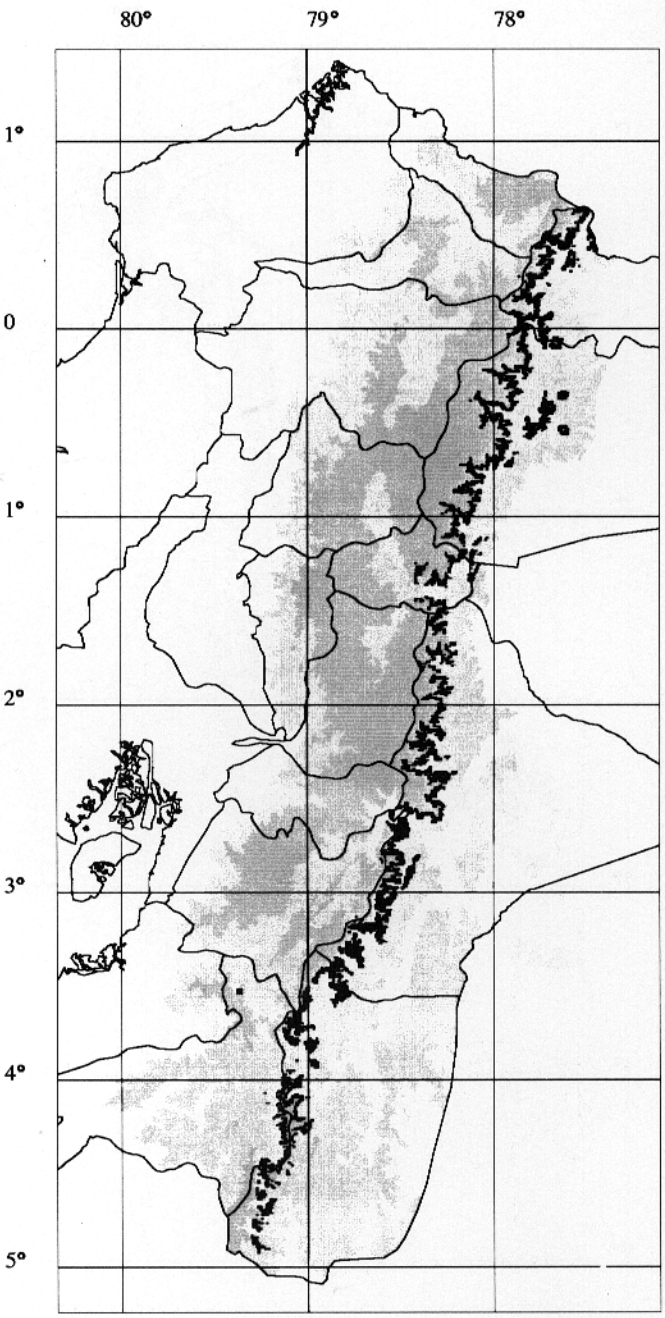
NE: Not found

S: Not found

Habitat: HPF

Total distribution: 2 cells

Critical



Glowing Puffleg
Zamarrito Luciente

Eriocnemis vestitus

Altitudinal range:

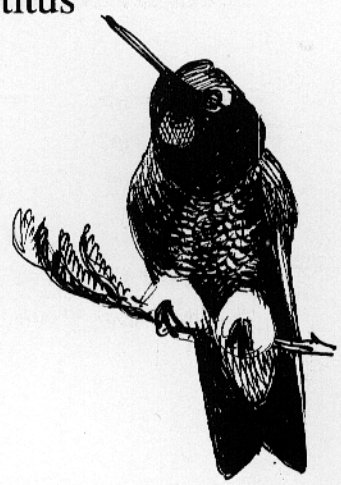
NW: Not found

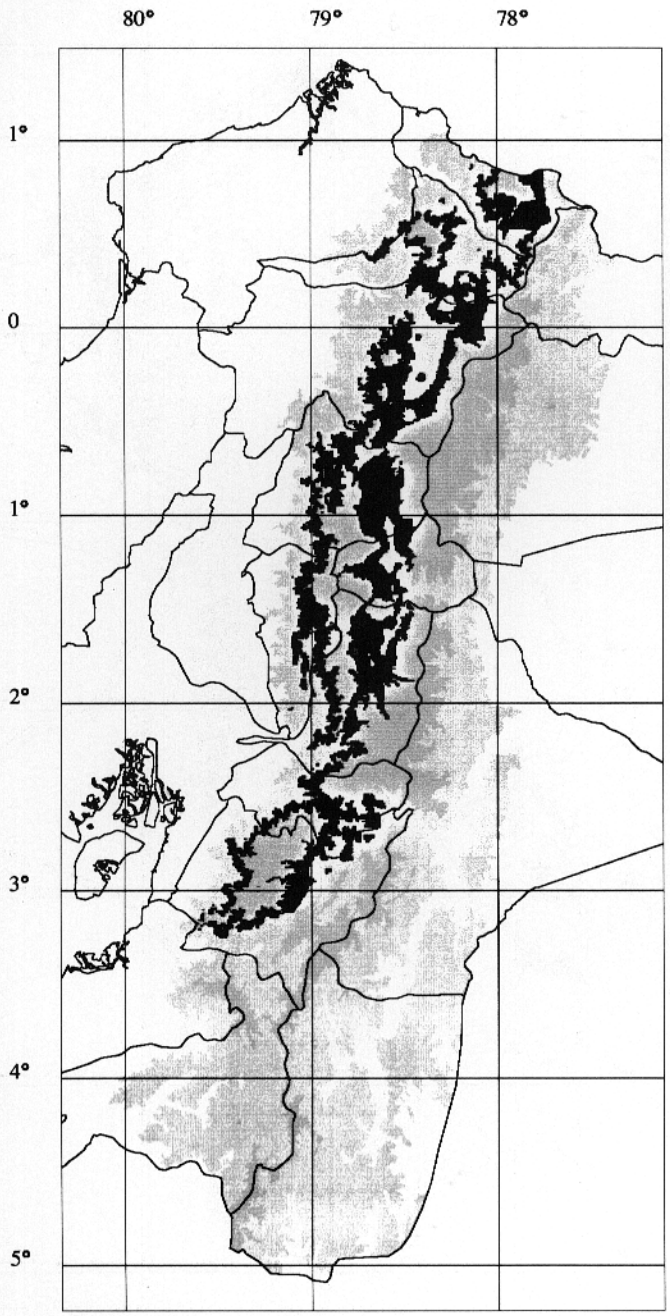
NE: 2500 –3100

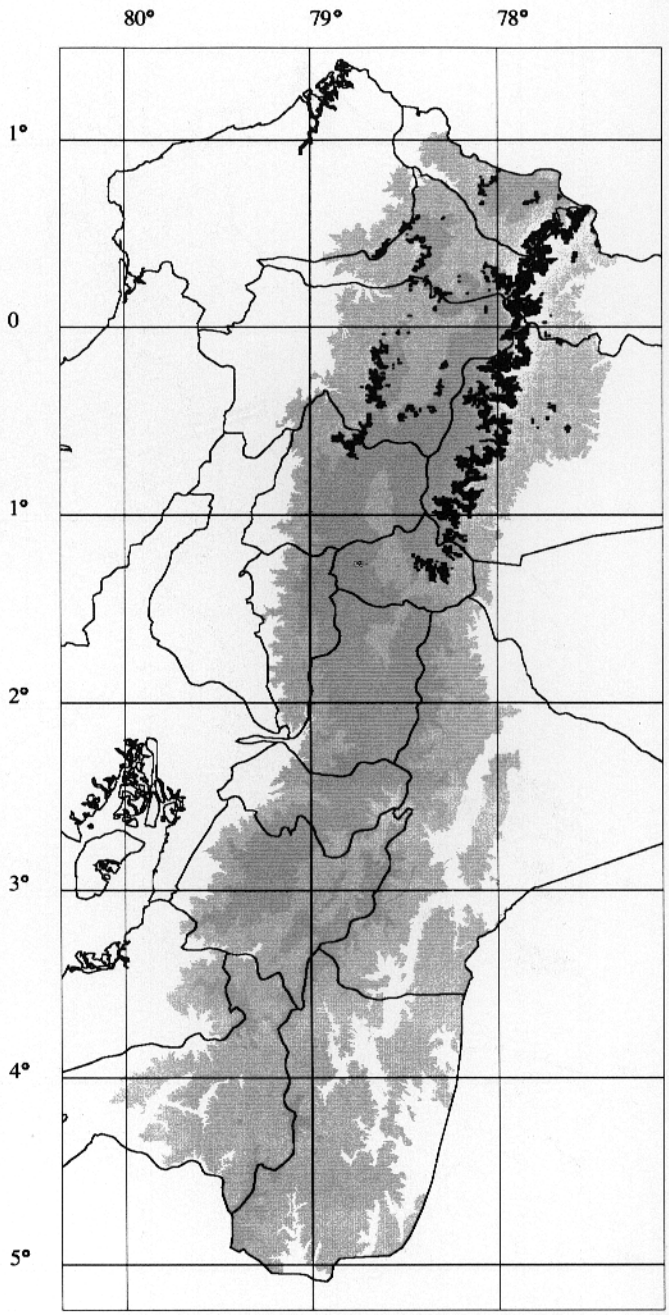
S: 2500 –3100

Habitat: HPF HSF HS

Total distribution: 30 cells







Sapphire-vented Puffleg
Zamarrito Colilargo

Eriocnemis luciani

Altitudinal range:

NW: 2700 –3700

NE: 2700 –3400

S: Not found

Habitat: HPF HSF HS DA

Total distribution: 17 cells

Golden-breasted Puffleg
Zamarrito Pechidorado

Eriocnemis mosquera

Altitudinal range:

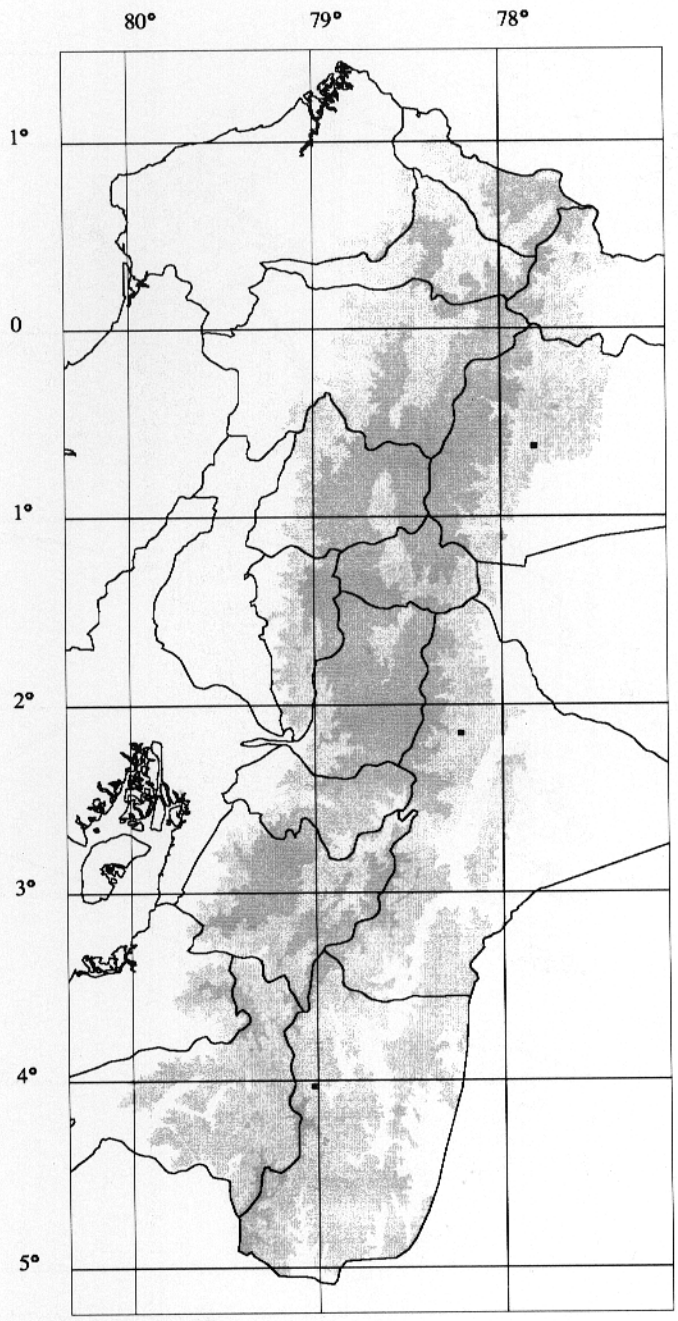
NW: 3000 –3600

NE: 3000 –3600

S: Not found

Habitat: HPF HSF HS

Total distribution: 12 cells



Emerald-bellied Puffleg
Zamarrito Pechiblanco

Eriocnemis alinae

Altitudinal range:

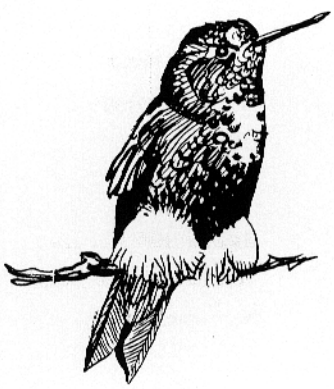
NW: Not found

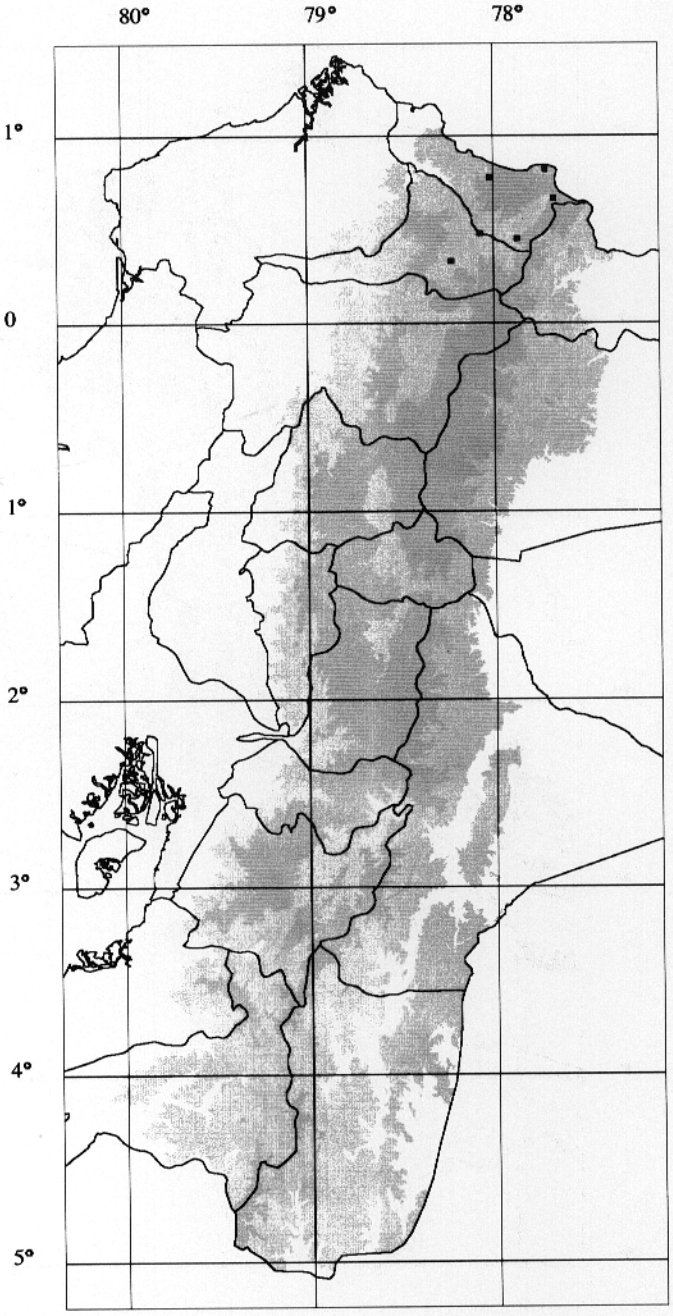
NE: 1800 –2250

S: 1800 –2250

Habitat: HPF

Total distribution: 12 cells





Black-thighed Puffleg
Zamarrito Muslinegro

Eriocnemis derbyi

Altitudinal range:

NW: 3000 –3500

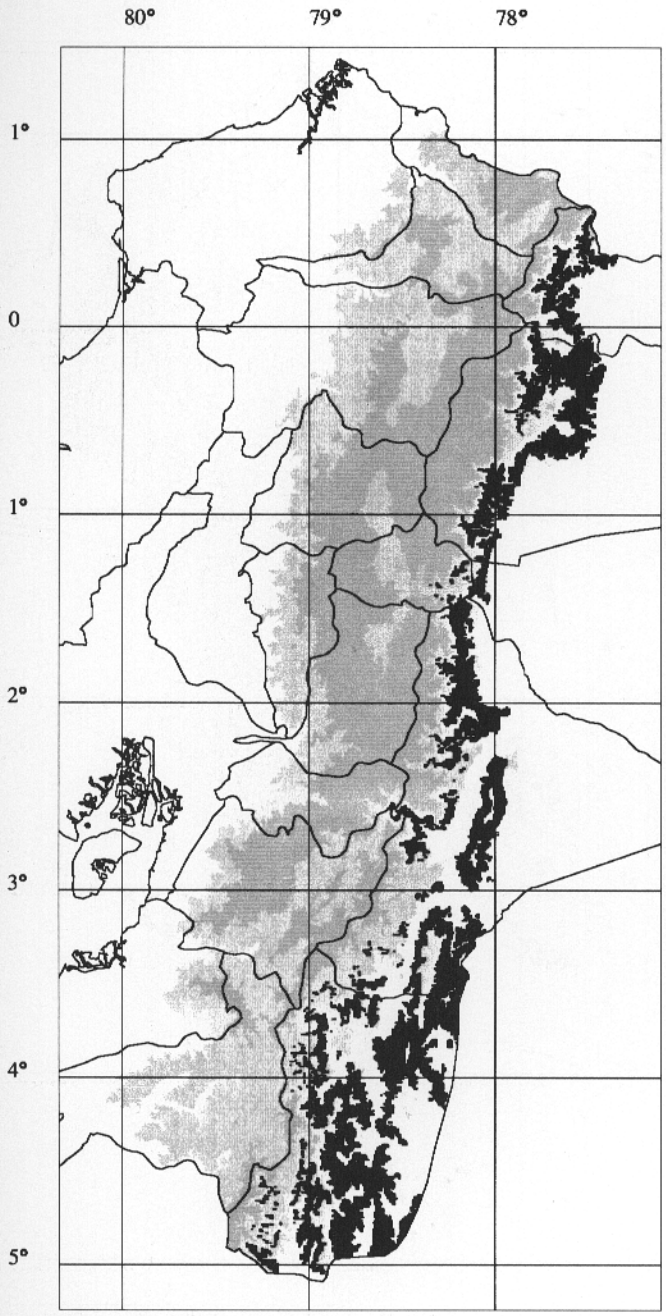
NE: 3000 –3500

S: Not found

Habitat: HPF HSF HS

Total distribution: 9 cells

Near –threatened



Greenish Puffleg
Zamarrito Verdoso

Haplophaedia aureliae

Altitudinal range:

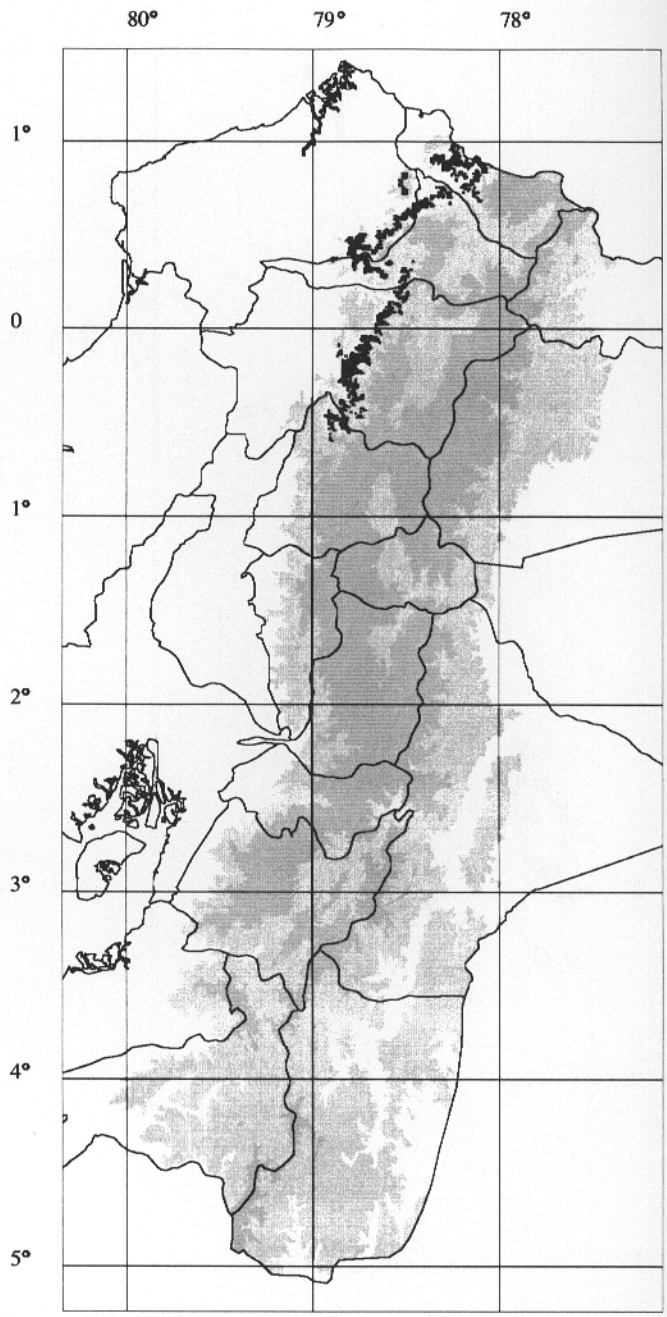
NW: Not found

NE: 1300 –2100

S: 1300 –2100

Habitat: HPF

Total distribution: 39 cells



Hoary Puffleg
Zamarrito Canoso

Haplophaedia lugens

Altitudinal range:

NW: 1700 –2100

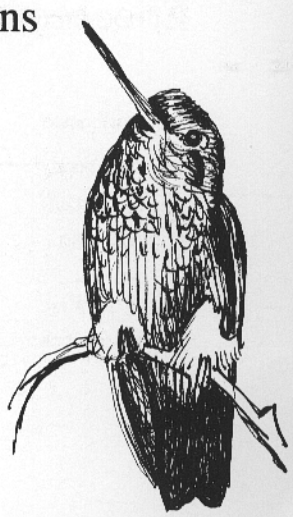
NE: Not found

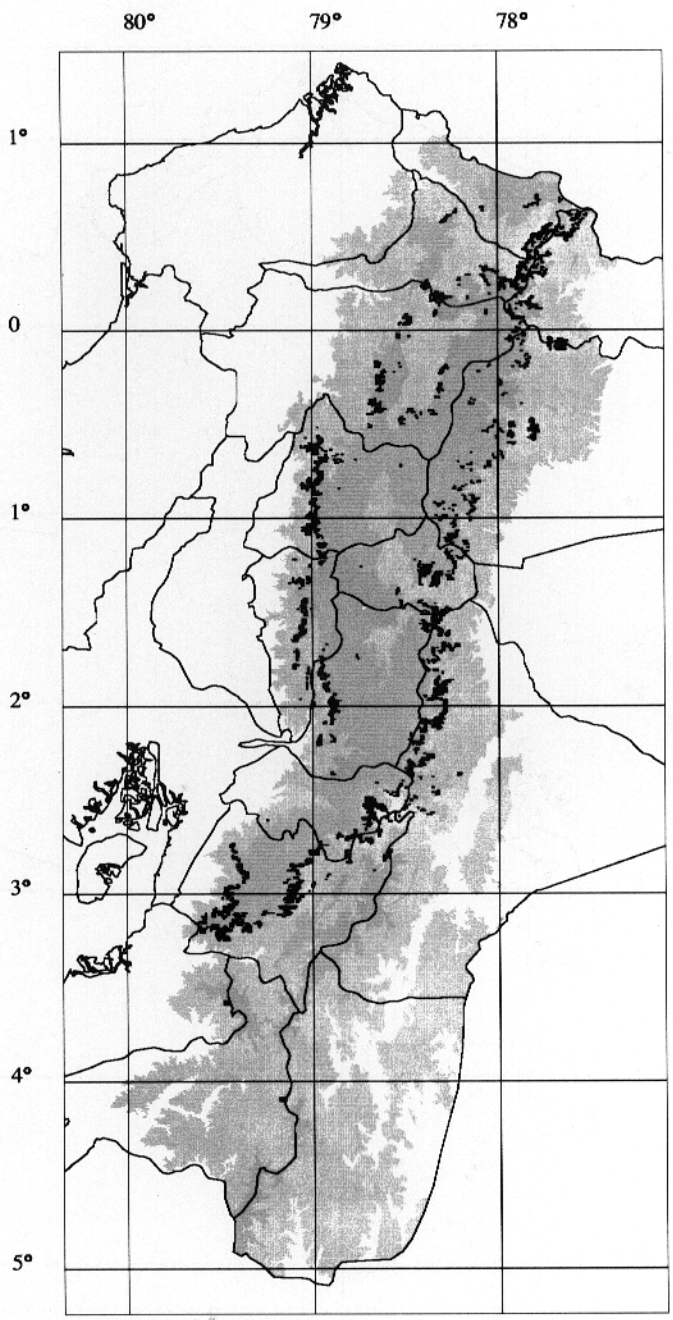
S: Not found

Habitat: HPF

Total distribution: 5 cells

Near –threatened





Purple-backed Thornbill
Picoespina Dorsipúrpura

Ramphomicron microrhynchum

Altitudinal range:

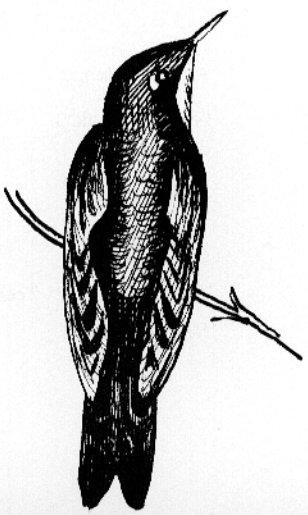
NW: 2500 –3400

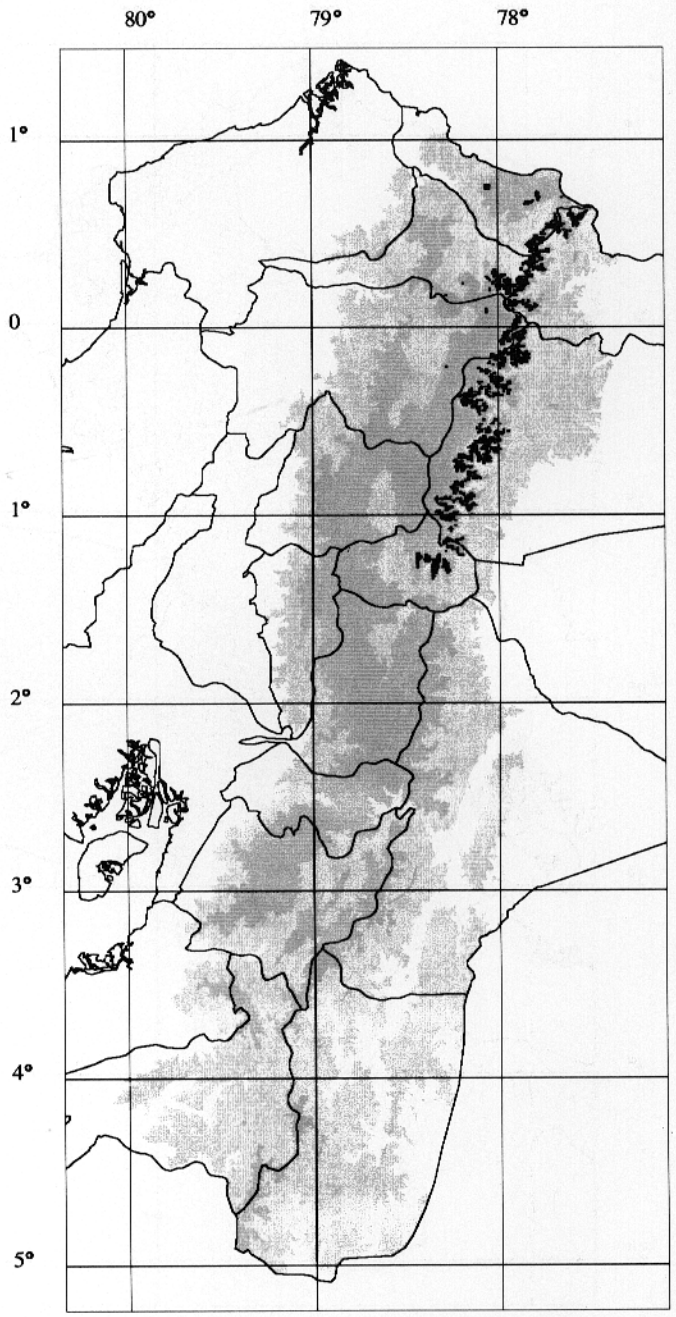
NE: 2500 –3400

S: Limited: 2750 –3000

Habitat: HSF HS

Total distribution: 46 cells





Viridian Metaltail
Metalura Verde

Metallura williami

Altitudinal range:

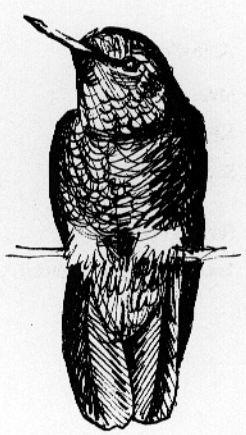
NW: 3400 –3600

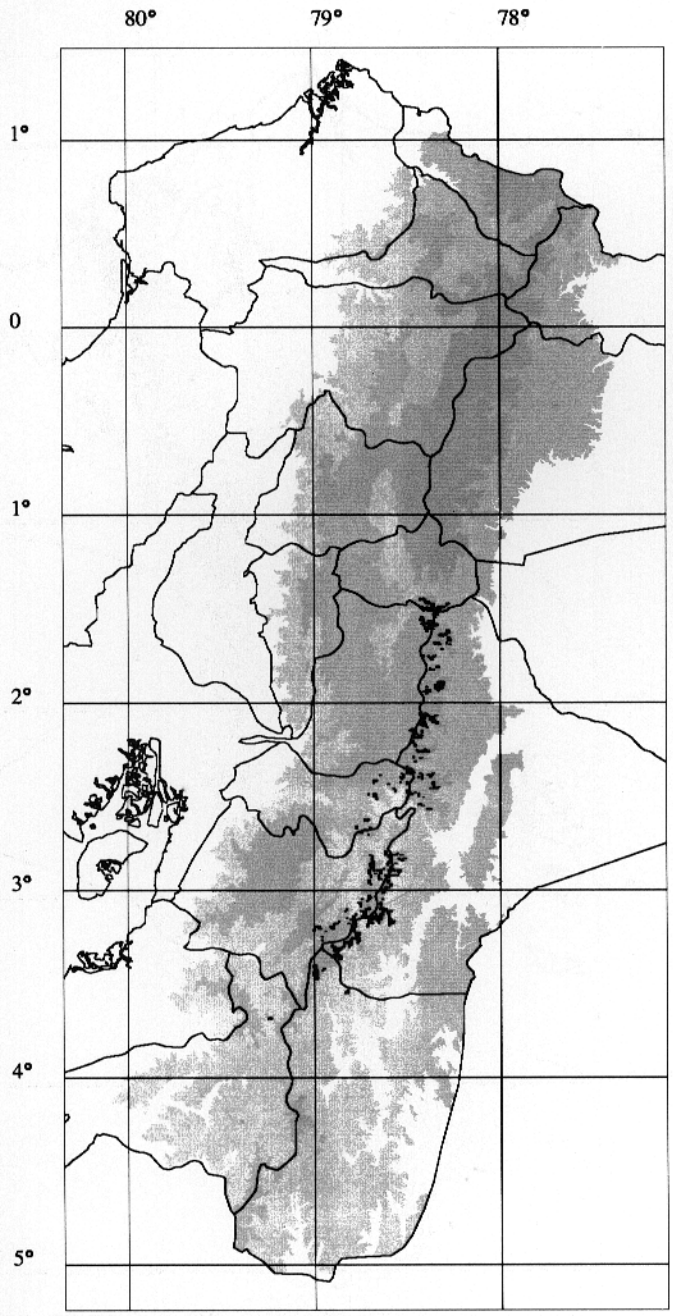
NE: 3400 –4000

S: Not found

Habitat: HSF HS

Total distribution: 12 cells





Black-throated Metaltail
Metalura Golinegra

Metallura atrigularis

Altitudinal range:

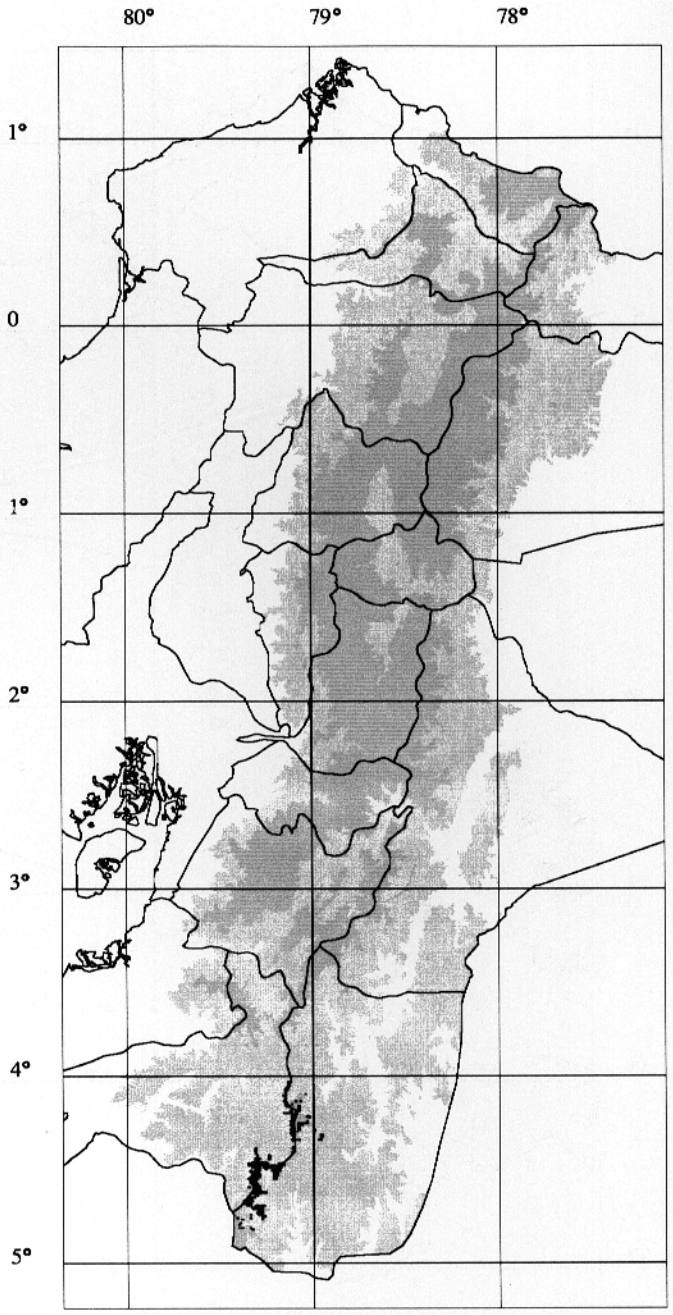
NW: Not found

NE: 3300 –3700

S: 3150 –3400

Habitat: HSF HS

Total distribution: 6 cells



Neblina Metaltail
Picoespina de Neblina

Metallura odomae

Altitudinal range:

NW: Not found

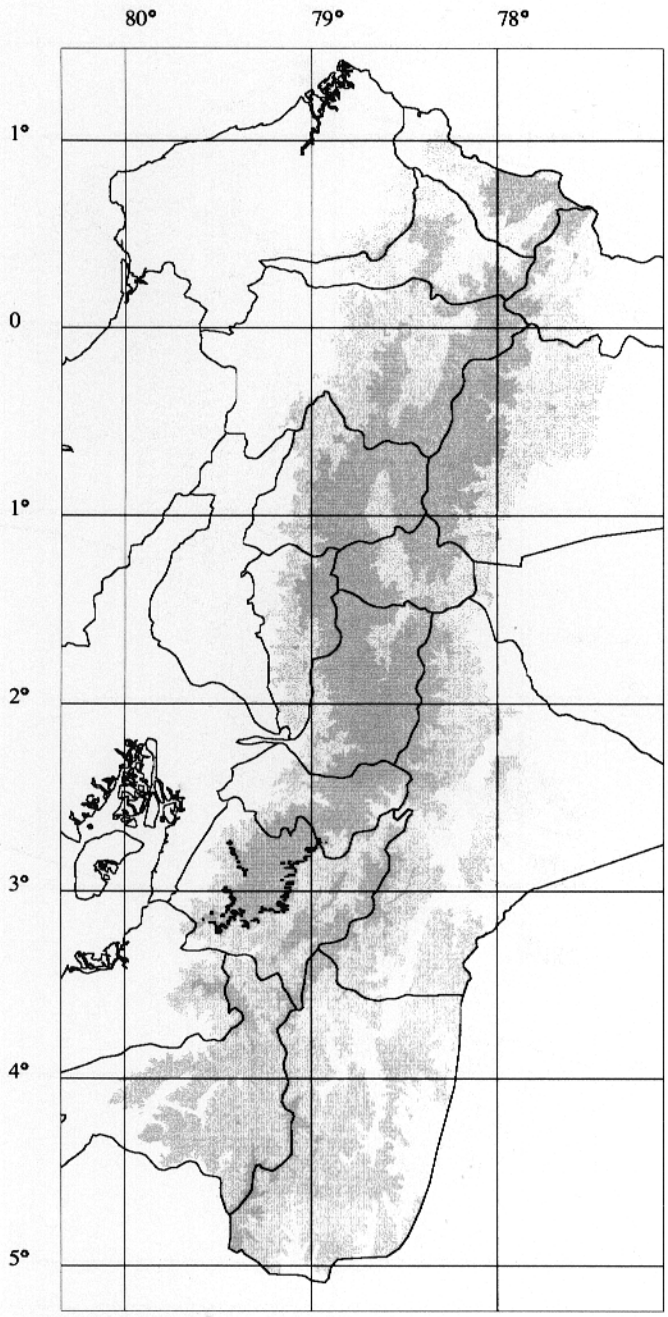
NE: Not found

S: 3080 –3700

Habitat: HSF HS

Total distribution: 2 cells

Near –threatened



Violet-throated Metaltail
Picoespina Gorjivioleta

Metallura baroni

Altitudinal range:

NW: 3100 –3700

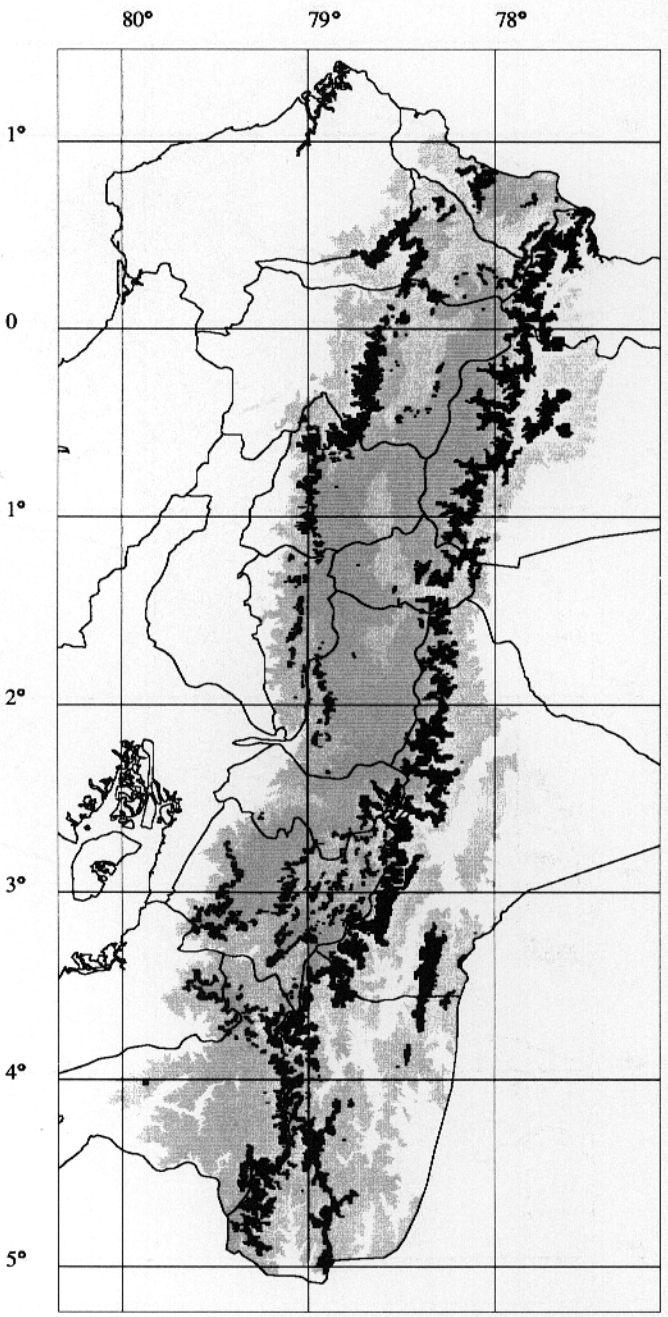
NE: Not found

S: Not found

Habitat: HSF HS

Total distribution: 3 cells

Vulnerable



Tyrian Metaltail
Metalura Tiria

Metallura tyrianthina

Altitudinal range:

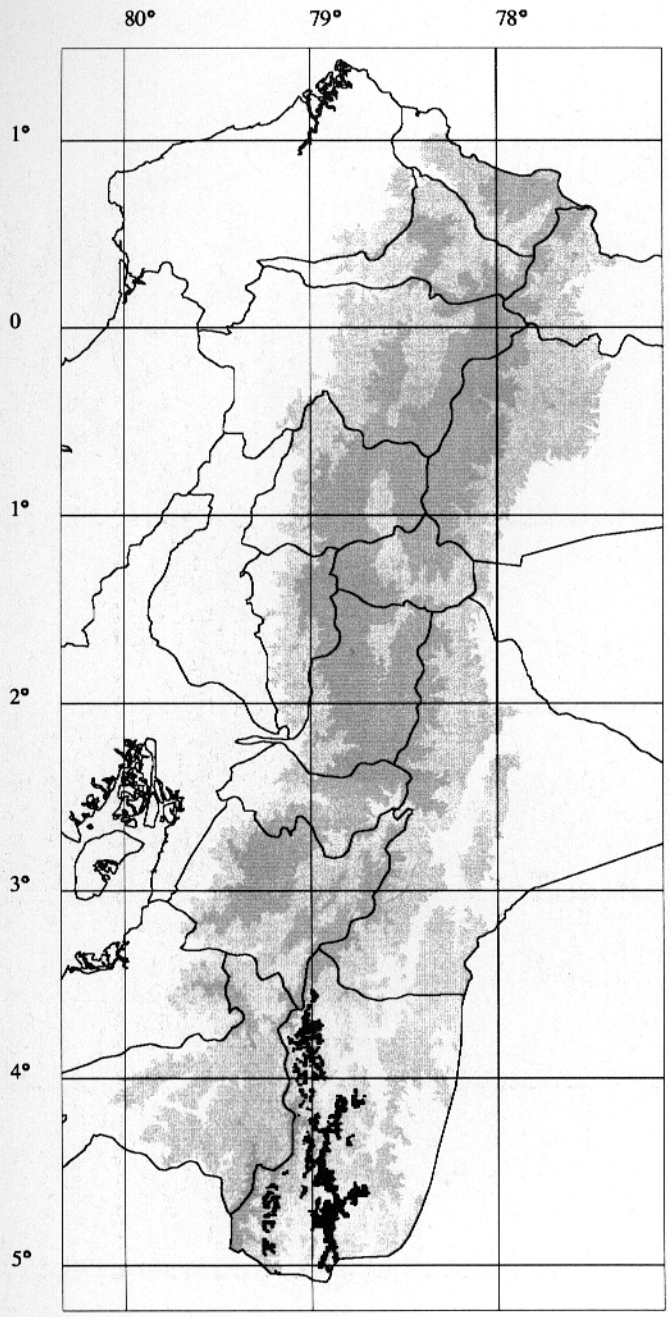
NW: 2300 –3400

NE: 2300 –3350

S: 2300 –3350

Habitat: HPF HSF HS

Total distribution: 73 cells



Rufous-capped Thornbill
Picoespina Gorrirrufa

Chalcostigma ruficeps

Altitudinal range:

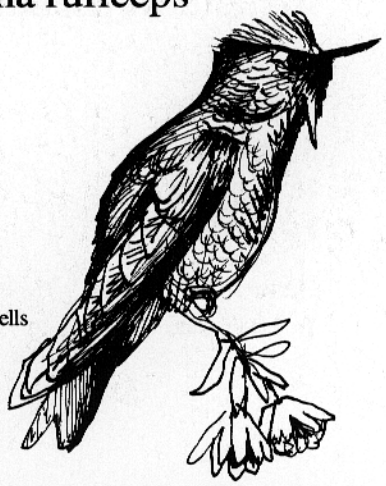
NW: Not found

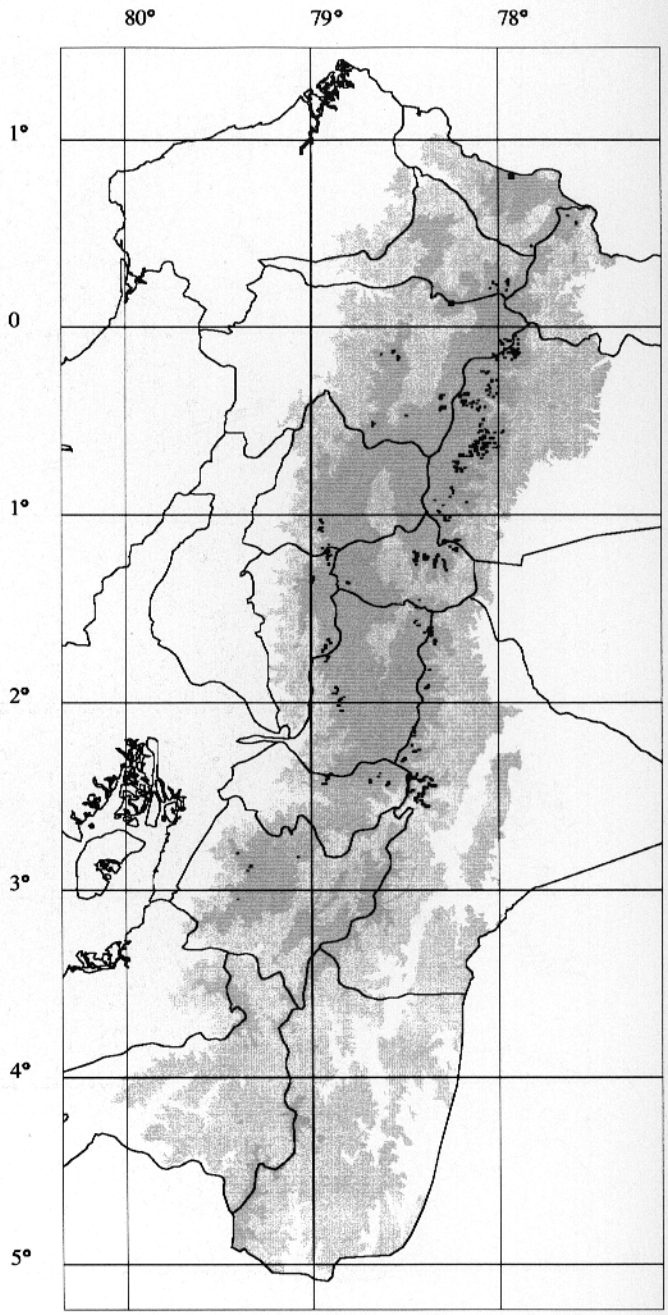
NE: Not found

S: 2100 –2600

Habitat: HPF HSF

Total distribution: 32 cells





Blue-mantled Thornbill
Picoespina Dorsiazul

Chalcostigma stanleyi

Altitudinal range:

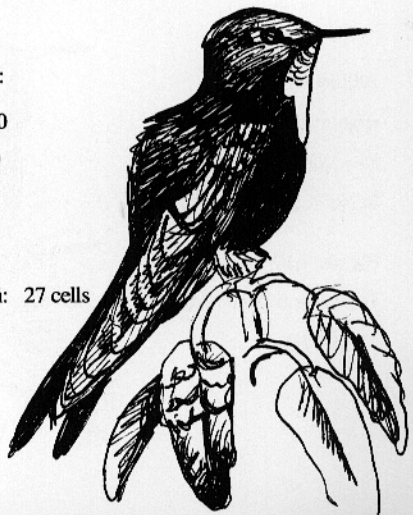
NW: 3700 –4100

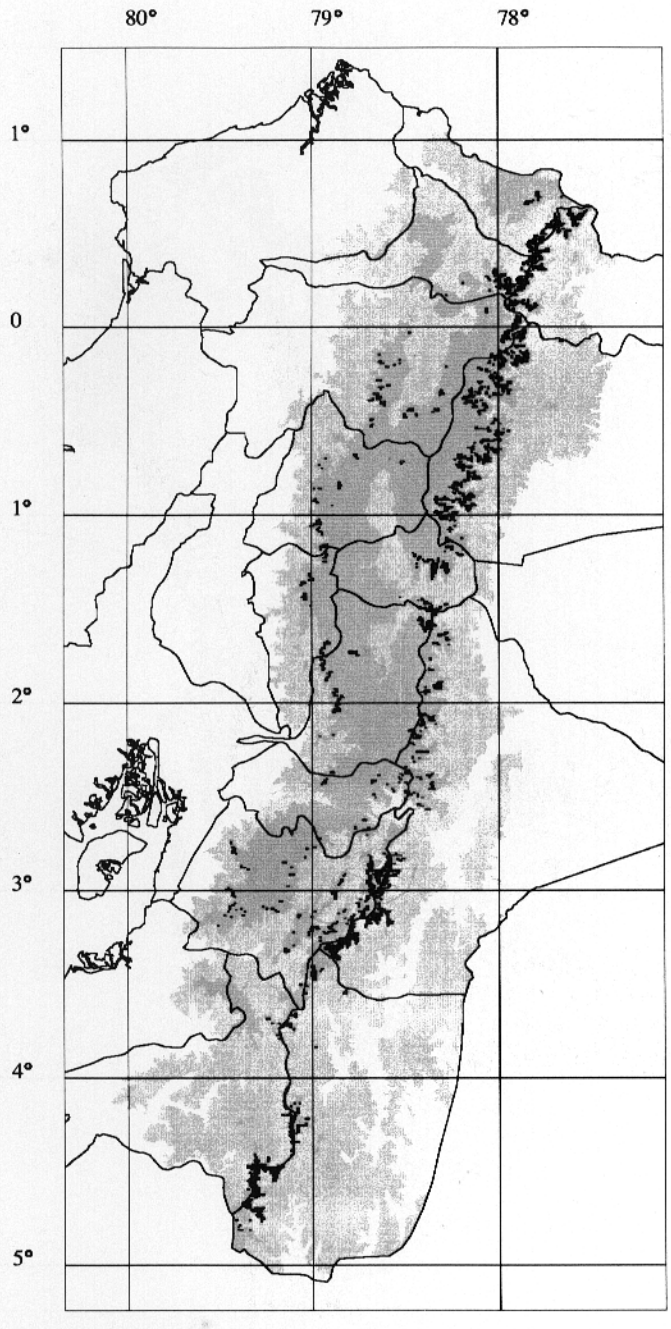
NE: 3700 –4100

S: Not found

Habitat: HS

Total distribution: 27 cells





Rainbow-bearded Thornbill
Picoespina Arcoiris

Chalcostigma herrani

Altitudinal range:

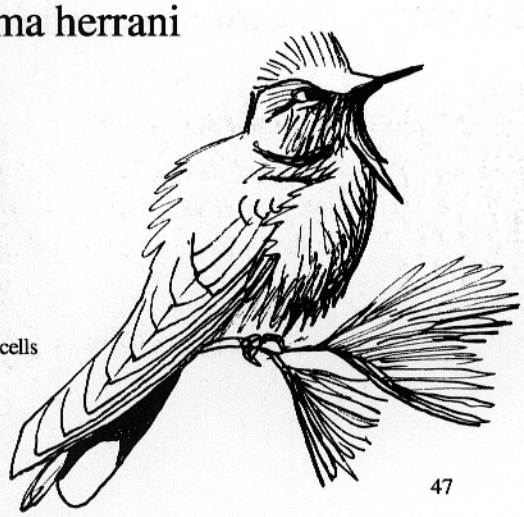
NW: 3400 –3700

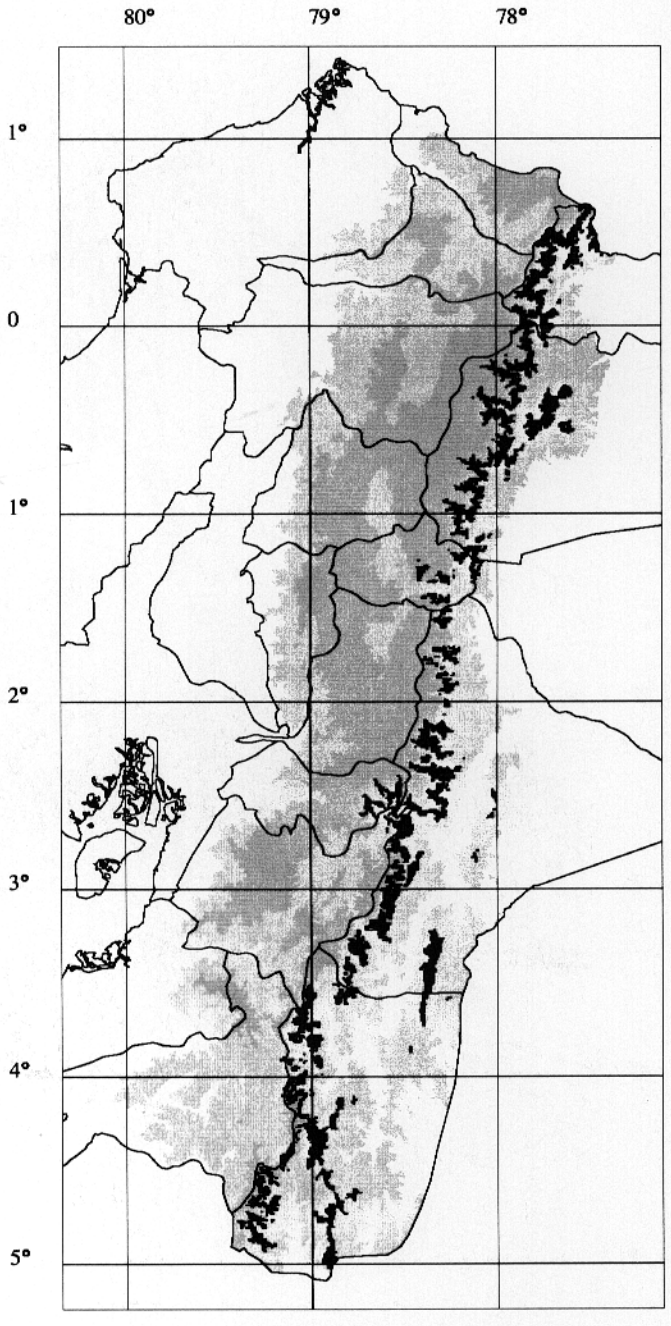
NE: 3400 –3700

S: 3150 –3700

Habitat: HS

Total distribution: 22 cells





Mountain Avocetbill
Colibrí Piquiavoceta

Opisthoprora euryptera

Altitudinal range:

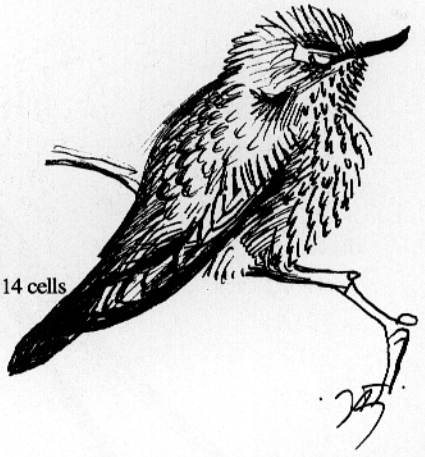
NW: Not found

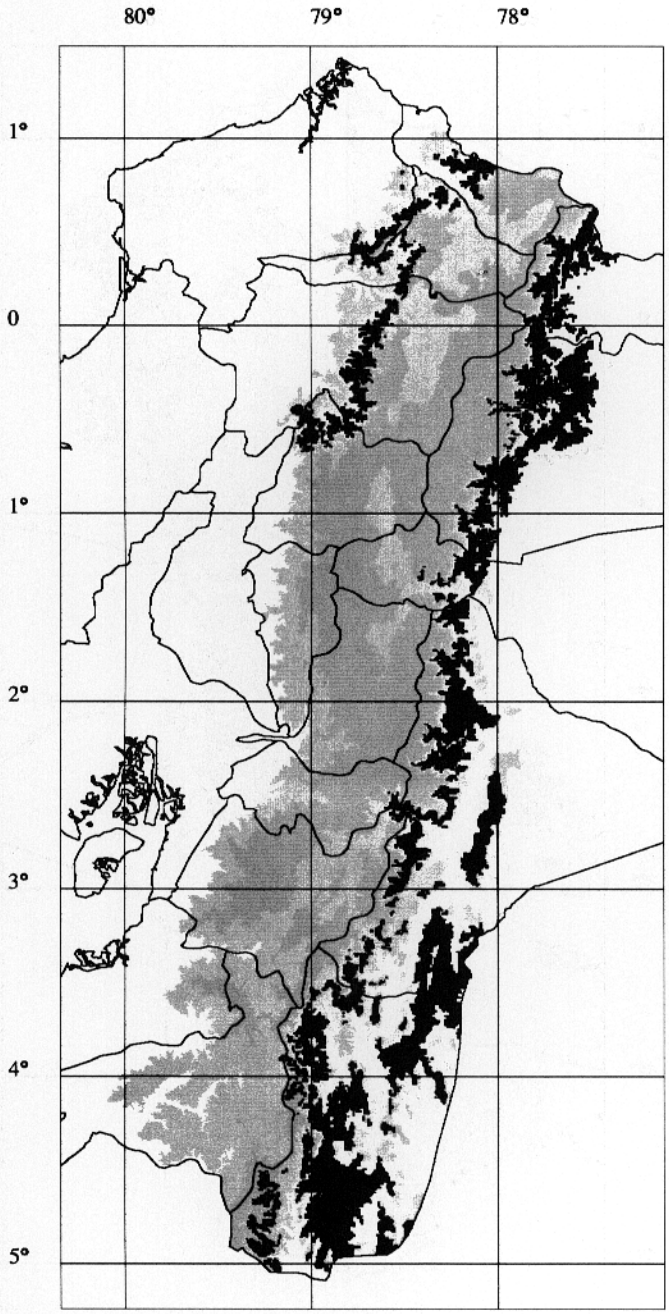
NE: 2400 –3200

S: 2400 –3150

Habitat: HPF HSF

Total distribution: 14 cells





Long-tailed Sylph
Silfo Colilargo

Aglaiocercus kingi

Altitudinal range:

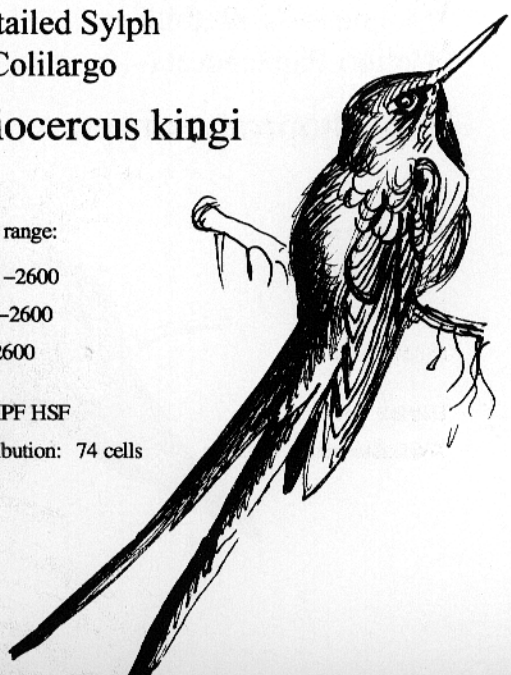
NW: 1900 –2600

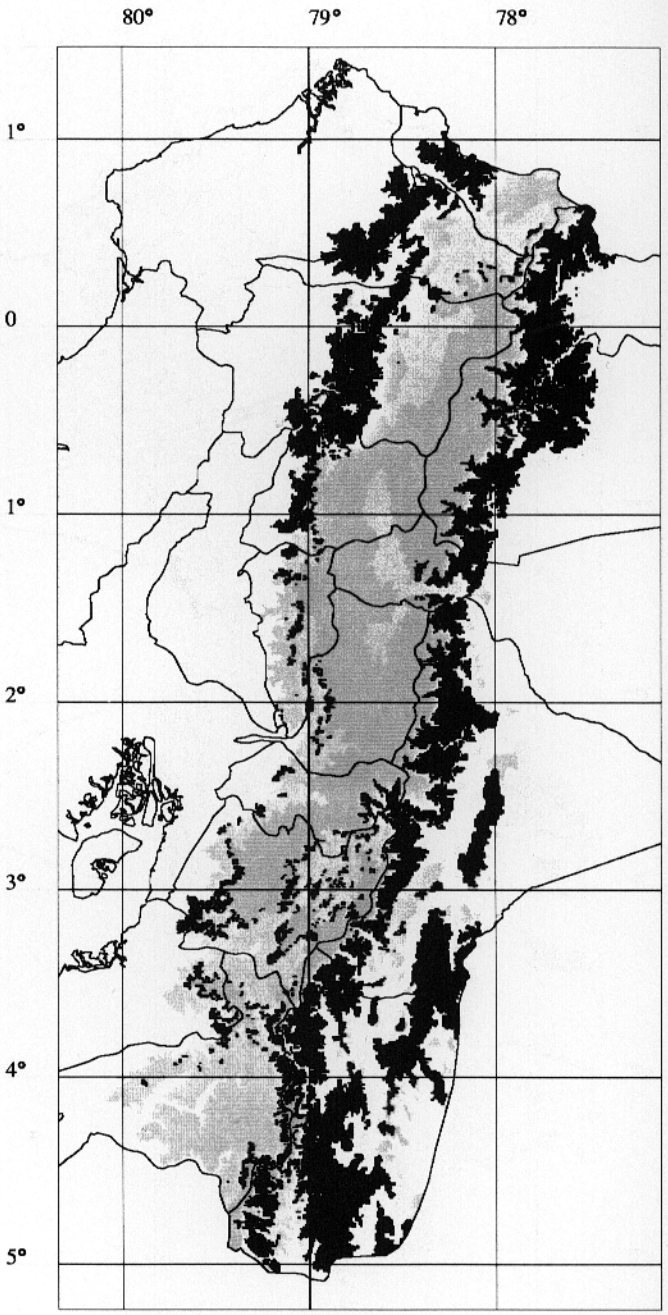
NE: 1600 –2600

S: 1600 –2600

Habitat: HPF HSF

Total distribution: 74 cells





Masked Trogon
Trogón Enmascarado

Trogon personatus

Altitudinal range:

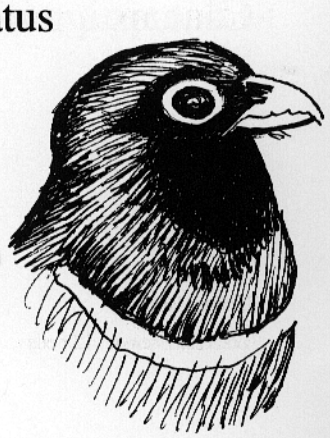
NW: 1200 –3200

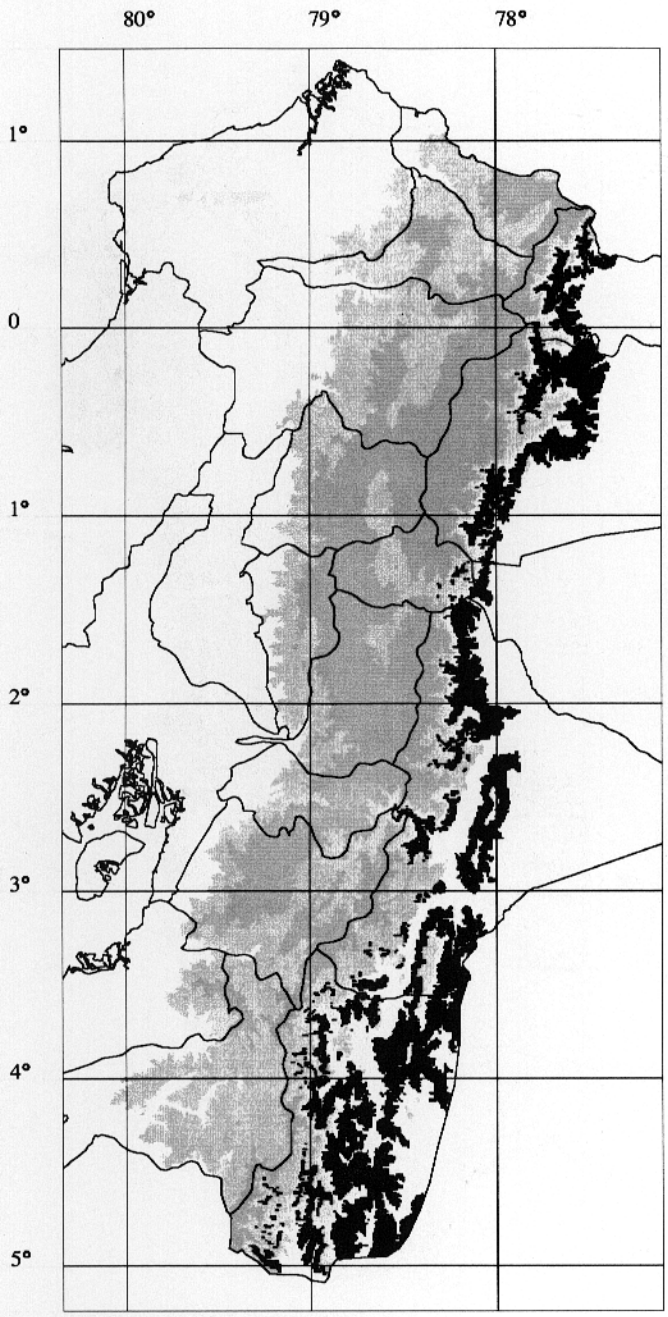
NE: 1500 –3150

S: 1500 –3100

Habitat: HPF HSF

Total distribution: 101 cells





Black-streaked Puffbird
Buco Negrilistado

Malacoptila fulvogularis

Altitudinal range:

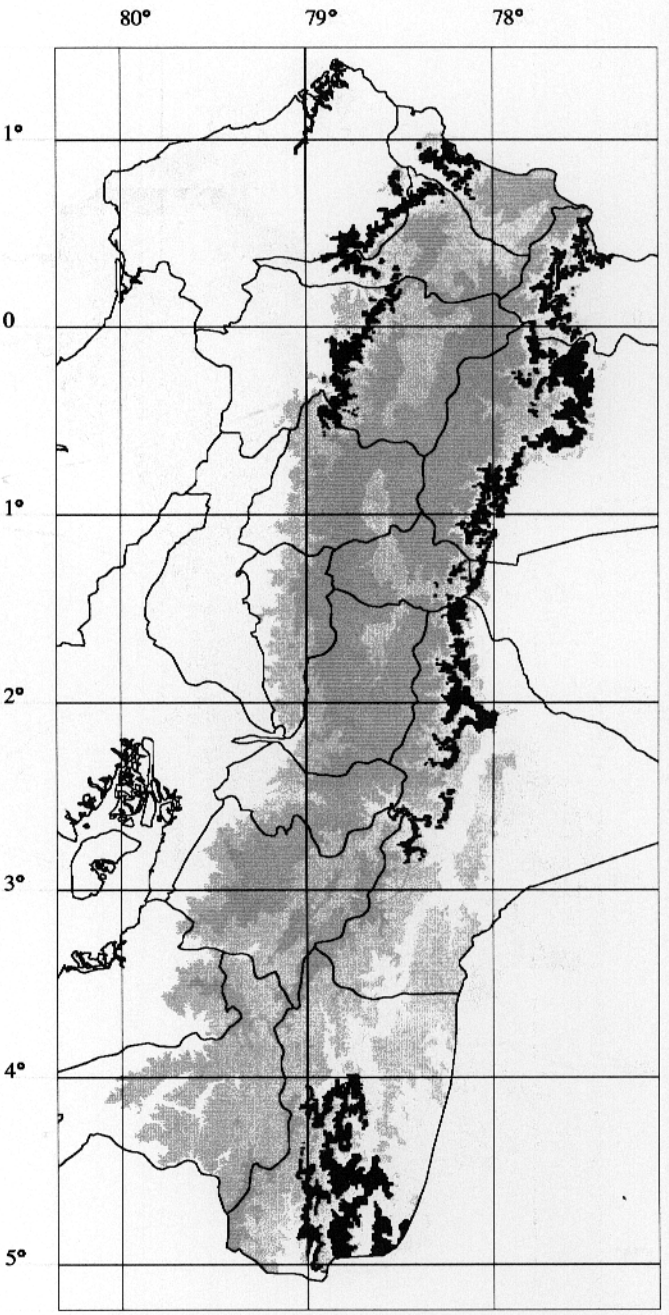
NW: Not found

NE: 1200 –2000

S: 1200 –2000

Habitat: HPF

Total distribution: 15 cells



White-faced Nunbird
Monja Cariblanca

Hapaloptila castanea

Altitudinal range:

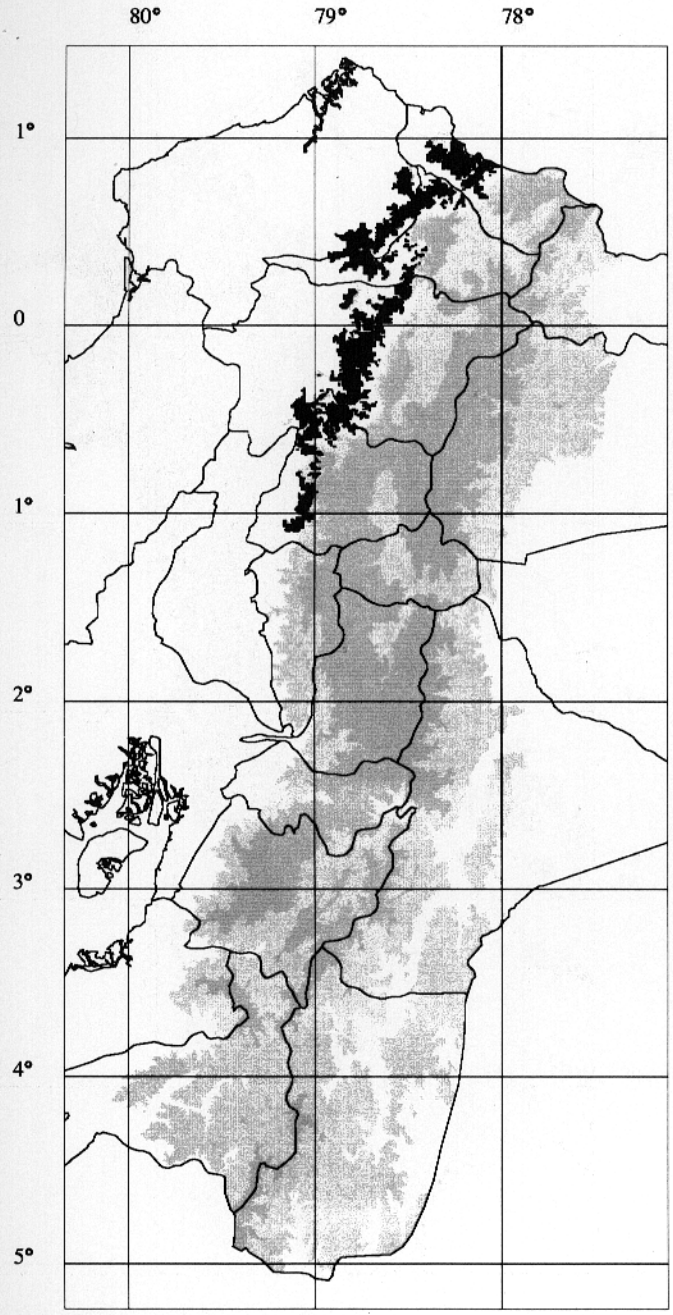
NW: 1500 –2000

NE: 1500 –2000

S: 1500 –2000

Habitat: HPF

Total distribution: 11 cells



Toucan Barbet
Yumbo

Semnornis ramphastinus

Altitudinal range:

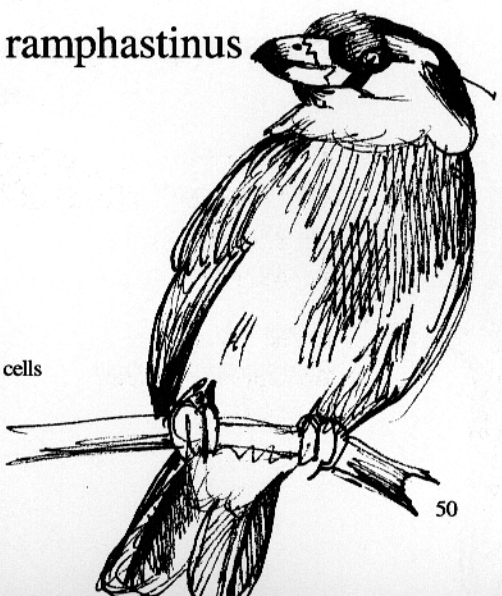
NW: 1400 –2400

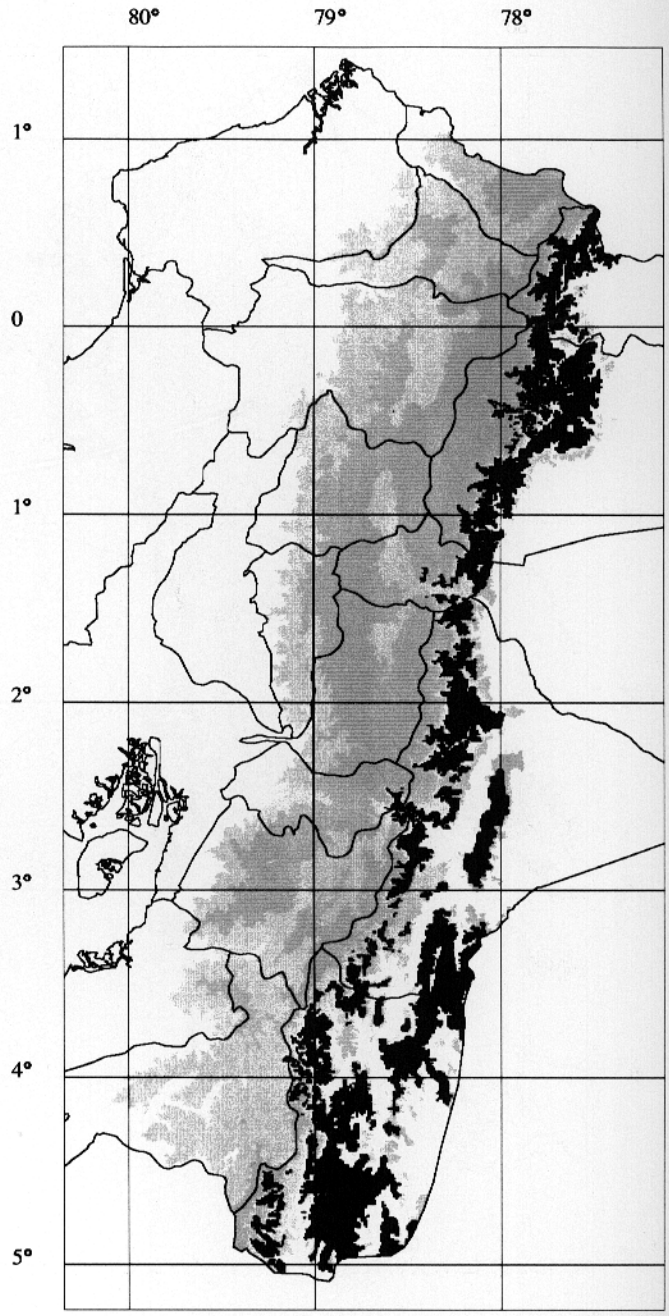
NE: Not found

S: Not found

Habitat: HPF (HSF)

Total distribution: 11 cells





Emerald Toucanet
Tucanete Esmeralda

Aulacorhynchus prasinus

Altitudinal range:

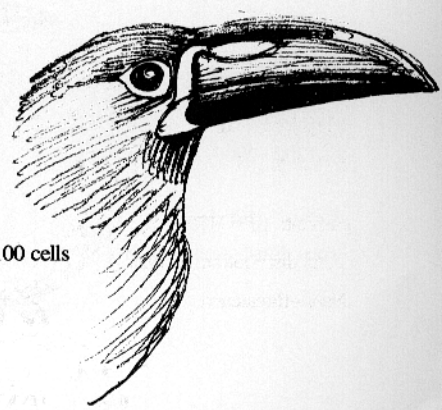
NW: Not found

NE: 1500 –2700

S: 1500 –2600

Habitat: HPF HSF

Total distribution: 100 cells



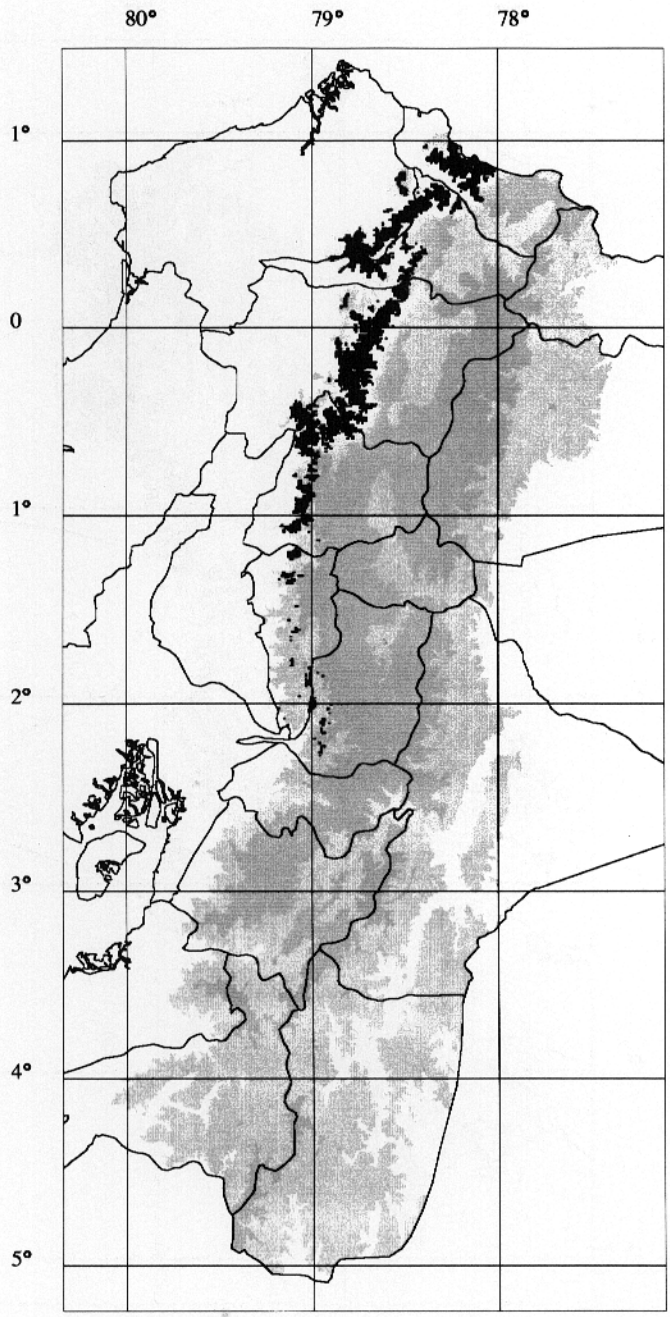


Plate-billed Mountain-toucan
Tucán Piquilaminado

Andigena laminirostris

Altitudinal range:

NW: 1600 –2600

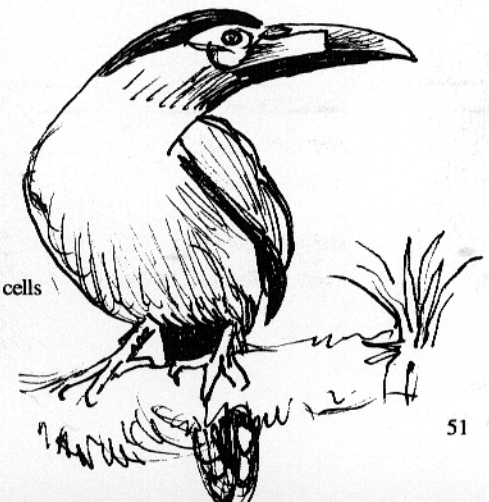
NE: Not found

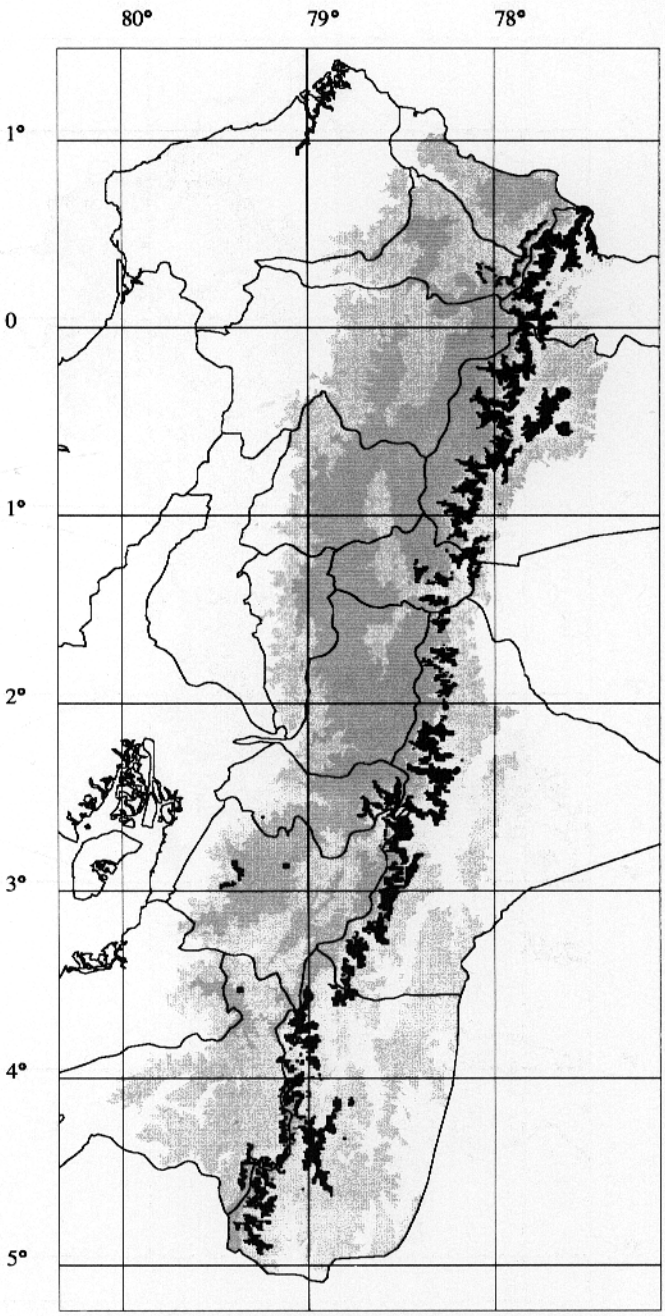
S: Not found

Habitat: HPF HSF

Total distribution: 8 cells

Near –threatened





Gray-breasted Mountain-toucan
Tucán Andino Pechigrís

Andigena hypoglauca

Altitudinal range:

NW: 2500 –3250

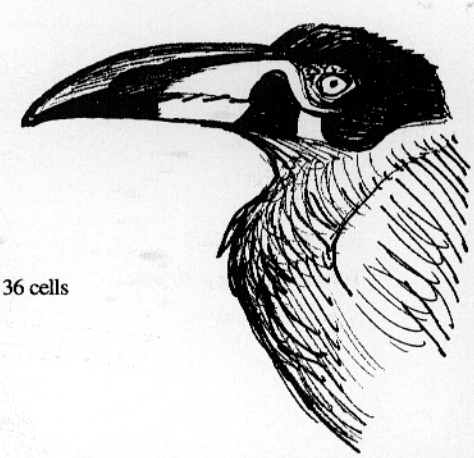
NE: 2300 –3300

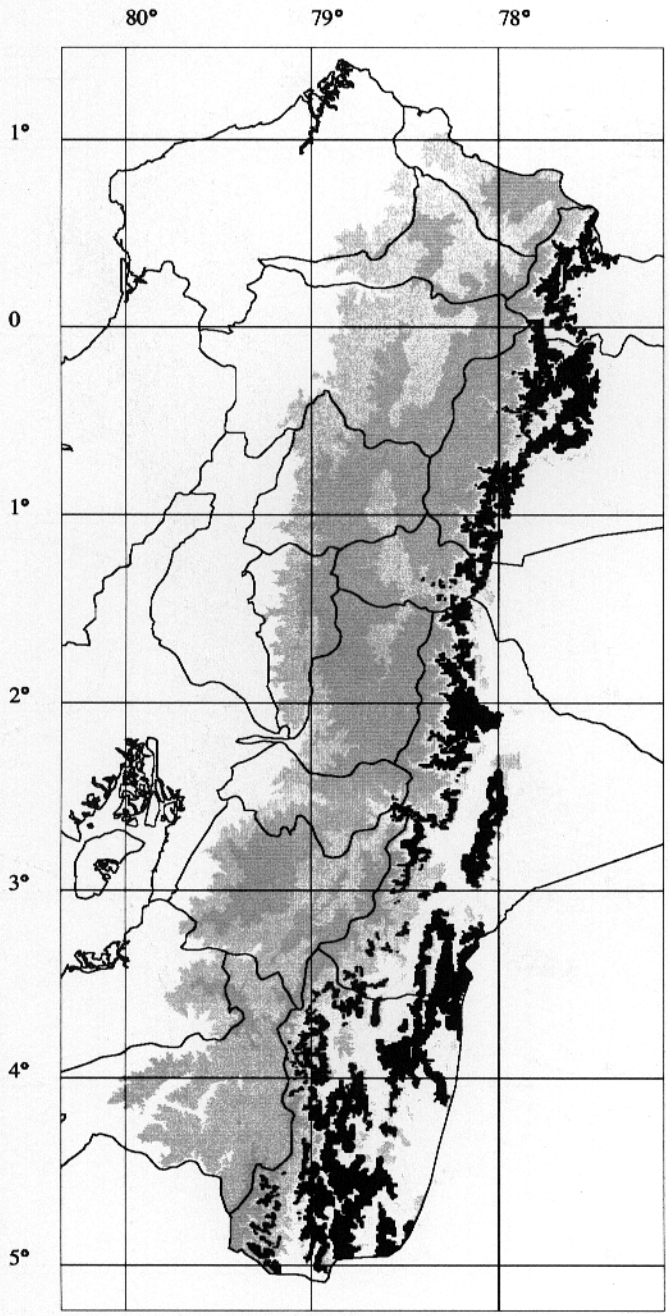
S: 2300 –3000

Habitat: HPF HSF

Total distribution: 36 cells

Near –threatened



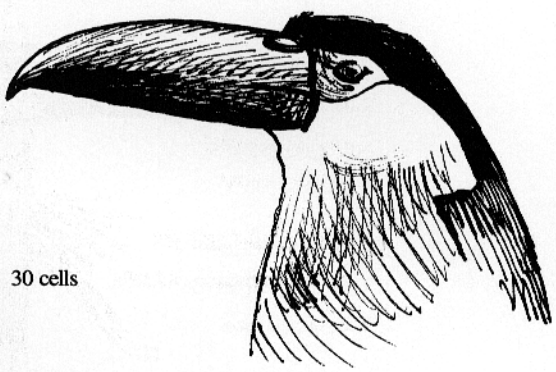


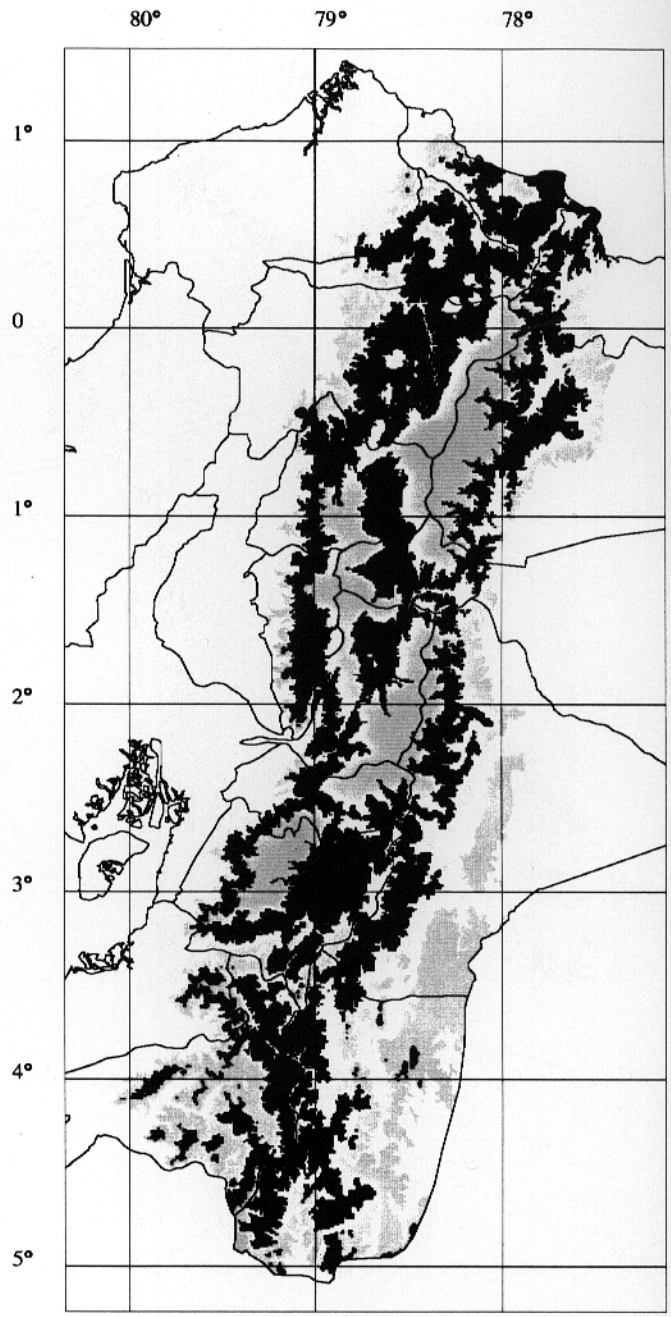
Black-billed Mountain-toucan
Tucán Andino Piquinegro

Andigena nigrirostris

Altitudinal range:
NW: Not found
NE: 1500 –2300
S: 1500 –2300

Habitat: HPF
Total distribution: 30 cells
Near –threatened



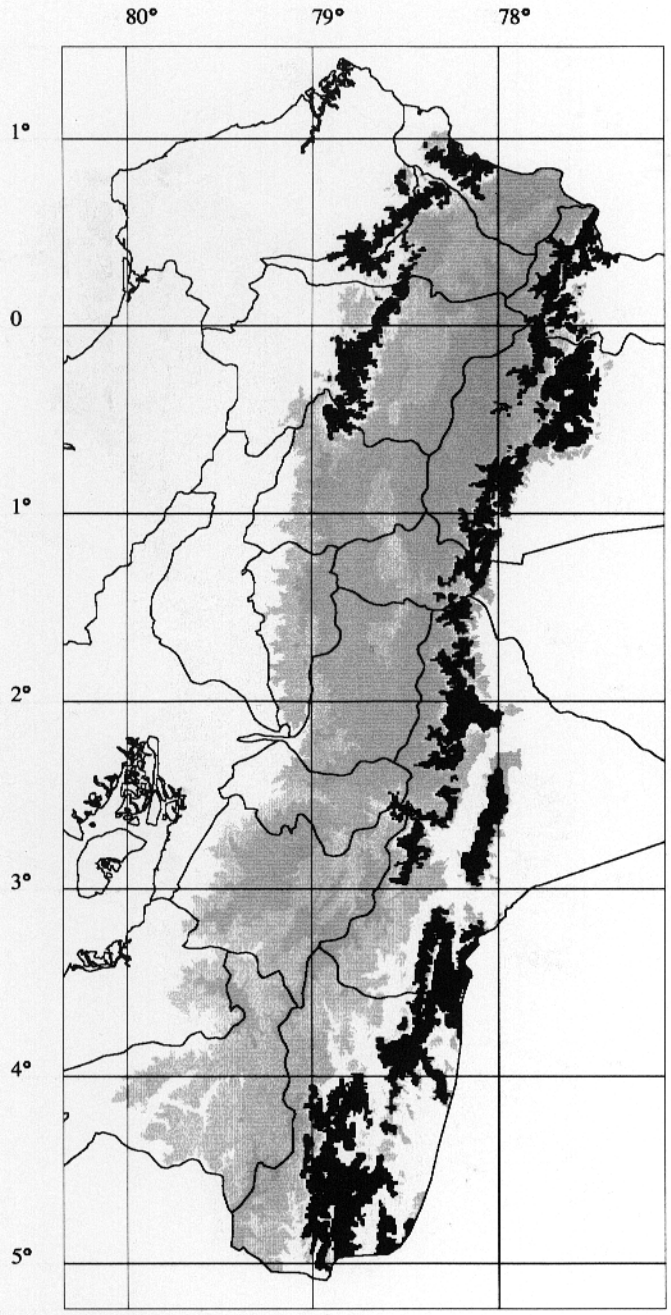


Crimson-mantled Woodpecker
Carpintero Dorsicarmesi

Piculus rivolii

Altitudinal range:
NW: 2000 –3500
NE: 2100 –3200
S: 1900 –3000

Habitat: HSF HS DA HPF
Total distribution: 79 cells



Yellow-vented Woodpecker
Carpintero Ventriamarillo

Veniliornis dignus

Altitudinal range:

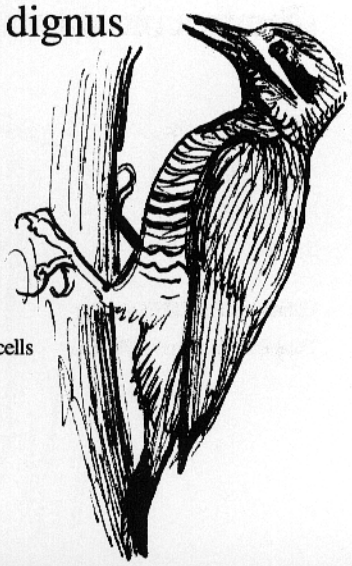
NW: 1500 –2500

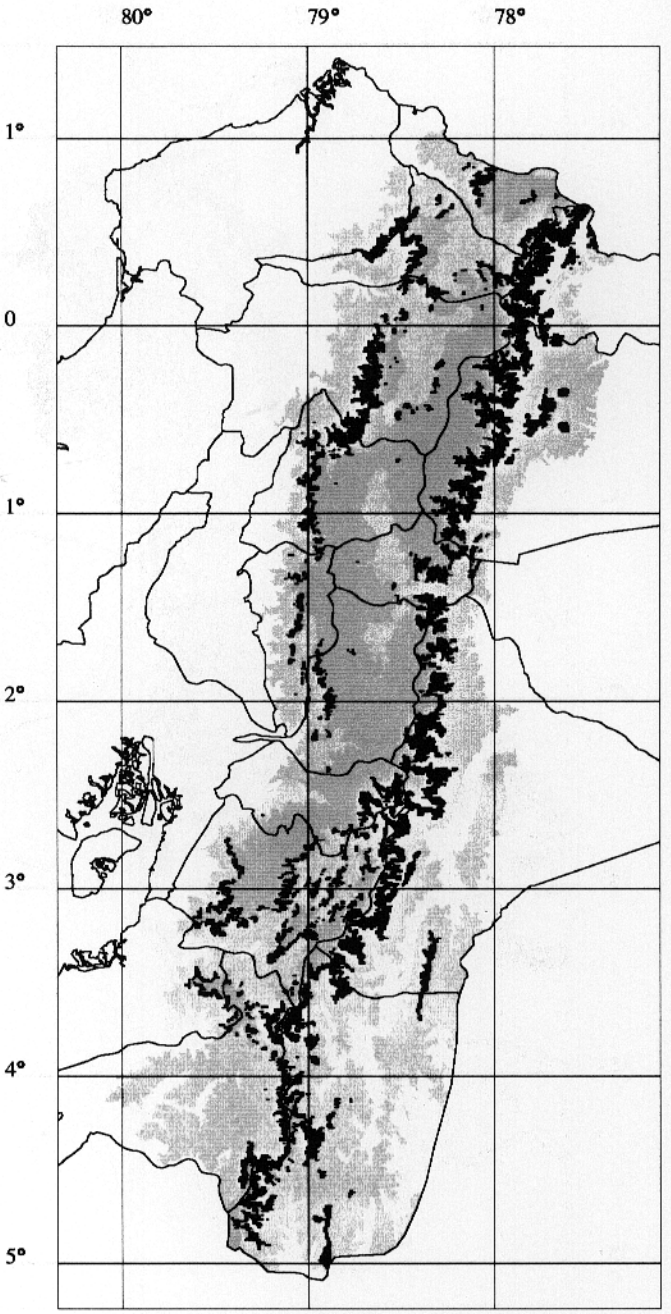
NE: 1500 –2500

S: 1500 –2500

Habitat: HPF

Total distribution: 26 cells





Bar-bellied Woodpecker
Carpintero Ventribarreado

Veniliornis nigriceps

Altitudinal range:

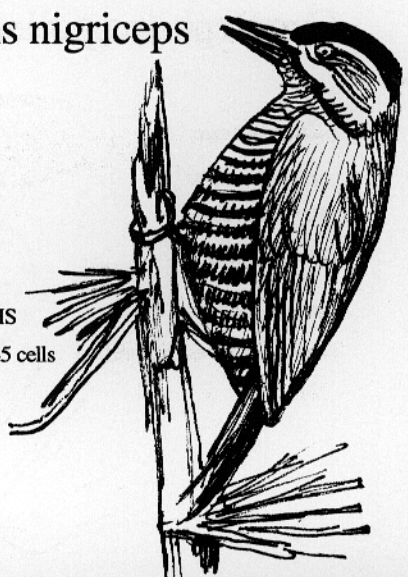
NW: 2500 –3500

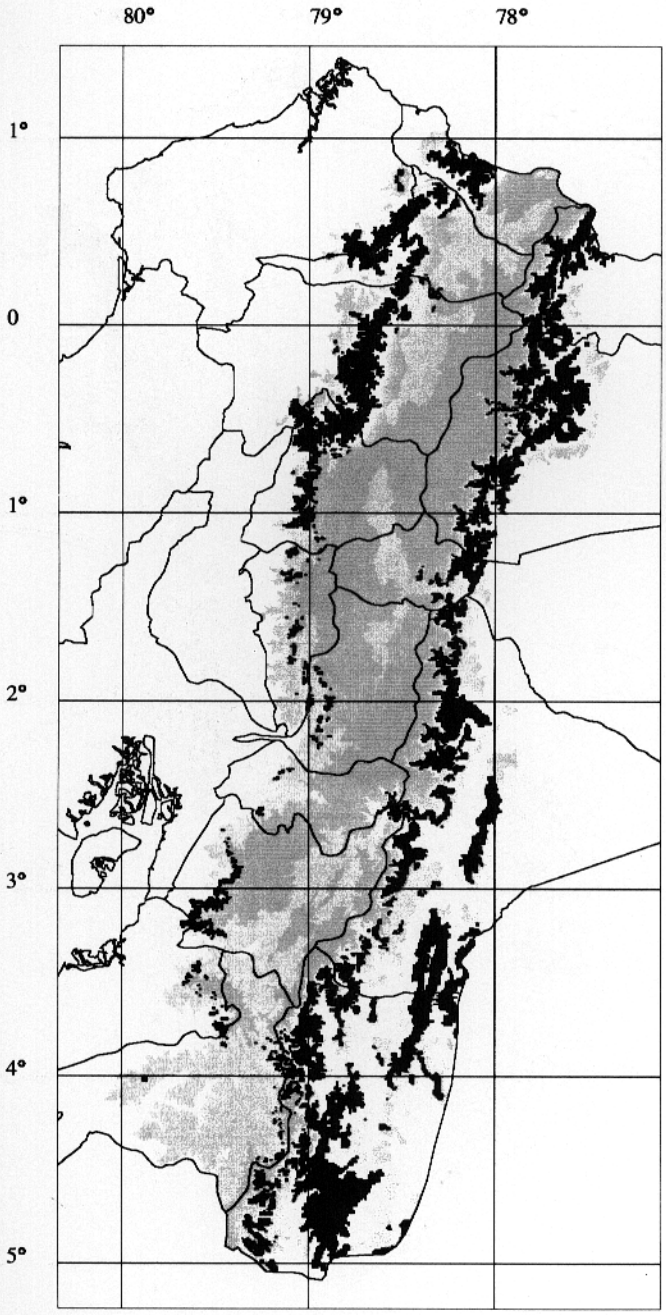
NE: 2500 –3500

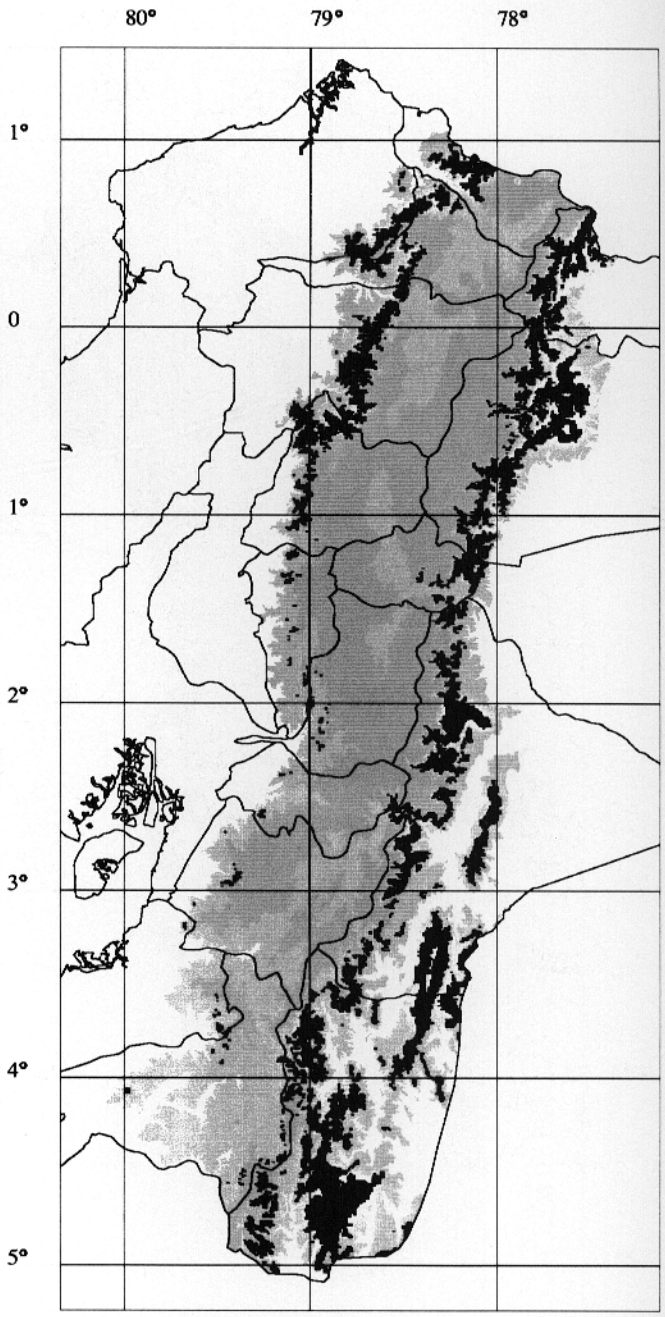
S: 2500 –3300

Habitat: HPF HSF HS

Total distribution: 45 cells







Powerful Woodpecker
Carpintero Poderoso

Campephilus pollens

Altitudinal range:

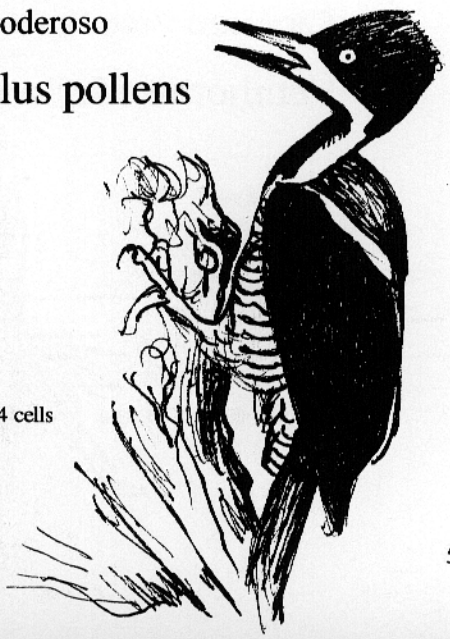
NW: 1700 –3100

NE: 1700 –2600

S: 1700 –2600

Habitat: HPF

Total distribution: 54 cells



Tyrannine Woodcreeper
Trepatroncos Tiranino

Dendrocincla tyrannina

Altitudinal range:

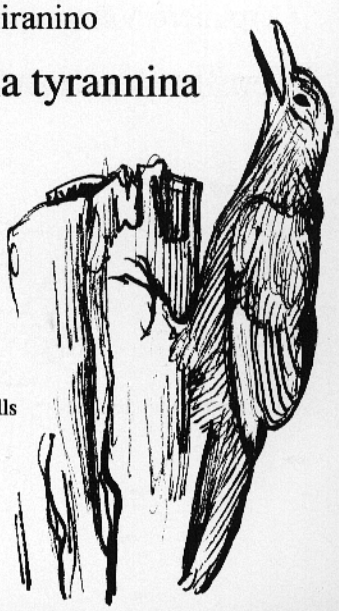
NW: 1800 –2600

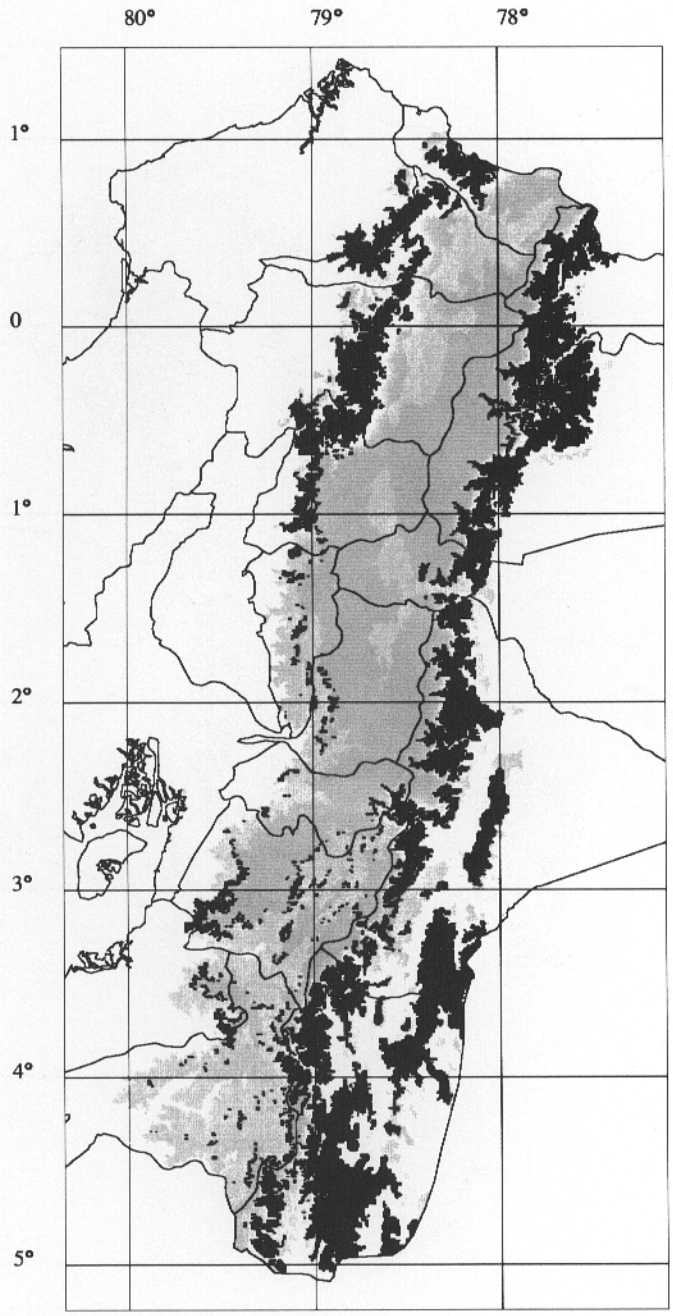
NE: 1800 –2600

S: 1800 –2600

Habitat: HPF HSF

Total distribution: 55 cells





Montane Woodcreeper

Trepatroncos Coronipunteado

Lepidocolaptes lacrymiger

Altitudinal range:

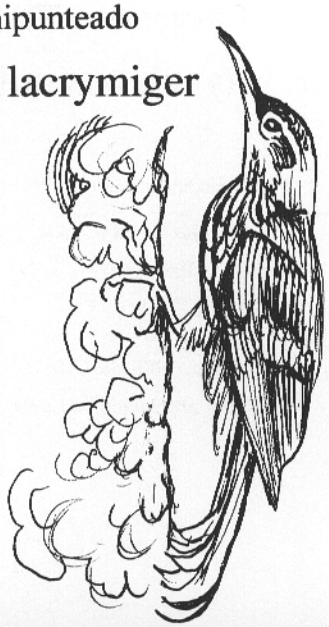
NW: 1500 –3150

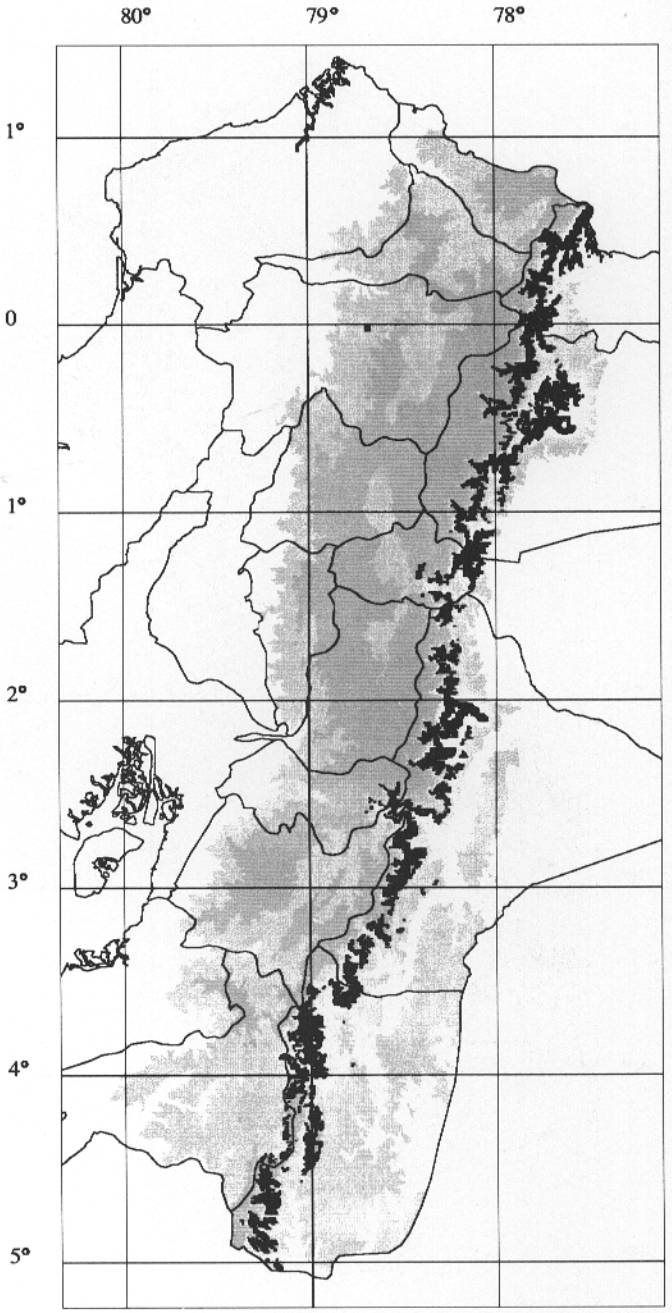
NE: 1500 –2900

S: 1500 –2900

Habitat: HPF HSF HS

Total distribution: 76 cells





Greater Scythebill

Picogadaña Grande

Campylorhamphus pucherani

Altitudinal range:

NW: Limited: 3500

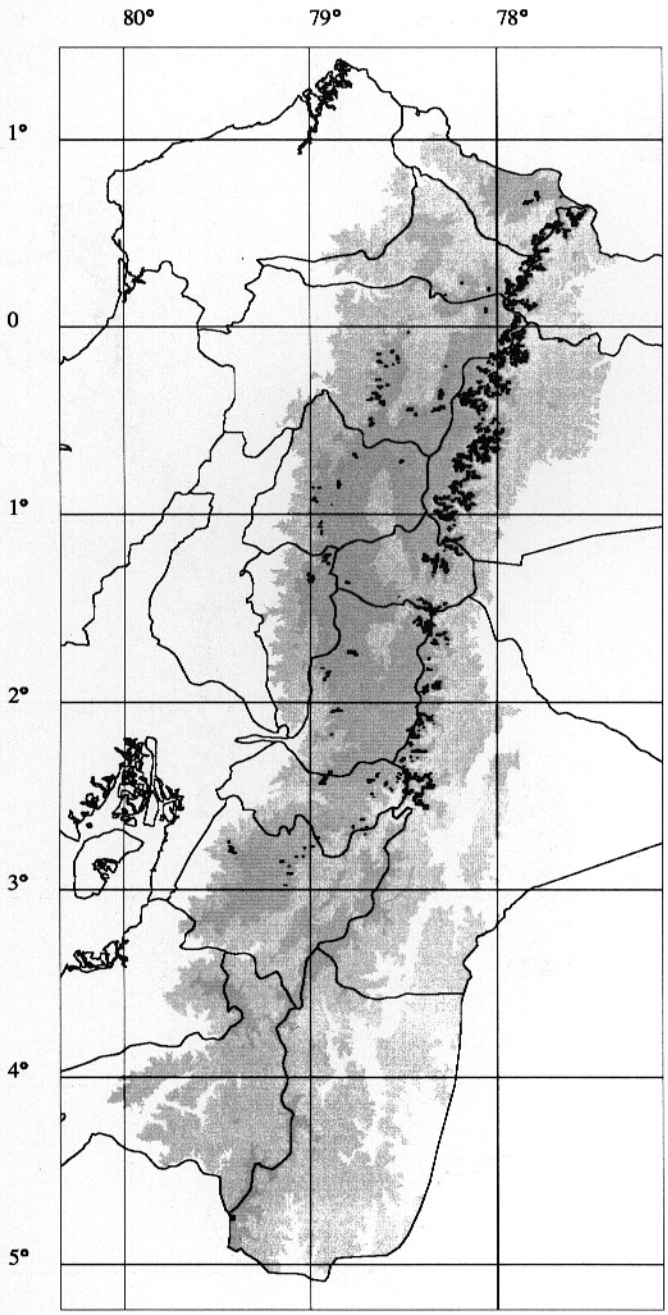
NE: 2000 –2800

S: 1850 –2800

Habitat: HPF HSF

Total distribution: 28 cells

Near –threatened



Andean Tit-spinetail
Tijeral Andino

Leptasthenura andicola

Altitudinal range:

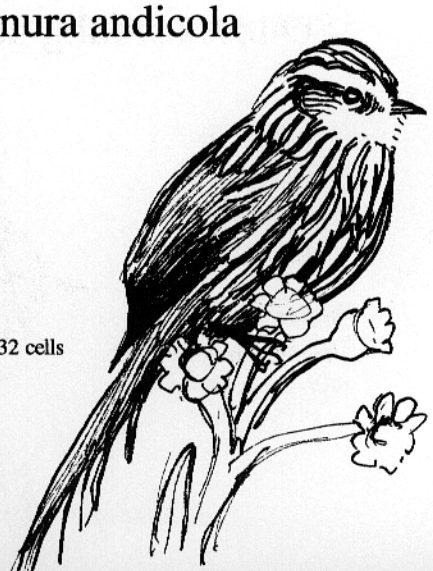
NW: 3400 –4100

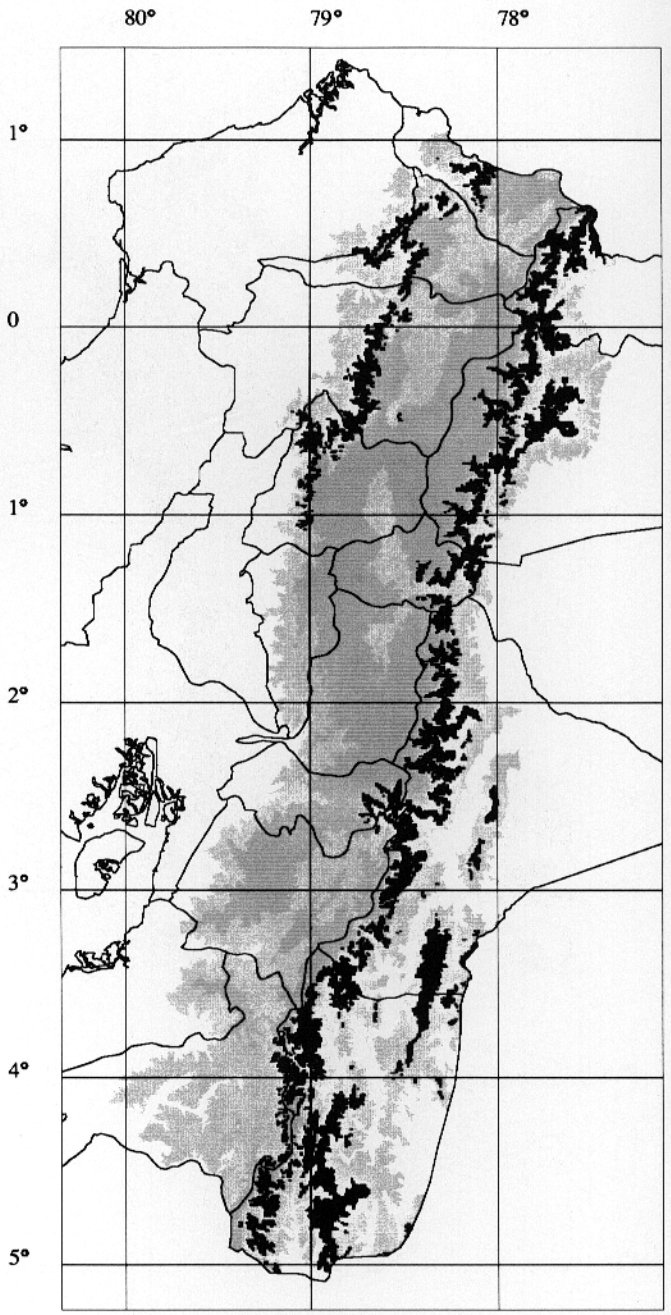
NE: 3400 –4100

S: 3400 –3700

Habitat: HS

Total distribution: 32 cells





Rufous Spinetail
Colaespina Rufa

Synallaxis unirufa

Altitudinal range:

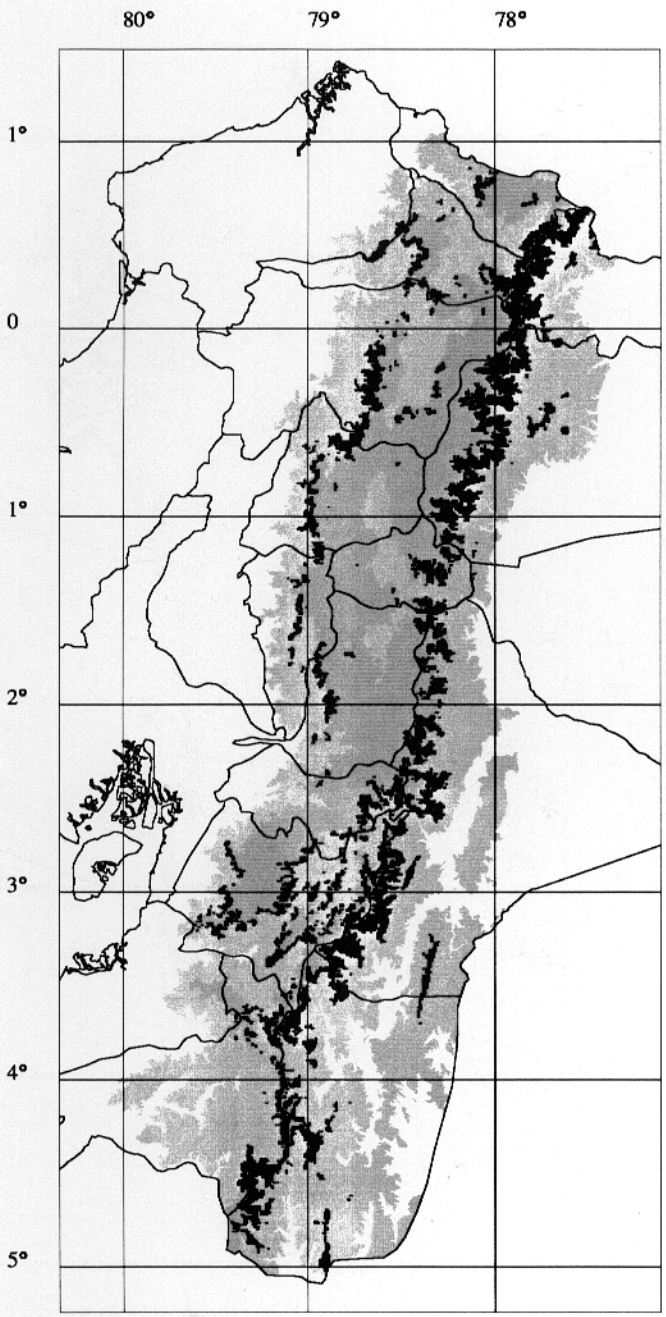
NW: 2200 –2900

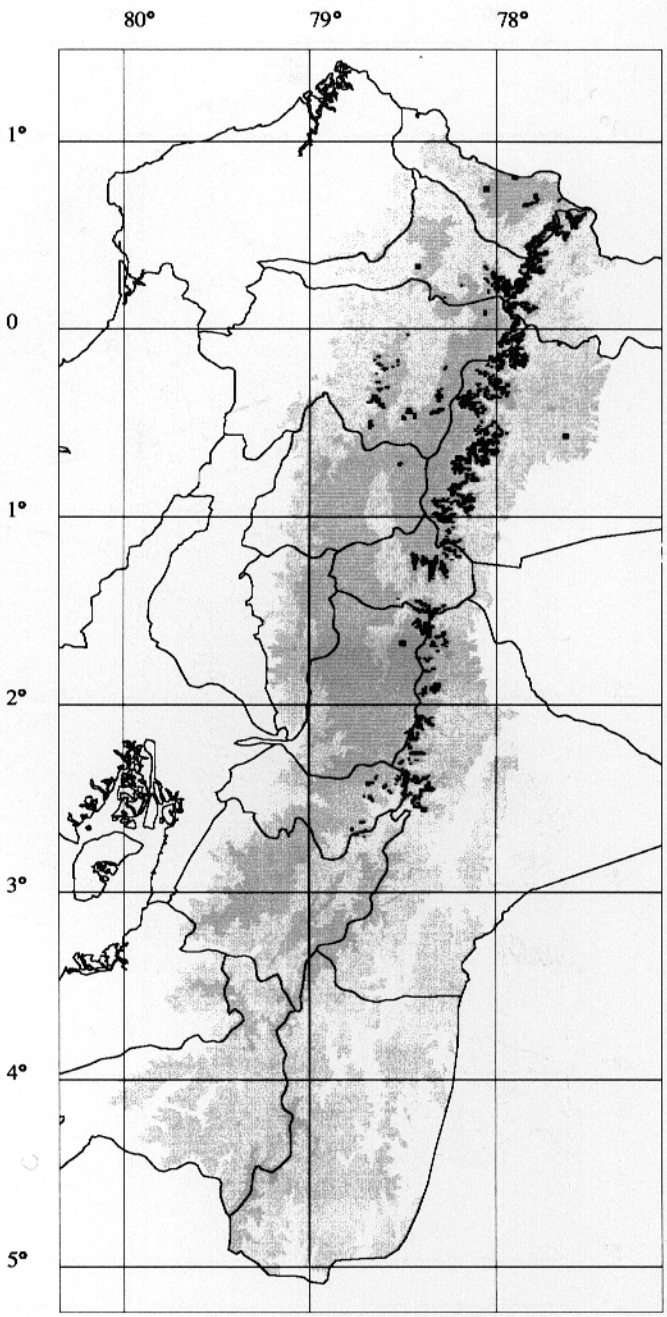
NE: 2100 –3100

S: 2000 –2900

Habitat: HPF HSF HS

Total distribution: 51 cells





White-browed Spinetail
Colaespina Cejiblanca

Hellmayrea gularis

Altitudinal range:

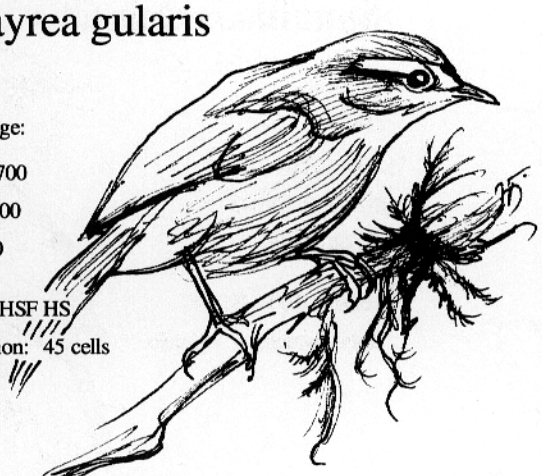
NW: 2800 –3700

NE: 2800 –3700

S: 2600 –3700

Habitat: HPF HSF HS

Total distribution: 45 cells



White-chinned Thistletail
Coliabrojo Barbiblanco

Schizoeaca fuliginosa

Altitudinal range:

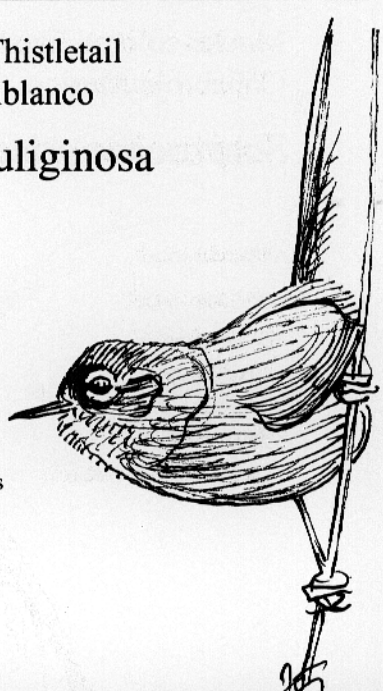
NW: 3300 –3800

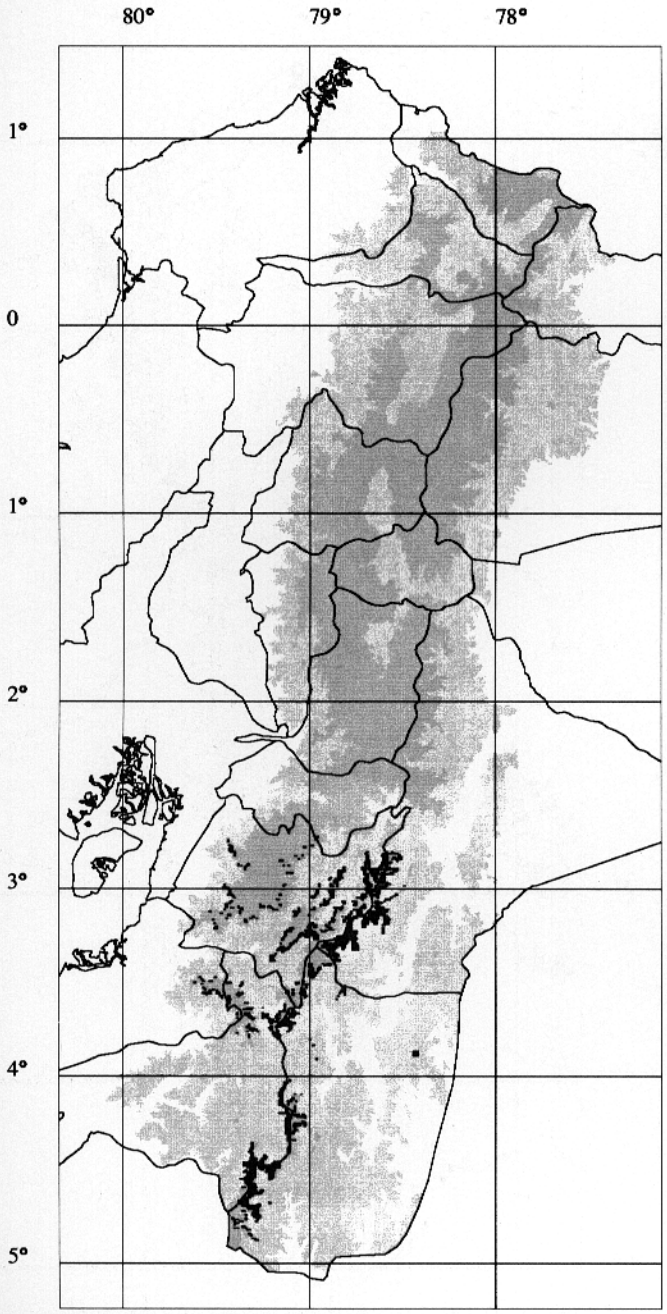
NE: 3300 –4000

S: Not found

Habitat: HS HSF

Total distribution: 21 cells





Mouse-colored Thistletail
Coliabrojo Murino

Schizoeaca griseomurina

Altitudinal range:

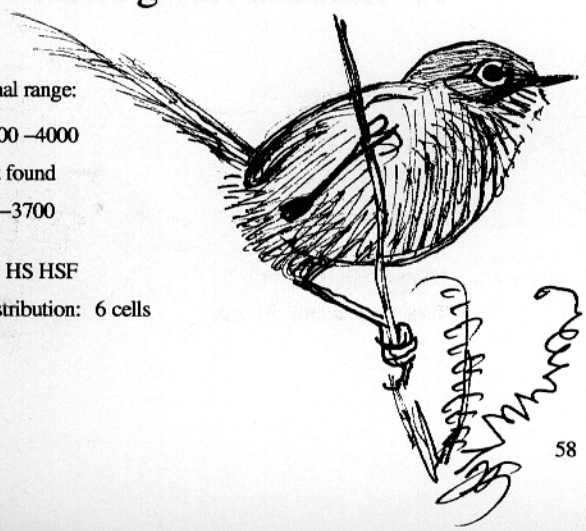
NW: 3300 –4000

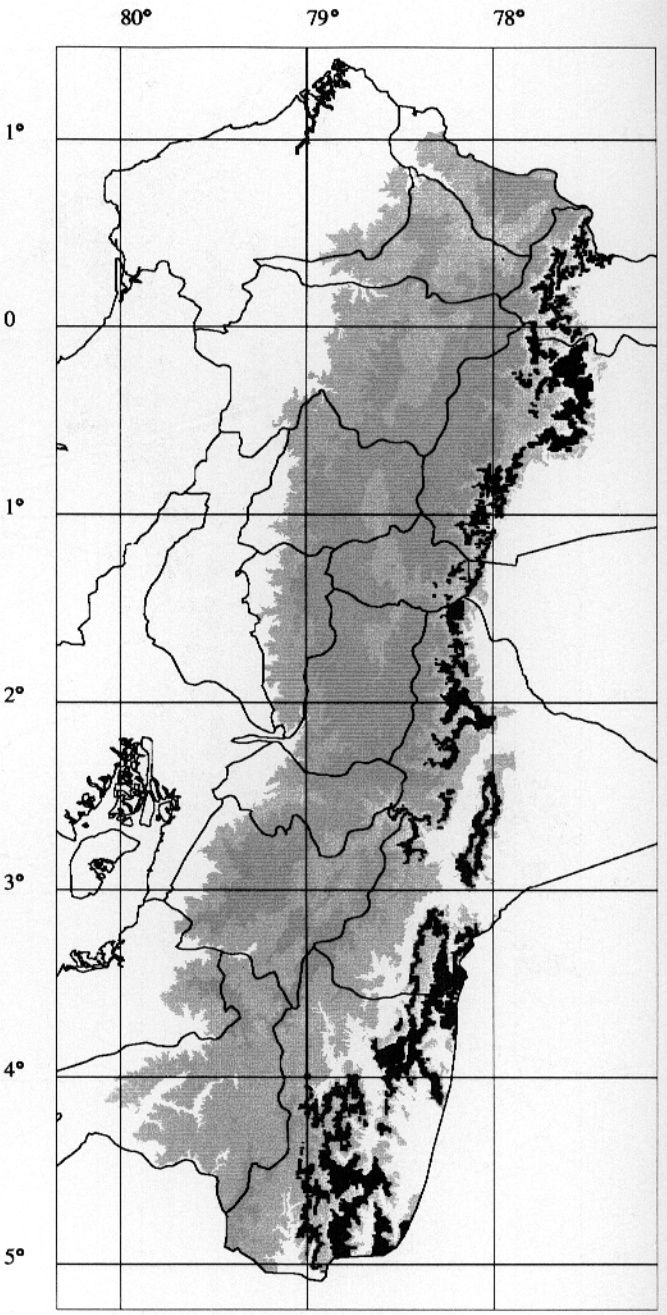
NE: Not found

S: 3000 –3700

Habitat: HS HSF

Total distribution: 6 cells





Spectacled Prickletail
Colapúa Frontino

Siptornis striaticollis

Altitudinal range:

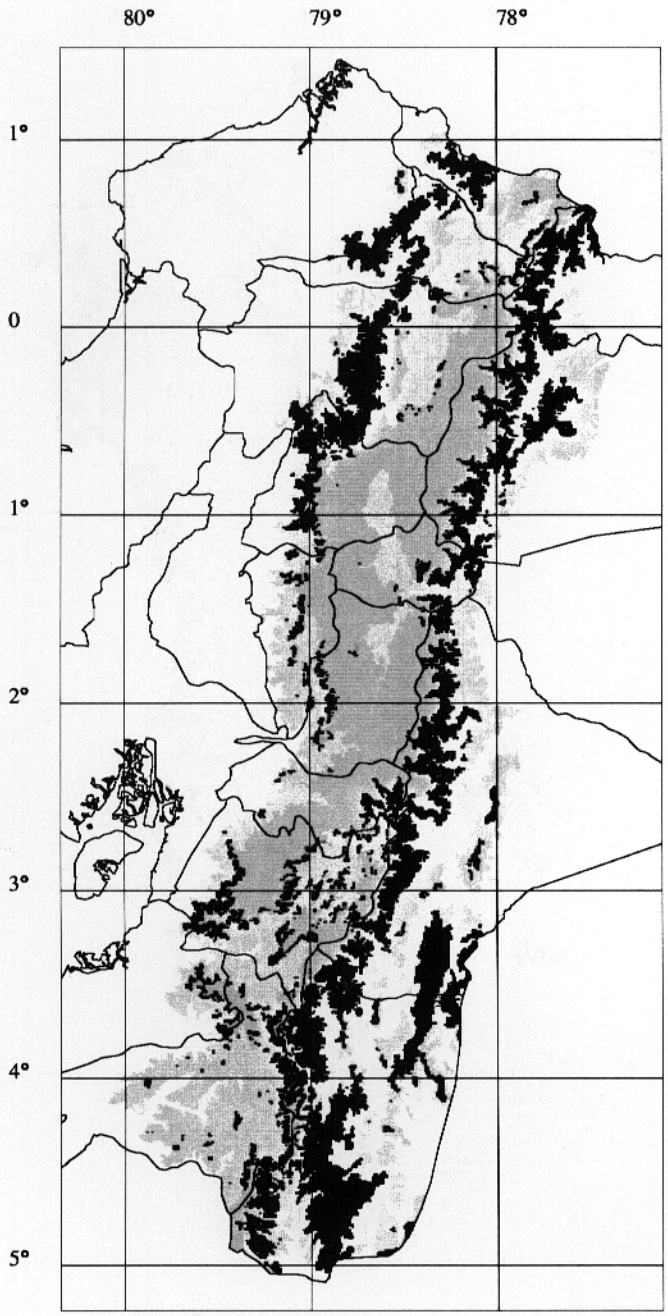
NW: Not found

NE: 1600 –2000

S: 1600 –2000

Habitat: HPF

Total distribution: 12 cells



Streaked Tuftedcheek
Barbablanca Rayada

Pseudocolaptes boissonneautii

Altitudinal range:

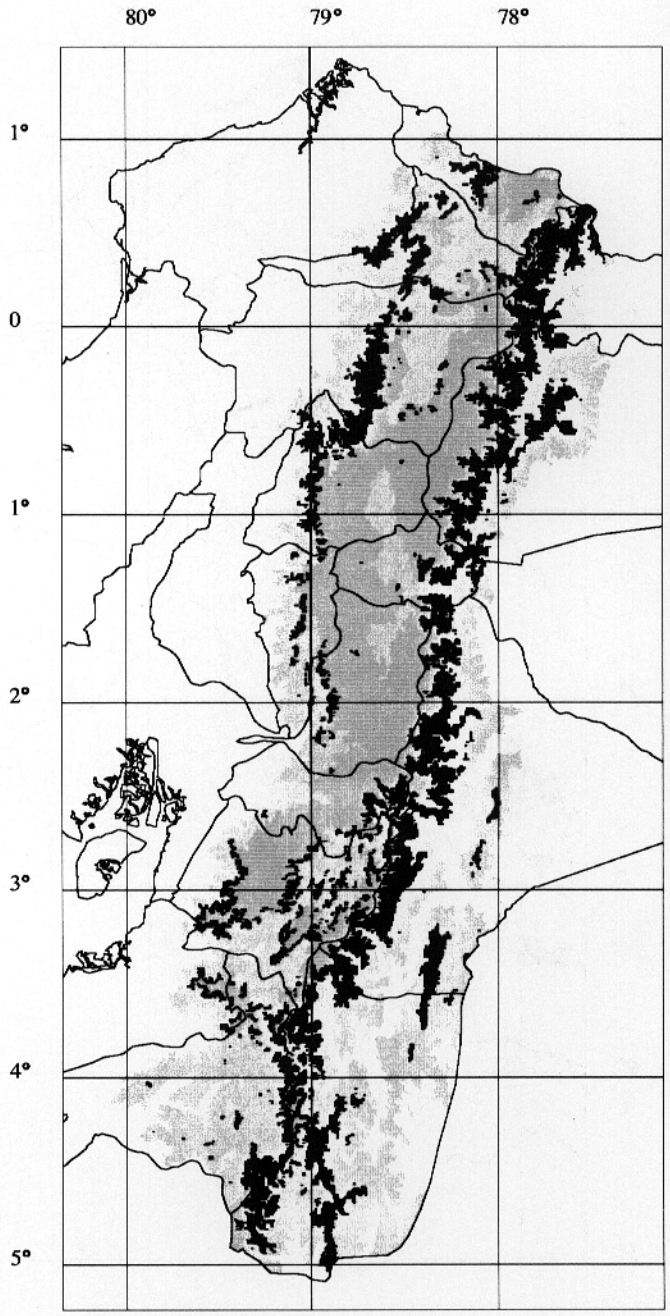
NW: 1700 –3500

NE: 2100 –3300

S: 1700 –3150

Habitat: HPF HSF HS

Total distribution: 87 cells



Pearled Treerunner
Subepalo Perlado

Margarornis squamiger

Altitudinal range:

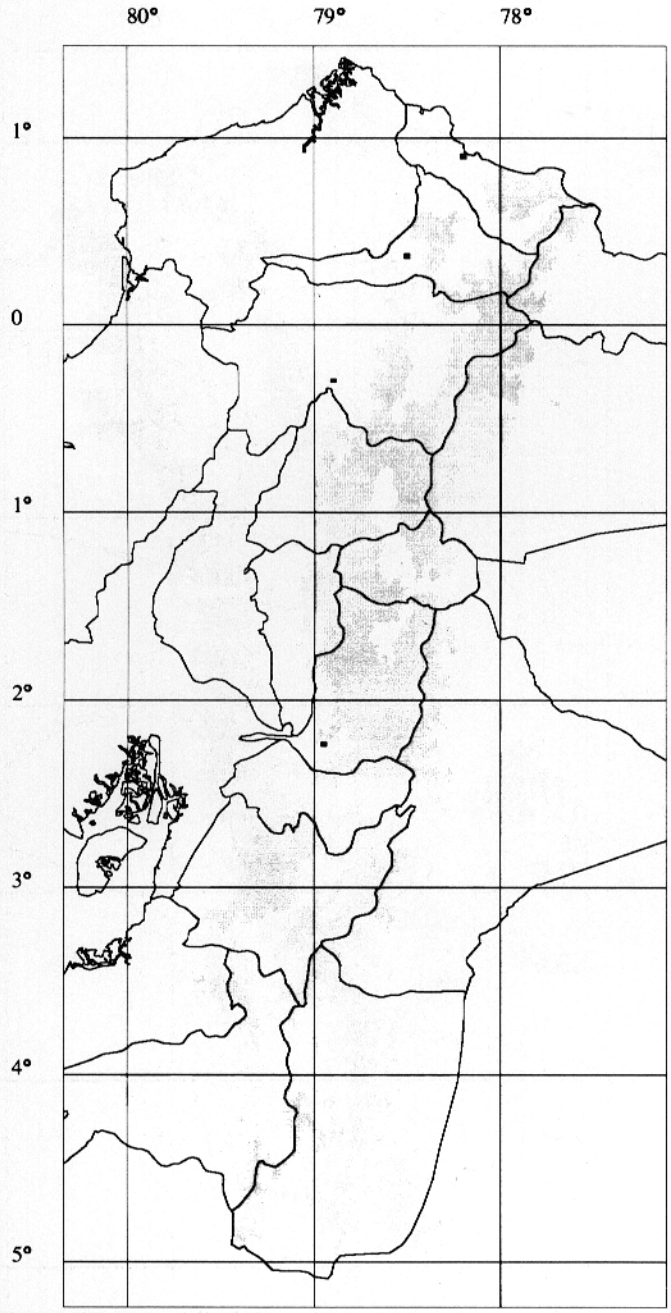
NW: 2200 –3500

NE: 2200 –3500

S: 2200 –3500

Habitat: HPF HSF HS

Total distribution: 87 cells



Fulvous-dotted Treerunner
Subepalo Fulvipunteado

Margarornis stellatus

Altitudinal range:

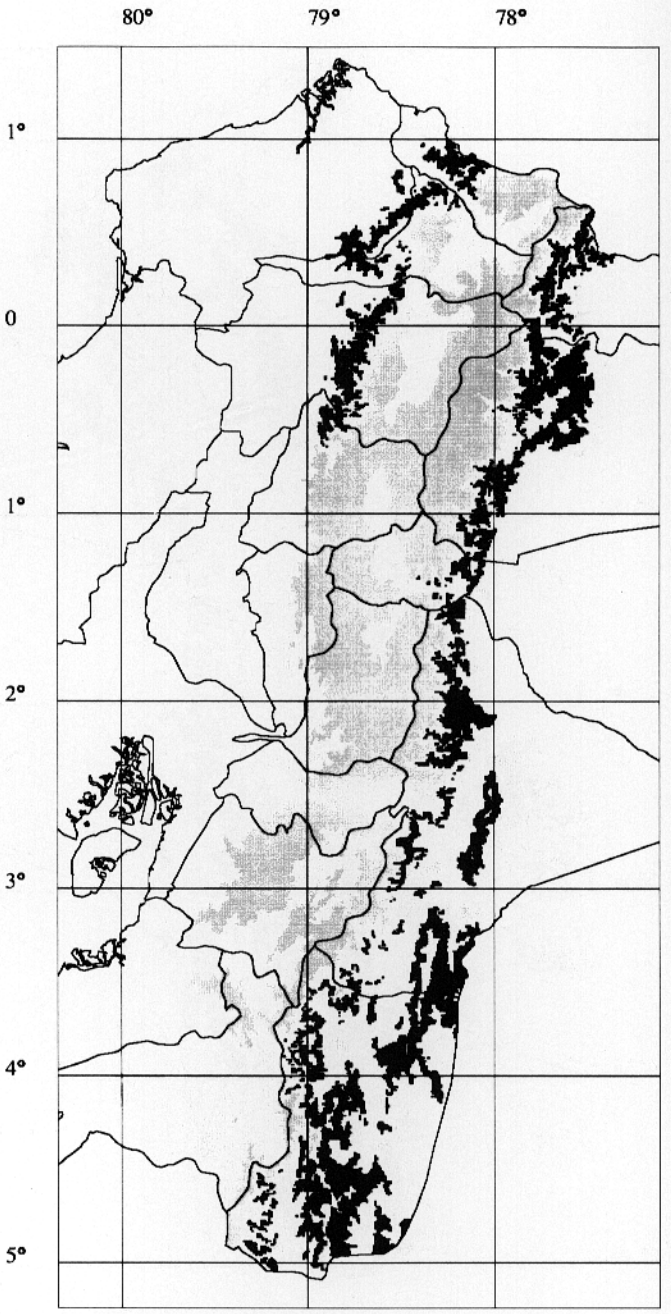
NW: Limited: 1200 –1900

NE: Not found

S: Not found

Habitat: HPF

Total distribution: 9 cells



Rusty-winged Barbtail
Subepalo Alirrojizo

Premnornis guttuligera

Altitudinal range:

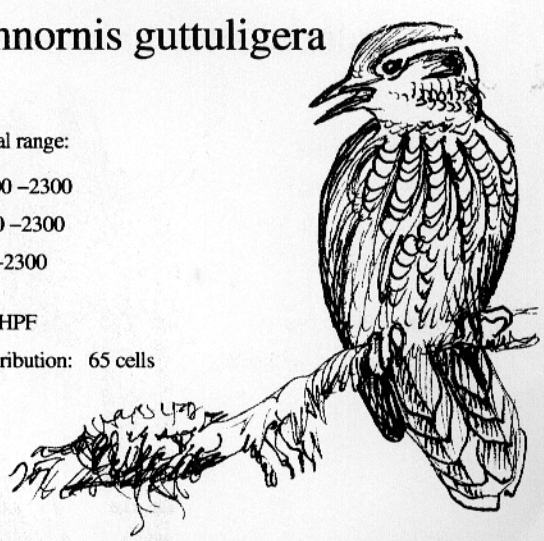
NW: 1600 –2300

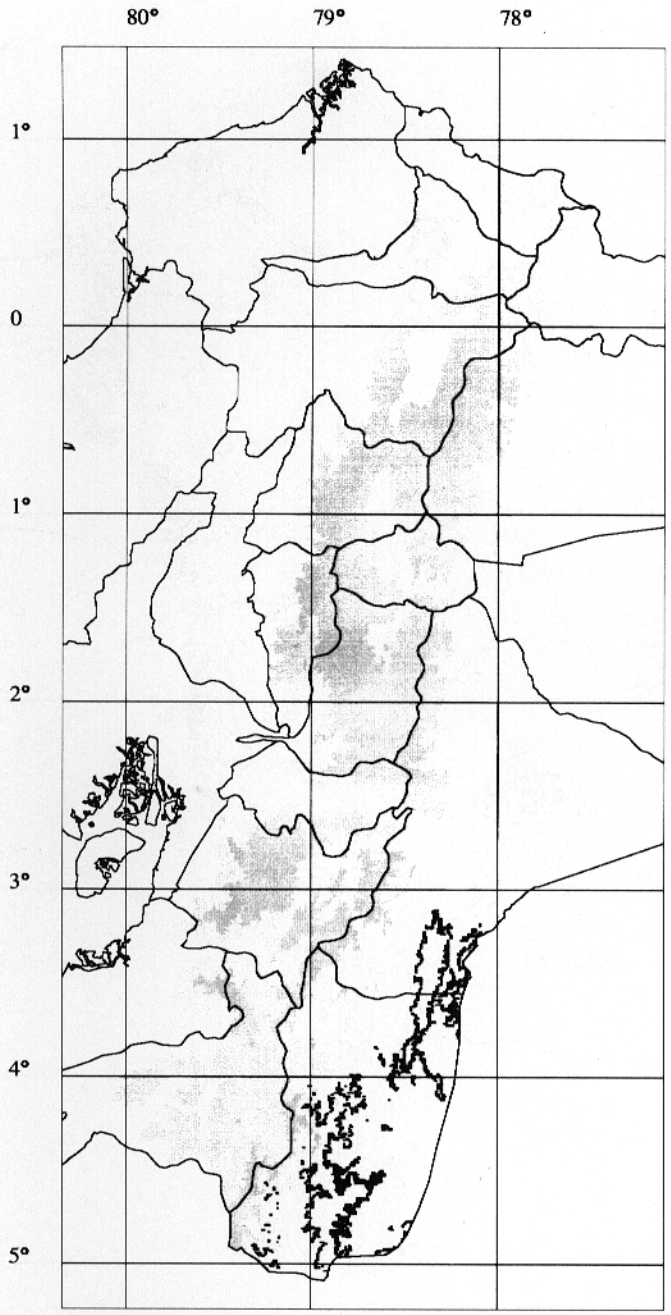
NE: 1600 –2300

S: 1600 –2300

Habitat: HPF

Total distribution: 65 cells





Buff-browed Foliage-gleaner
Limpiafronda Cejihabana

Syndactyla rufosuperciliata

Altitudinal range:

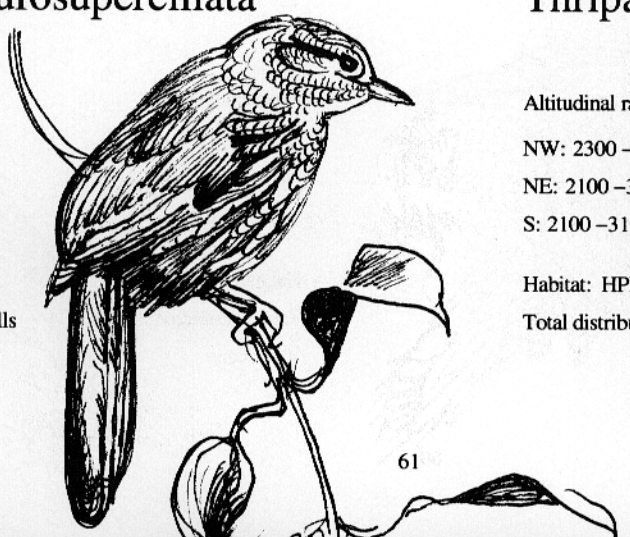
NW: Not found

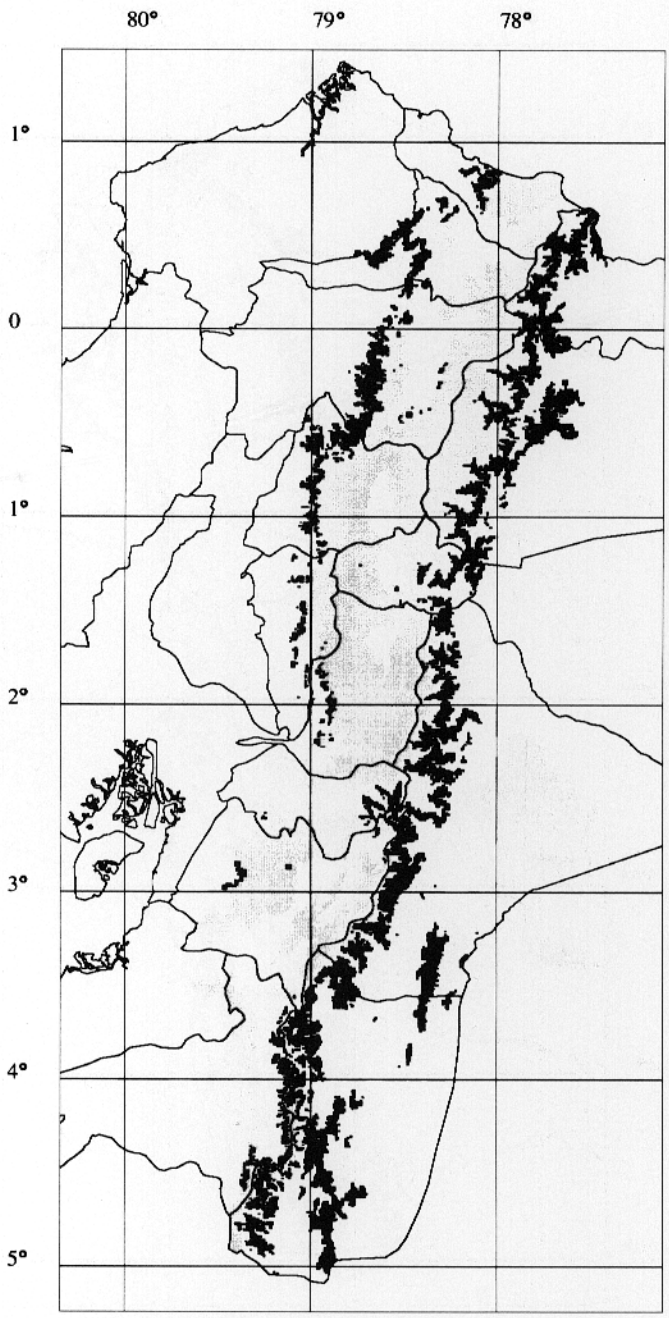
NE: Not found

S: 1700 –1950

Habitat: HPF

Total distribution: 175 cells





Flammulated Treehunter
Trepamusgos Flamulado

Thripadectes flammulatus

Altitudinal range:

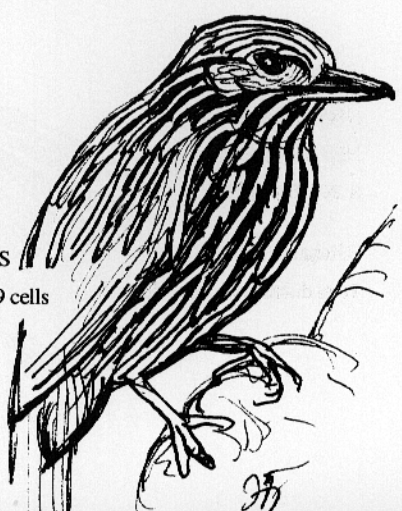
NW: 2300 –3300

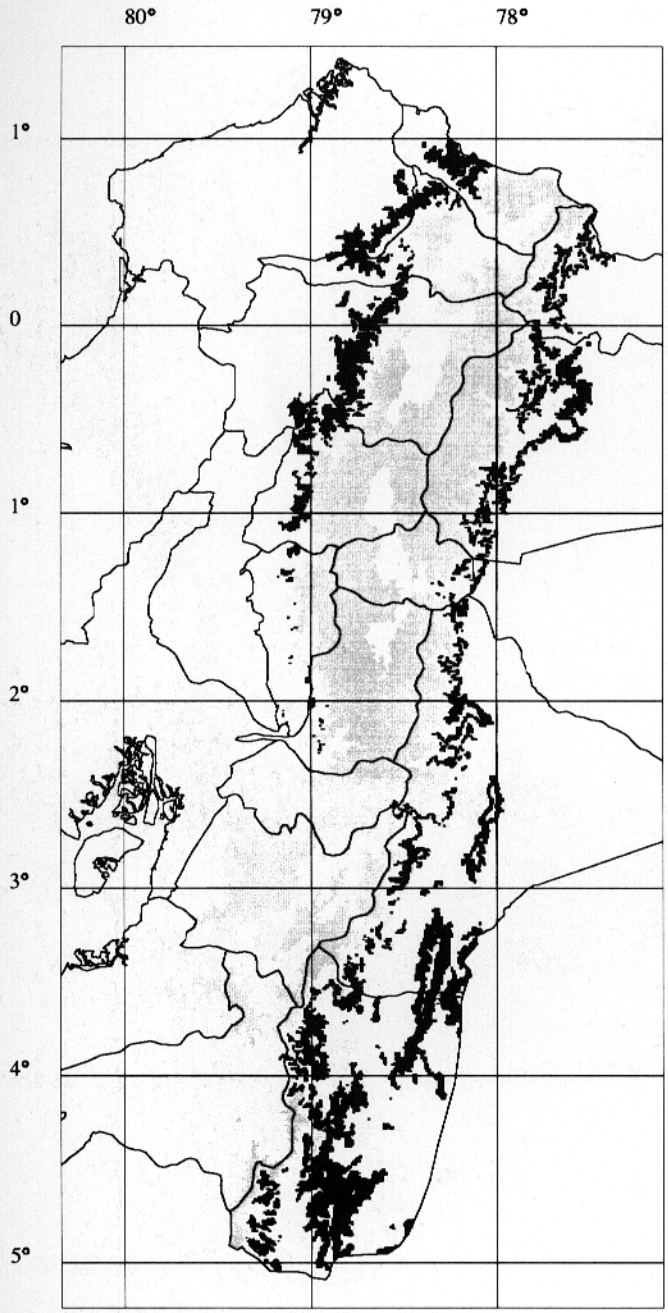
NE: 2100 –3100

S: 2100 –3100

Habitat: HPF HSF HS

Total distribution: 29 cells





Striped Treehunter
Trepamusgos Franjeado

Thripadectes holostictus

Altitudinal range:

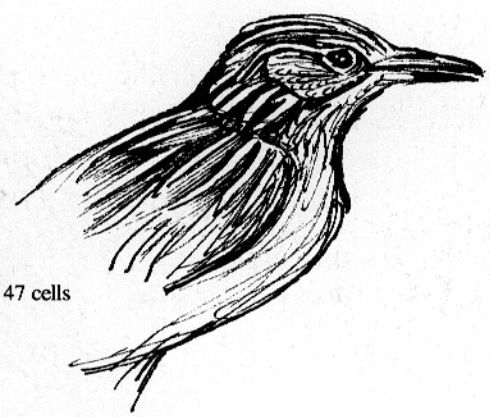
NW: 1500 –2350

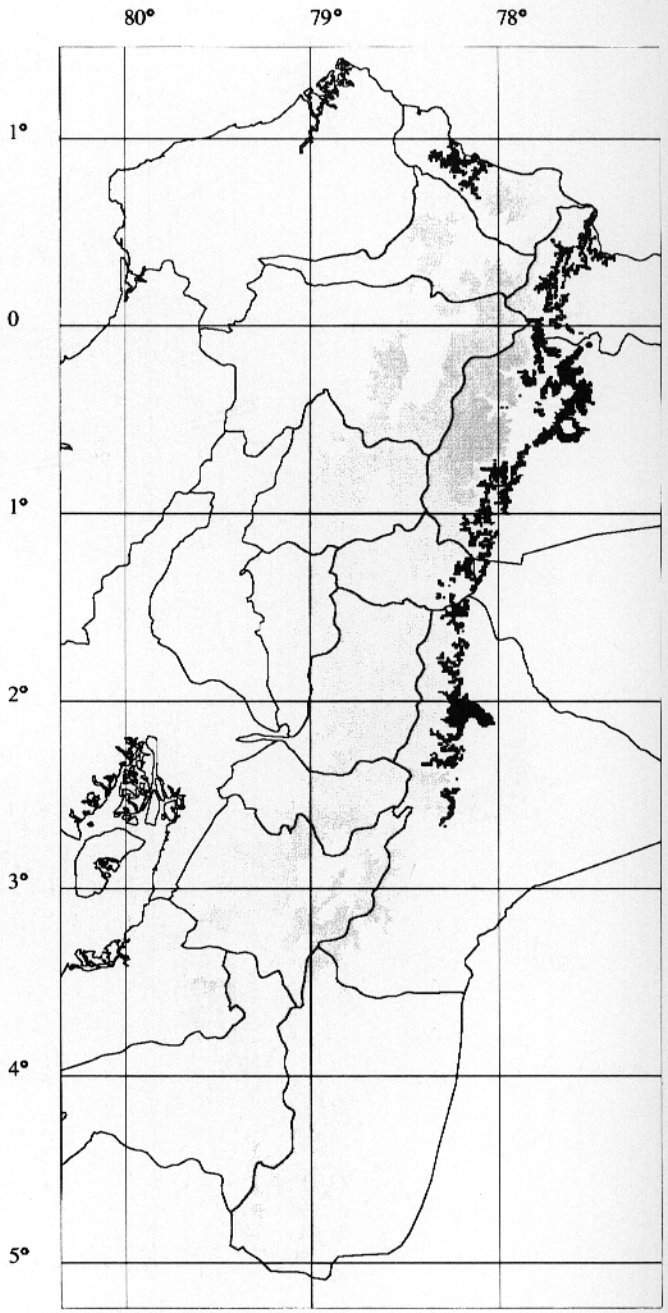
NE: 1700 –2100

S: 1700 –2500

Habitat: HPF HSF

Total distribution: 47 cells





Bicolored Antvireo
Batara Occidental

Dysithamnus occidentalis

Altitudinal range:

NW: 1675 –2200

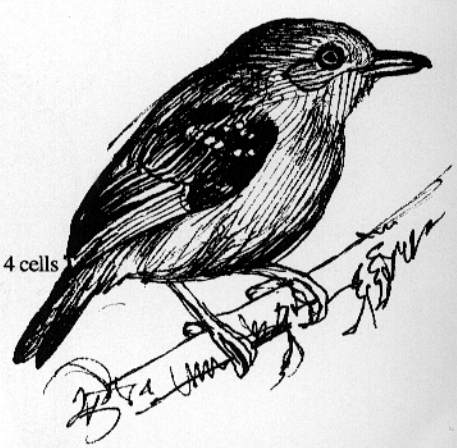
NE: 1675 –2200

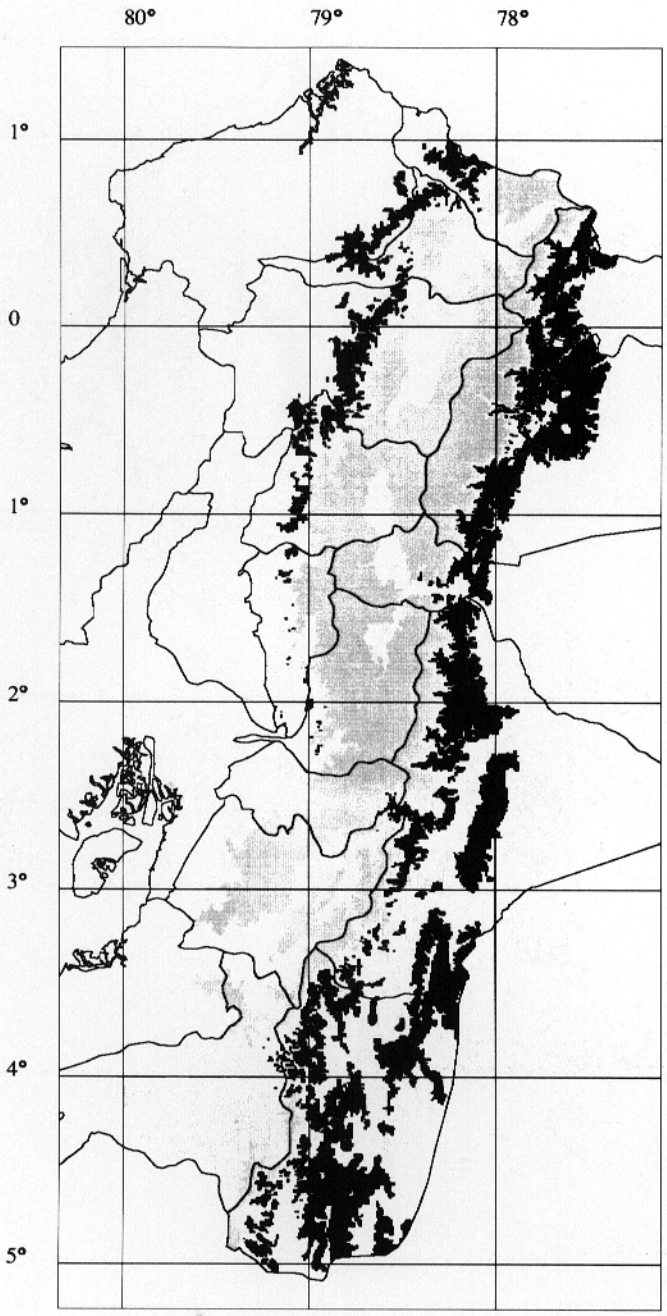
S: Not found

Habitat: HPF

Total distribution: 4 cells

Vulnerable





Long-tailed Antbird
Hormiguero Colilargo

Drymophila caudata

Altitudinal range:

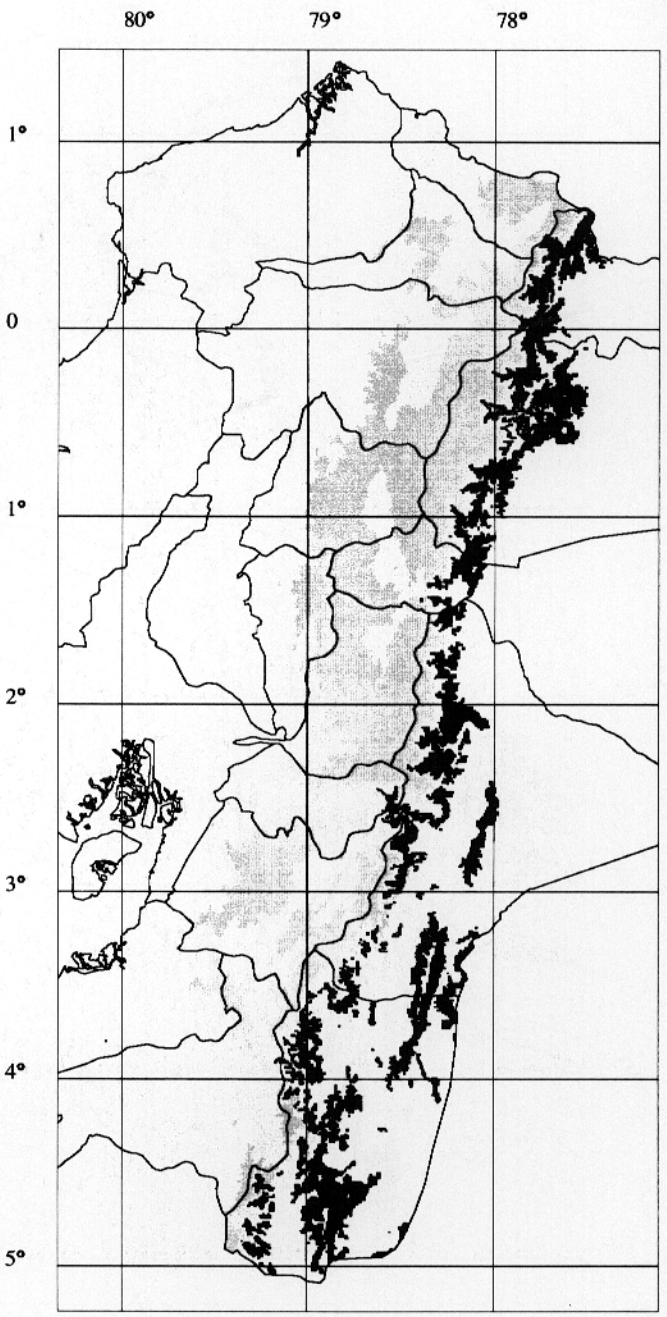
NW: 1500 –2300

NE: 1200 –2500

S: 1500 –2500

Habitat: HPF HSF HS

Total distribution: 53 cells



Barred Antthrush
Rasconzuelo Barreteado

Chamaeza mollissima

Altitudinal range:

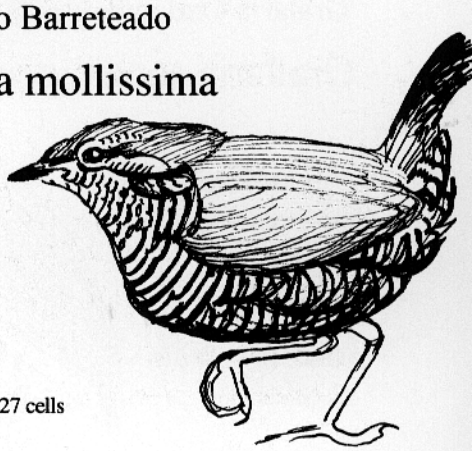
NW: Not found

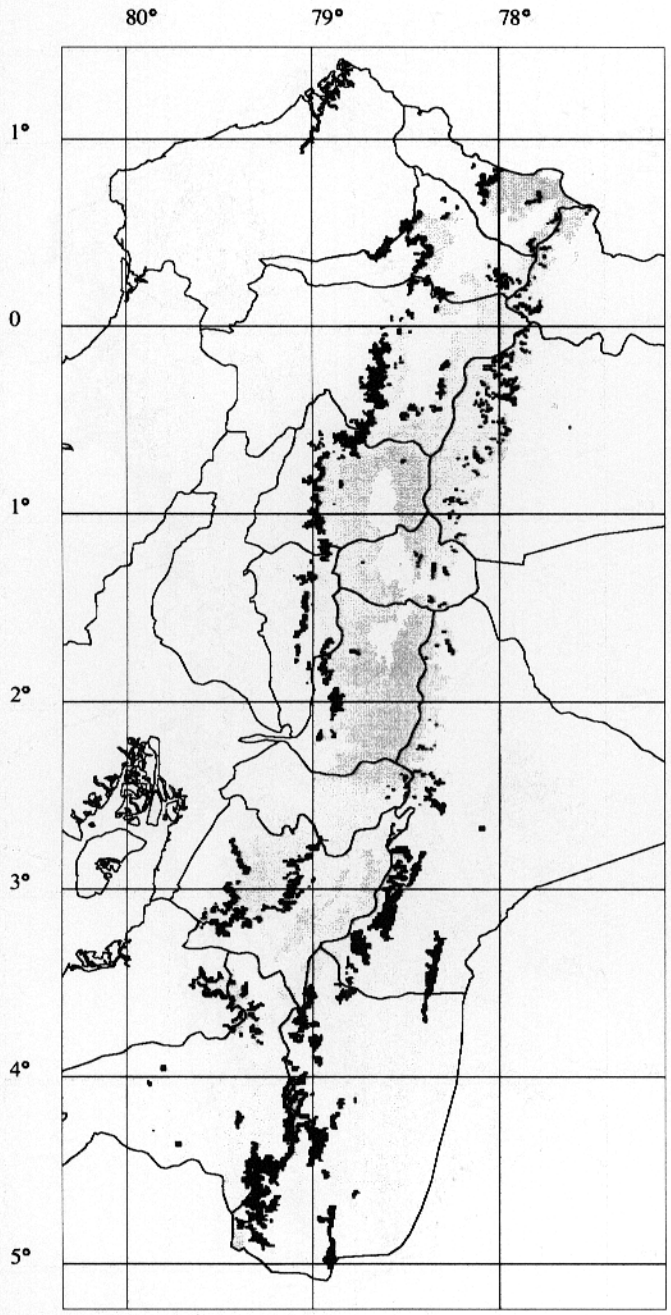
NE: 1800 –2800

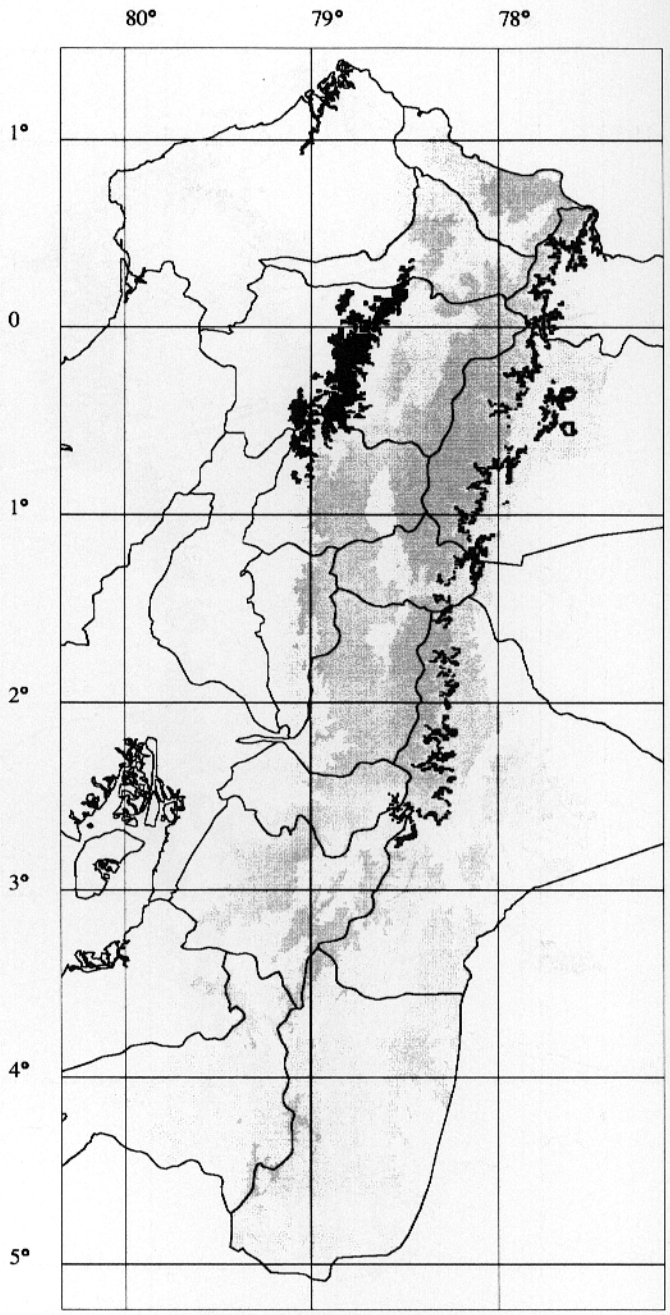
S: 1800 –2500

Habitat: HPF HSF

Total distribution: 27 cells







Undulated Antpitta
Gralaria Ondulada

Grallaria squamigera

Altitudinal range:

NW: 2700 –3800

NE: 3350 –3700

S: 2450 –3700

Habitat: HPF HSF (HS)

Total distribution: 50 cells

Giant Antpitta
Gralaria Gigante

Grallaria gigantea

Altitudinal range:

NW: 1200 –2300

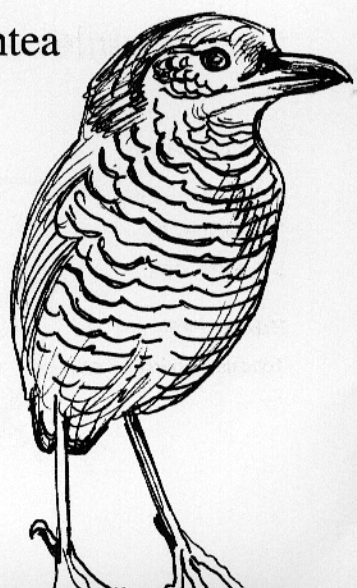
NE: 2200 –2600

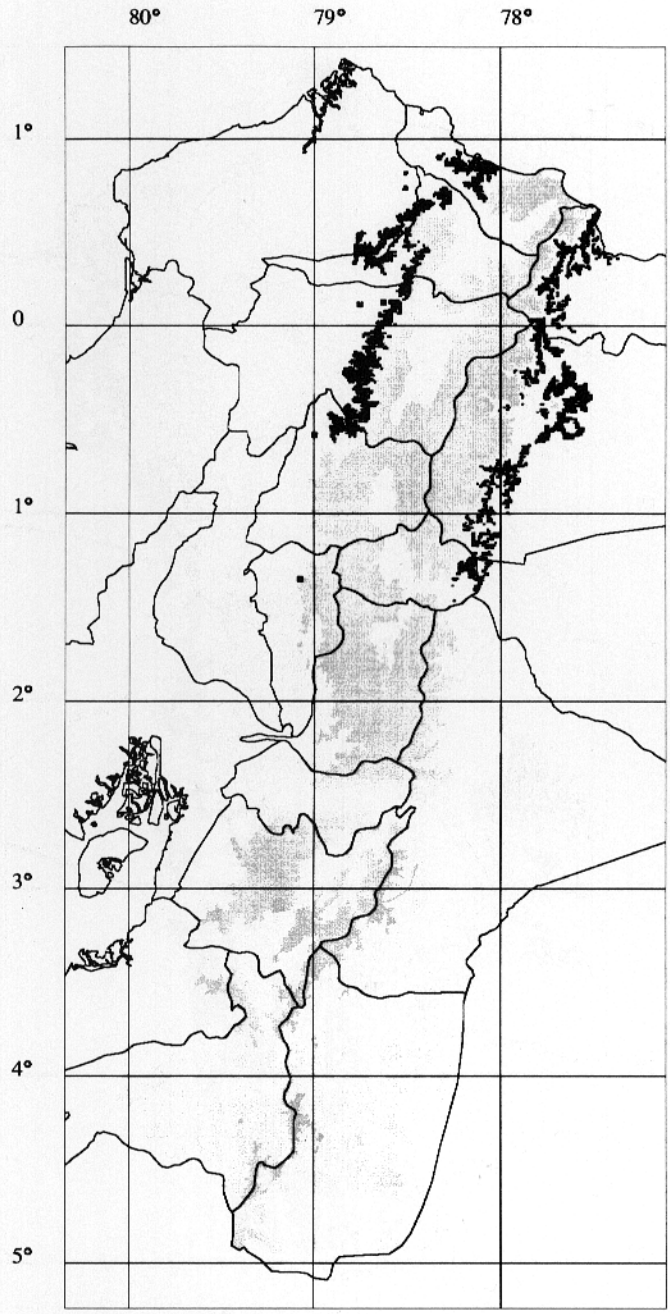
S: Not found

Habitat: HPF

Total distribution: 8 cells

Vulnerable





Moustached Antpitta
Gralaria Bigotiblanca

Grallaria alleni

Altitudinal range:

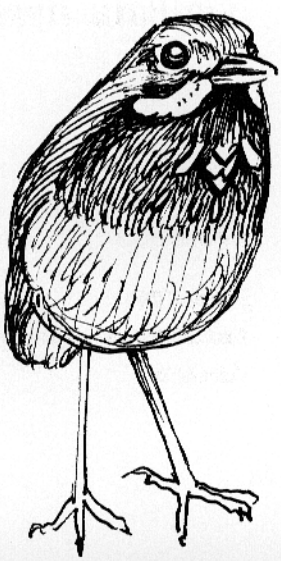
NW: 1850 –2700

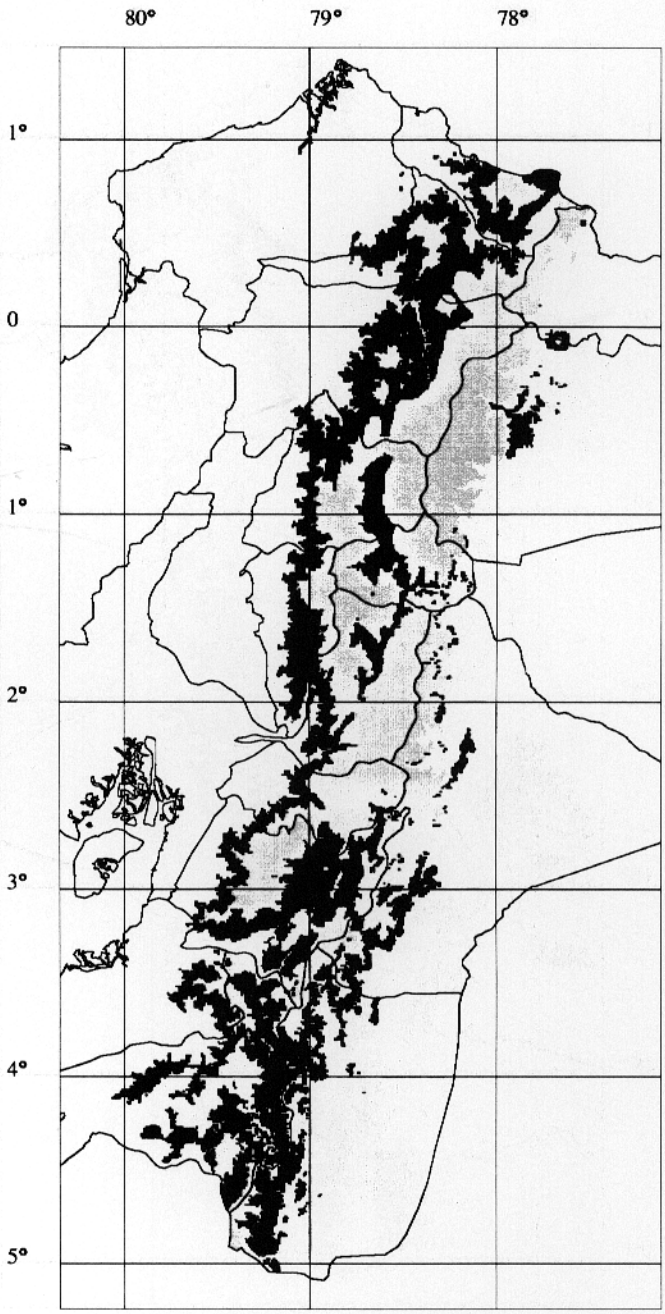
NE: 1850 –2300

S: Not found

Habitat: HPF

Total distribution: 8 cells





Chestnut-crowned Antpitta
Gralaria Coronicastaña

Grallaria ruficapilla

Altitudinal range:

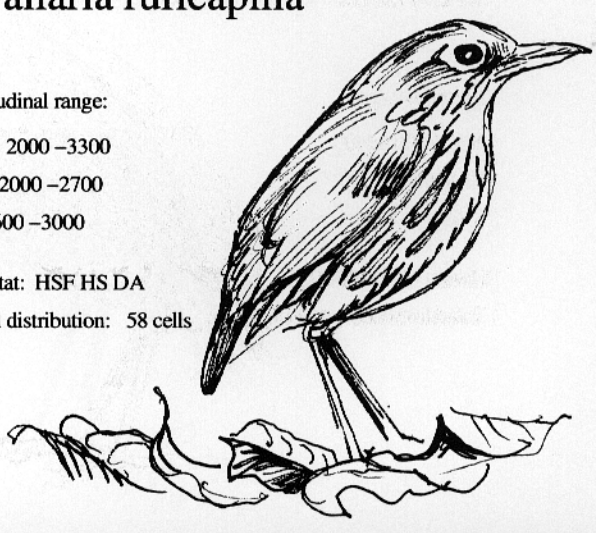
NW: 2000 –3300

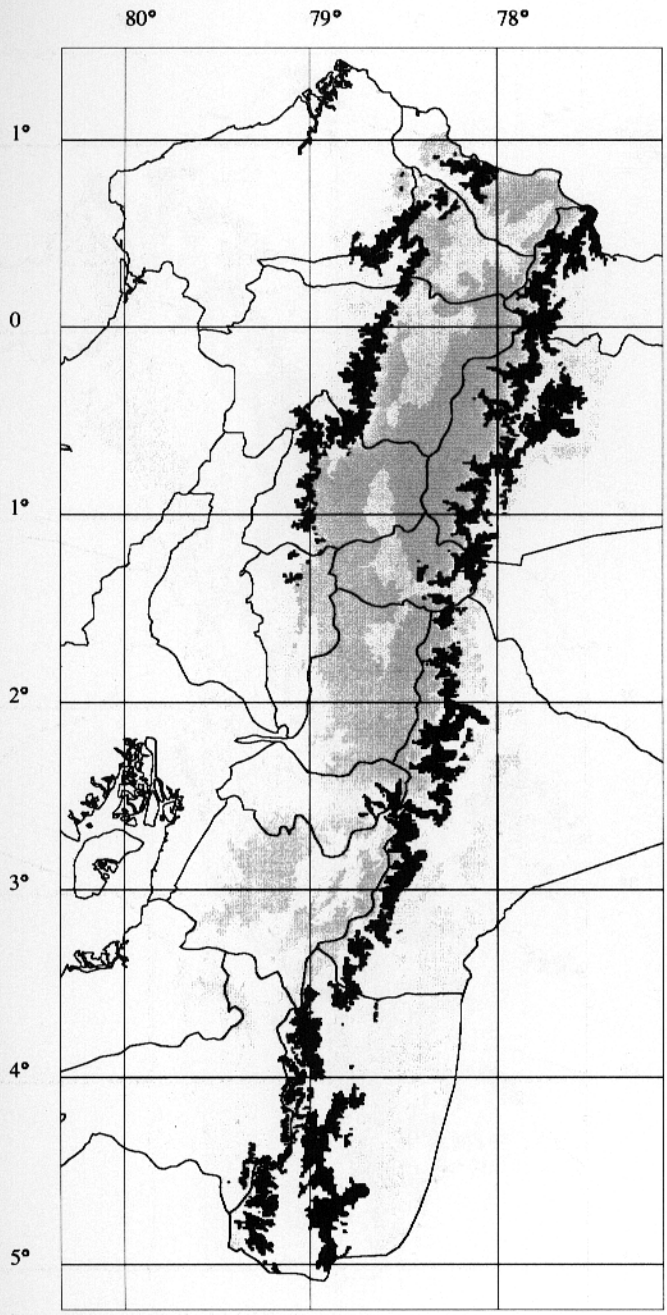
NE: 2000 –2700

S: 1600 –3000

Habitat: HSF HS DA

Total distribution: 58 cells





Chestnut-naped Antpitta
Gralaria Nuquicastaña

Grallaria nuchalis

Altitudinal range:

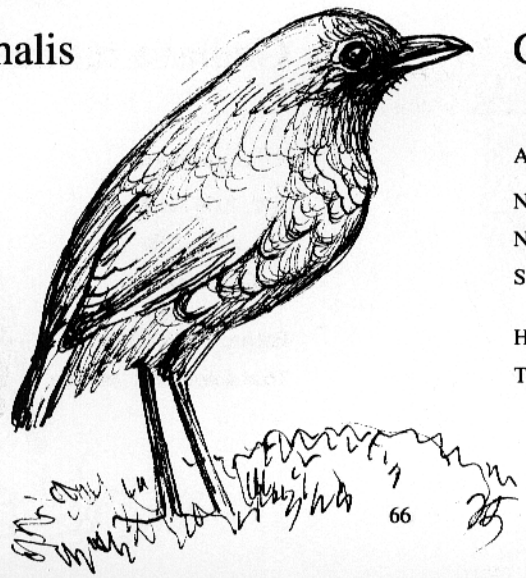
NW: 2000 –3100

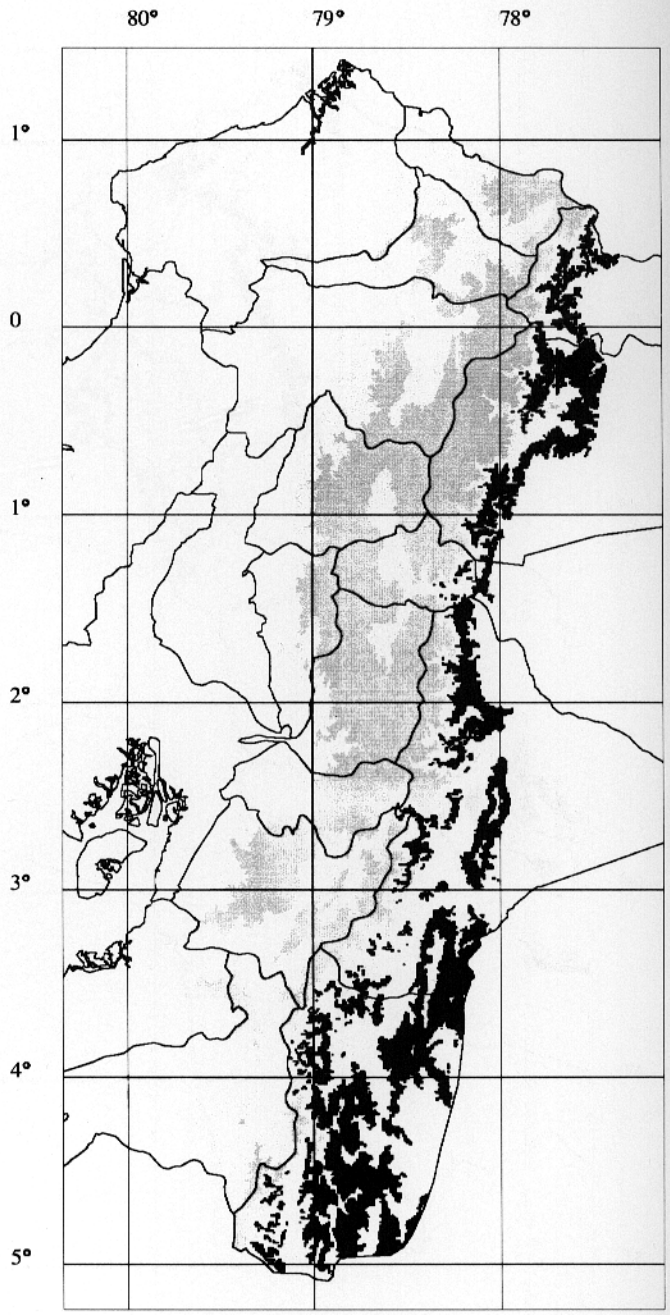
NE: 2000 –3100

S: 2000 –3100

Habitat: HPF HSF

Total distribution: 14 cells





White-bellied Antpitta
Gralaria Ventriblanca

Grallaria hypoleuca

Altitudinal range:

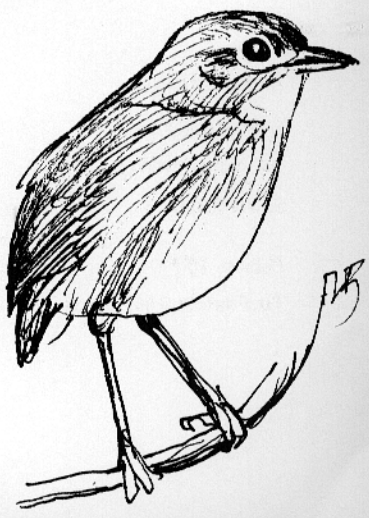
NW: Not found

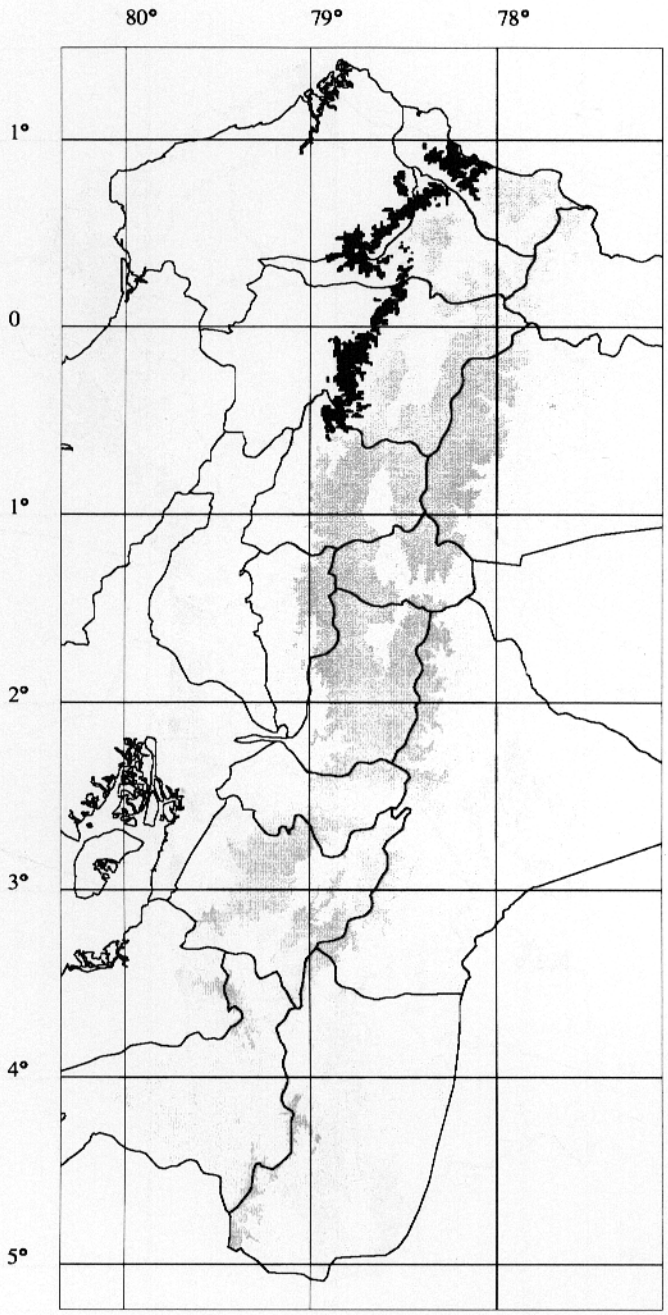
NE: 1400 –2050

S: 1400 –2250

Habitat: HPF

Total distribution: 30 cells





Yellow-breasted Antpitta
Gralaria Pechiamarilla

Grallaria flavotincta

Altitudinal range:

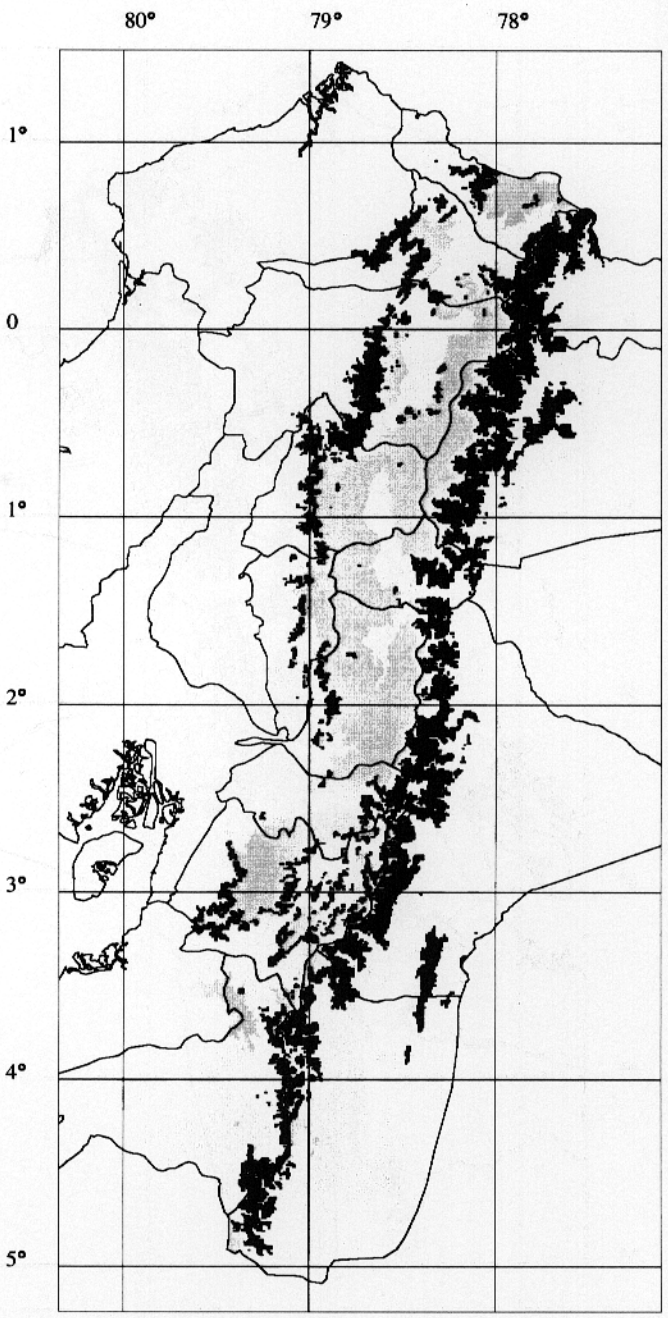
NW: 1500 –2300

NE: Not found

S: Not found

Habitat: HPF

Total distribution: 9 cells



Rufous Antpitta
Gralaria Rufa

Grallaria rufula

Altitudinal range:

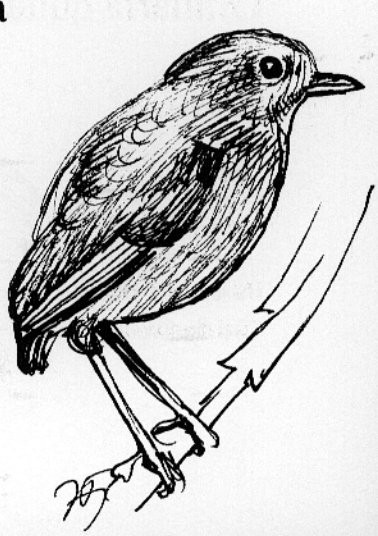
NW: 2200 –3800

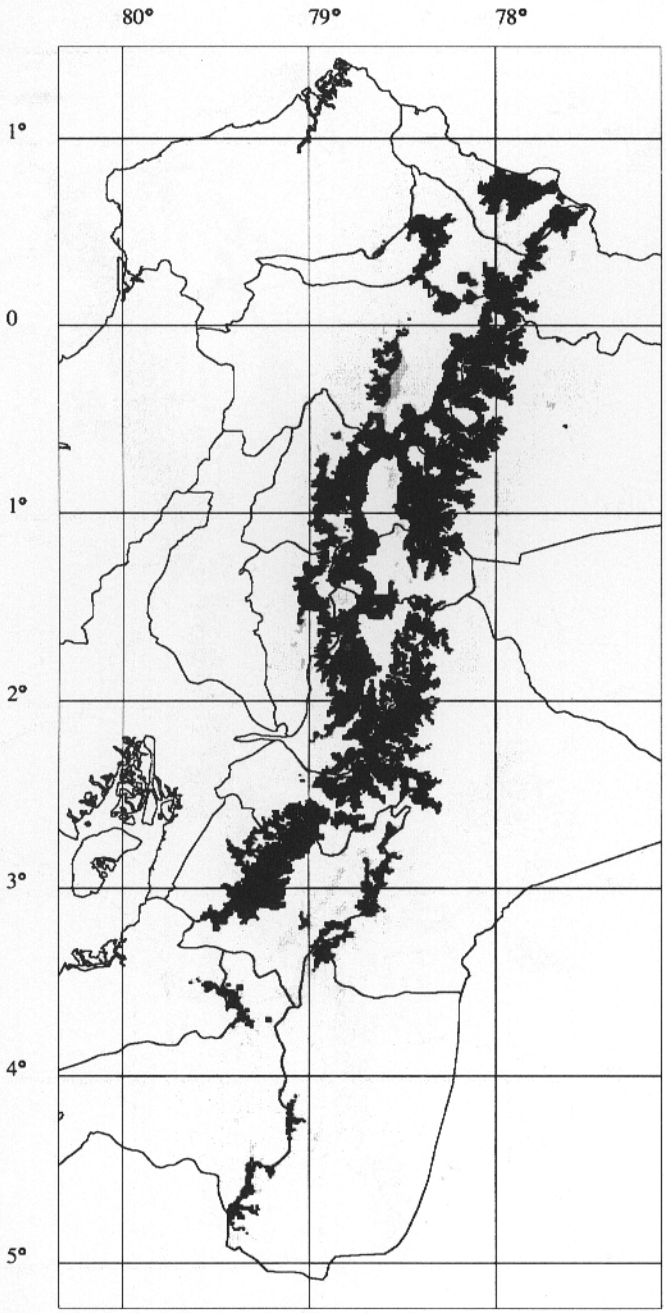
NE: 2200 –3900

S: 2200 –3700

Habitat: HPF HSF HS

Total distribution: 58 cells





Tawny Antpitta
Gralaria Leonada

Grallaria quitensis

Altitudinal range:

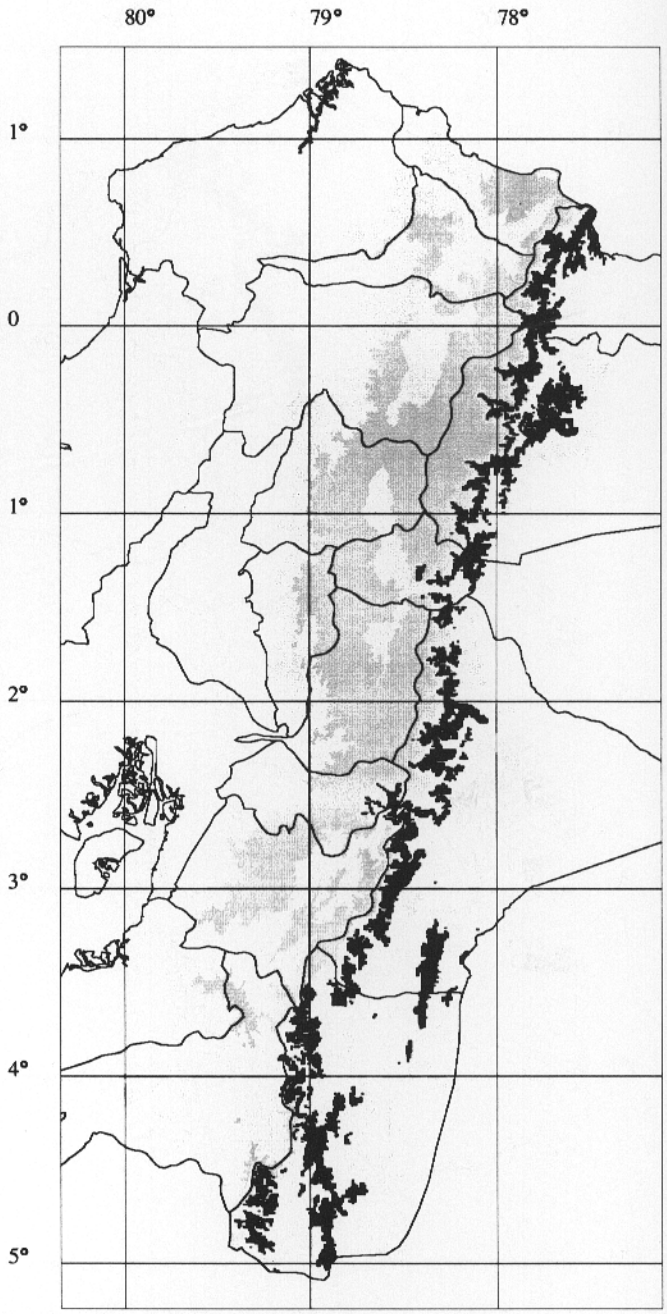
NW: 3200 –4000

NE: 3300 –4100

S: 3350 –3700

Habitat: HPF HSF HS DA

Total distribution: 27 cells



Slate-crowned Antpitta
Gralarita Coronipizarra

Grallaricula nana

Altitudinal range:

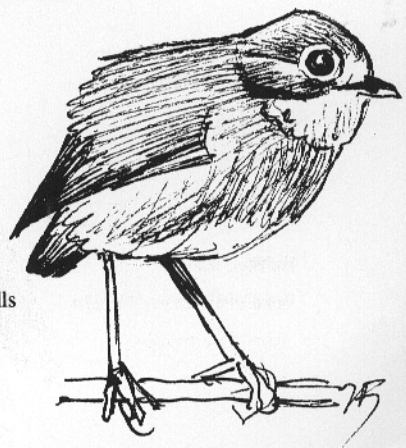
NW: Not found

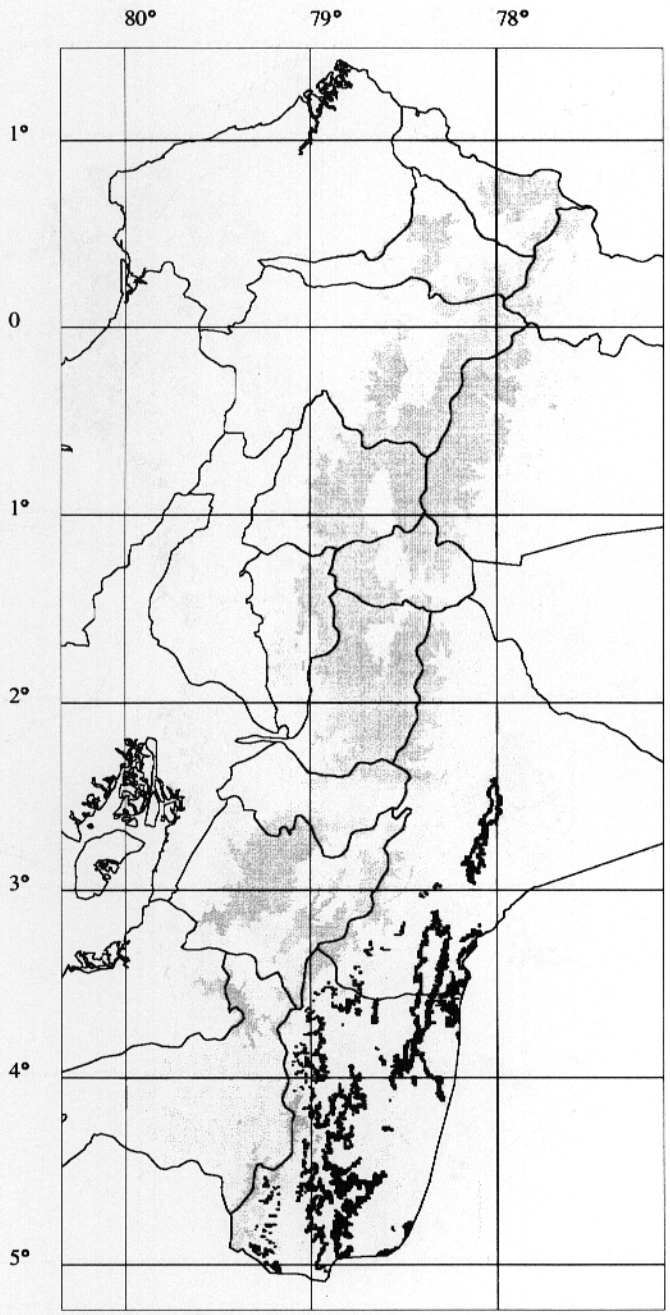
NE: 2000 –2900

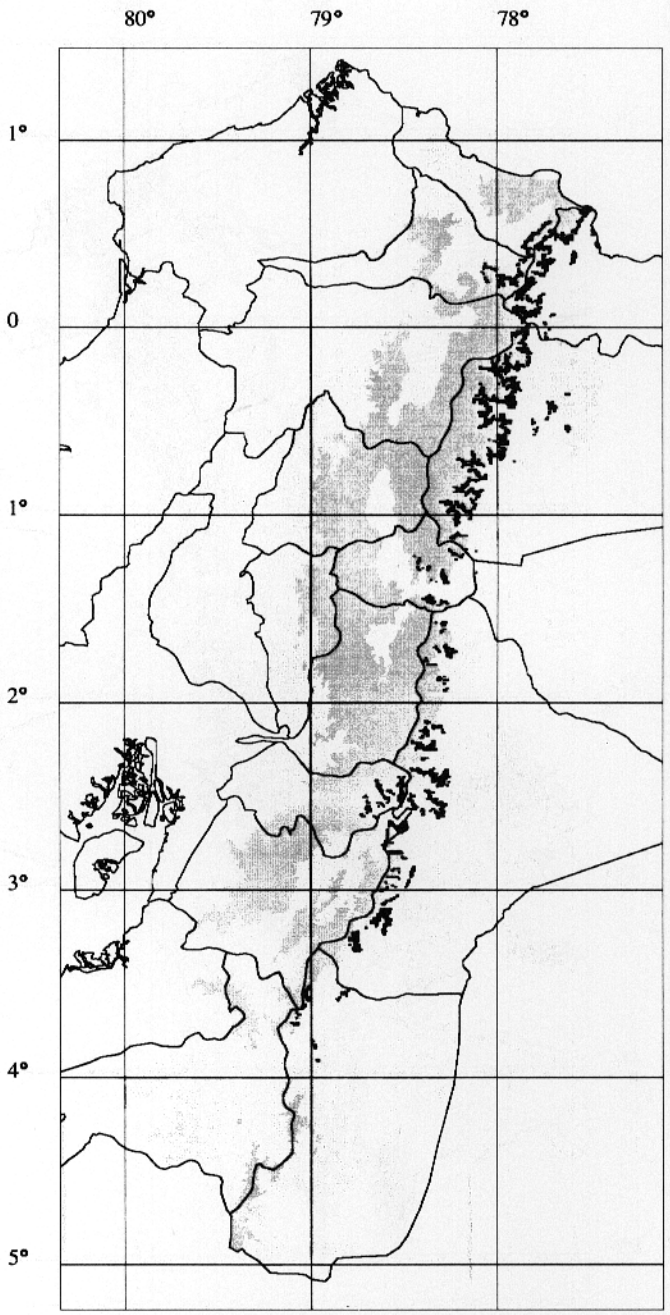
S: 2100 –3150

Habitat: HPF HSF

Total distribution: 34 cells







Peruvian Antpitta
Gralarita Peruana

Grallaricula peruviana

Altitudinal range:

NW: Not found

NE: 1750 –2100

S: 1750 –2100

Habitat: HPF

Total distribution: 4 cells

Near –threatened

Crescent-faced Antpitta
Gralarita Carilunada

Grallaricula lineifrons

Altitudinal range:

NW: Not found

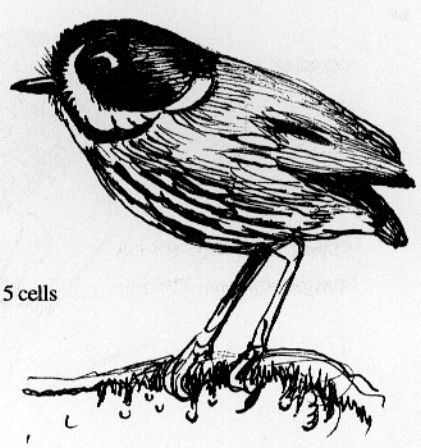
NE: 2900 –3400

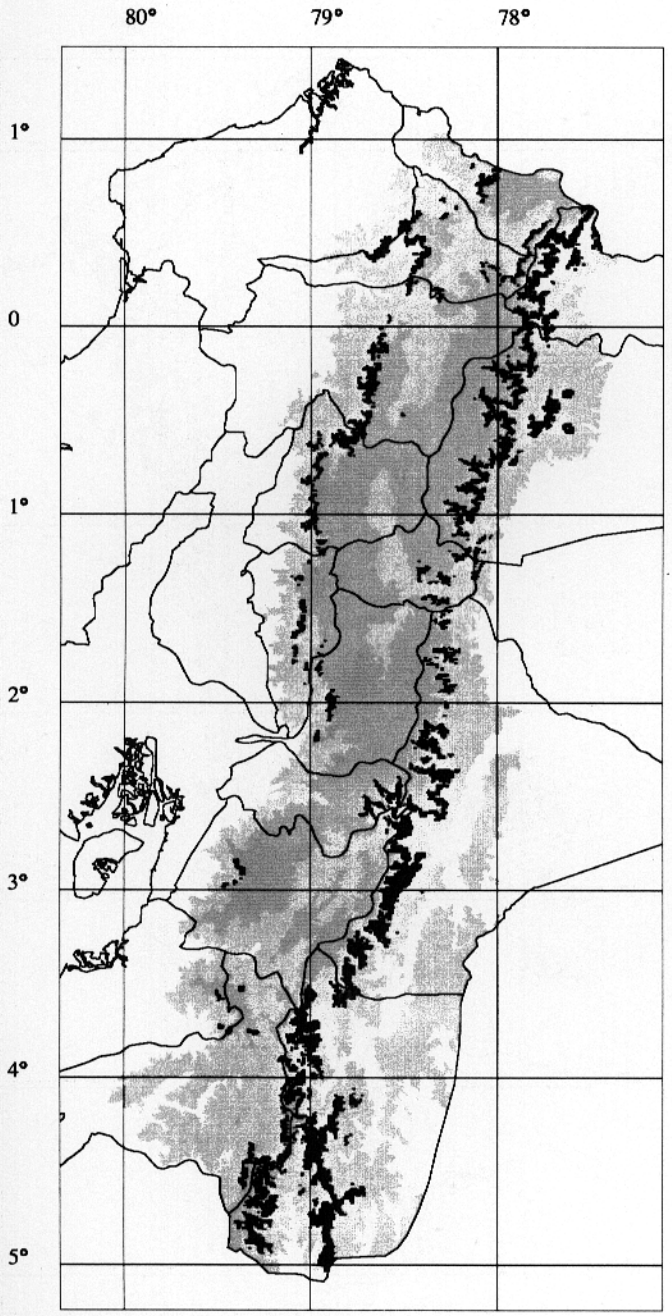
S: 2900 –3400

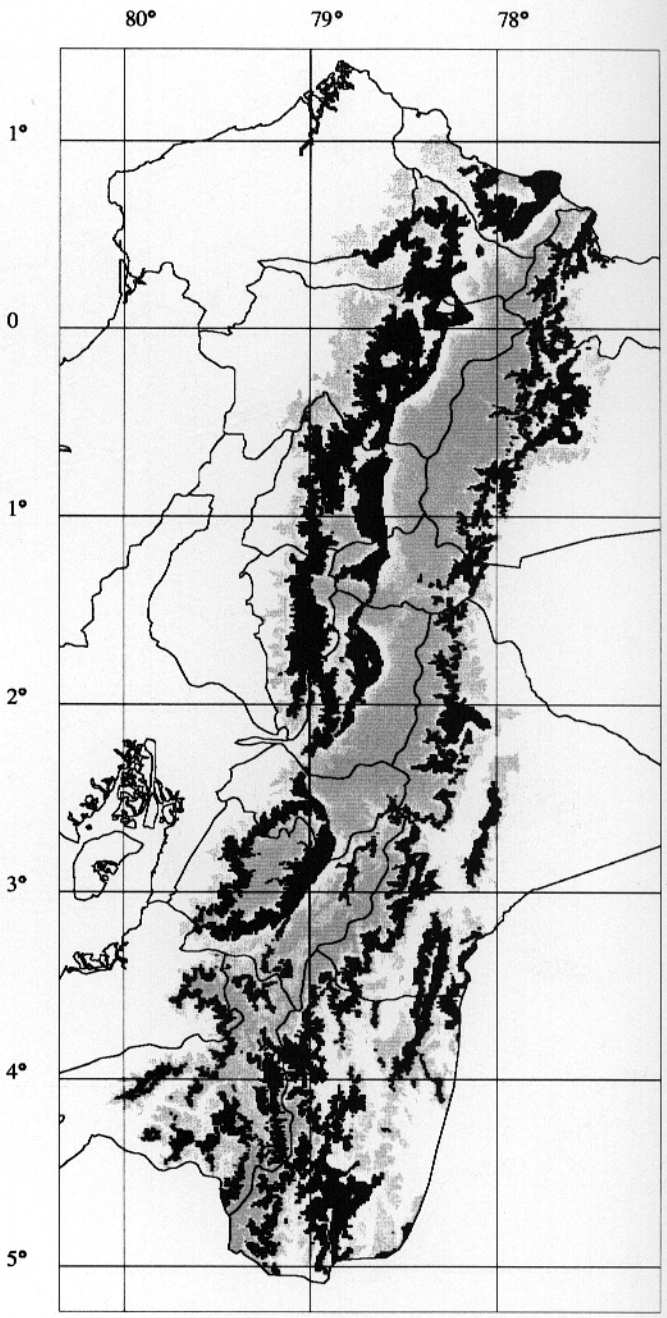
Habitat: HPF HSF

Total distribution: 5 cells

Near –threatened







Ash-colored Tapaculo
Tapaculo Cenizo

Myornis senilis

Altitudinal range:

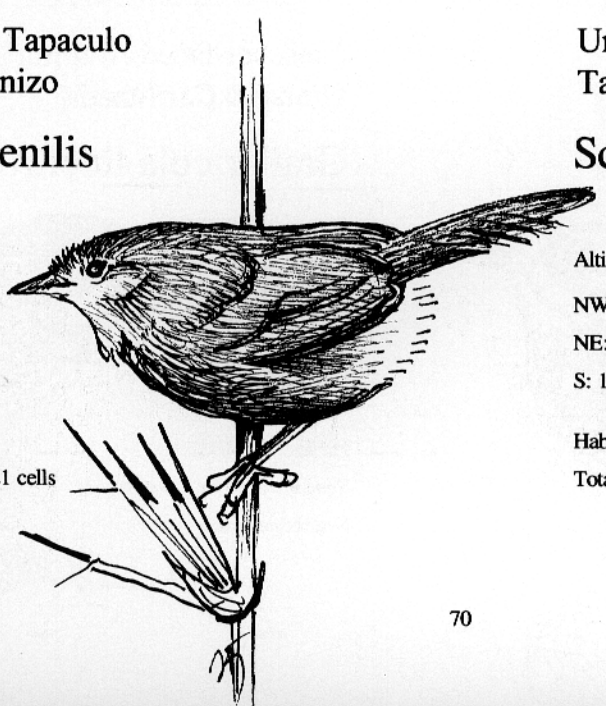
NW: 2650 –3350

NE: 2500 –3200

S: 2200 –3100

Habitat: HPF HSF

Total distribution: 21 cells



Unicolored Tapaculo
Tapaculo Negruzco

Scytalopus unicolor

Altitudinal range:

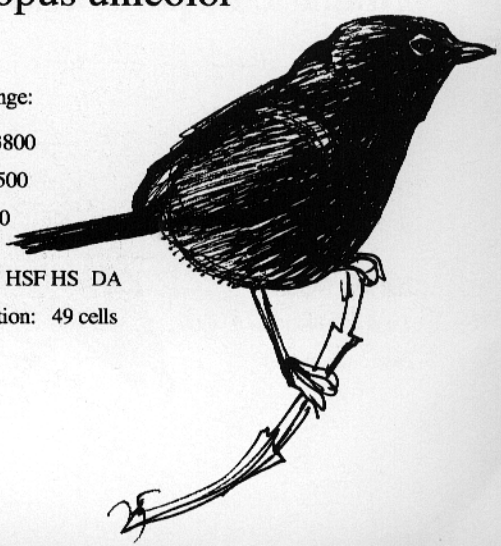
NW: 2300 –3800

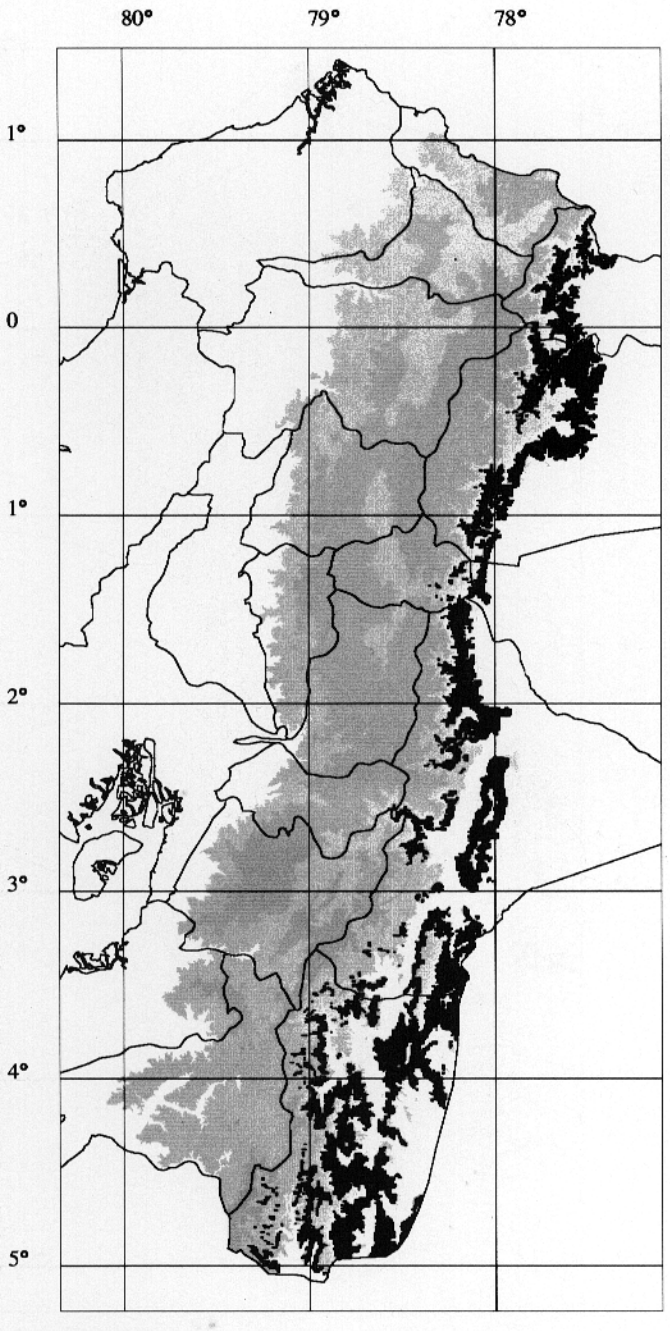
NE: 1800 –2500

S: 1500 –3000

Habitat: HPF HSF HS DA

Total distribution: 49 cells





Equatorial Rufous-vented Tapaculo
Tapaculo Culirrufo Ecuatorial

Scytalopus micropterus

Altitudinal range:

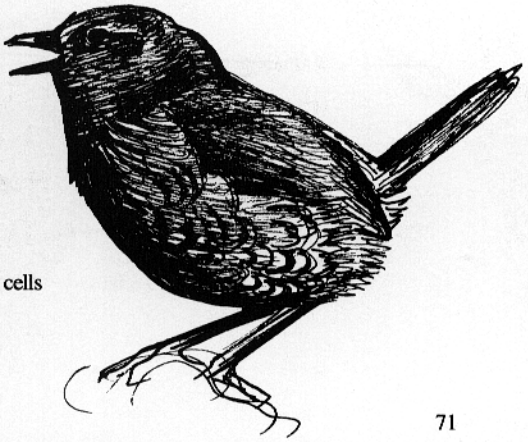
NW: Not found

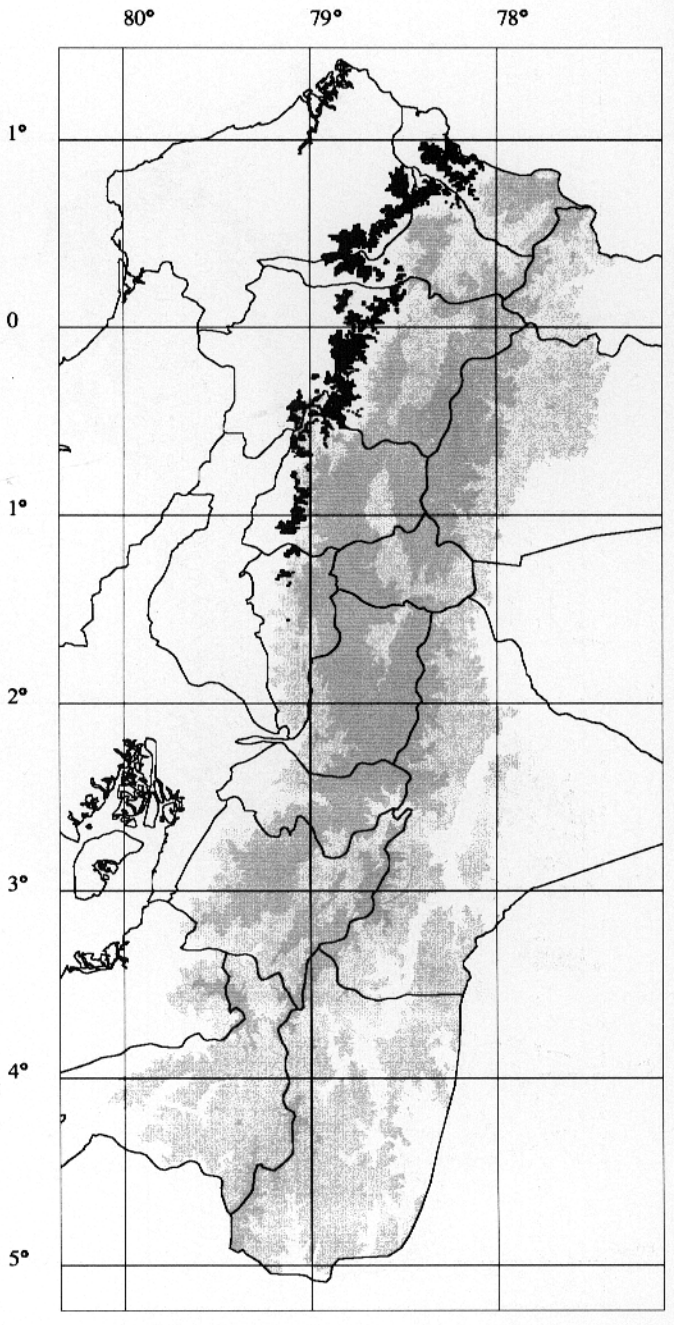
NE: 1250 –2050

S: 1400 –2050

Habitat: HPF HSF

Total distribution: 13 cells





Narino Tapaculo
Tapaculo de Nariño

Scytalopus vicinior

Altitudinal range:

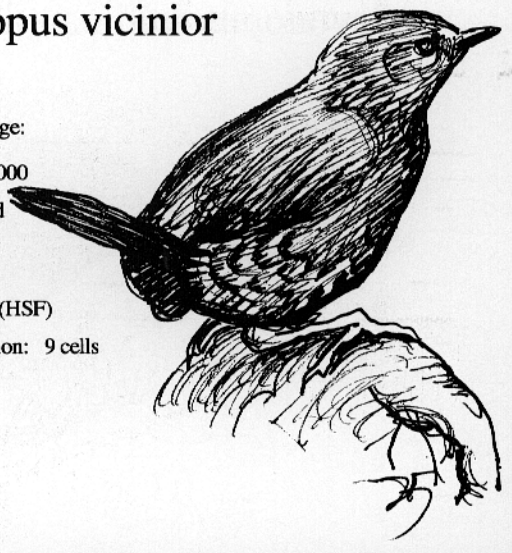
NW: 1250 –2000

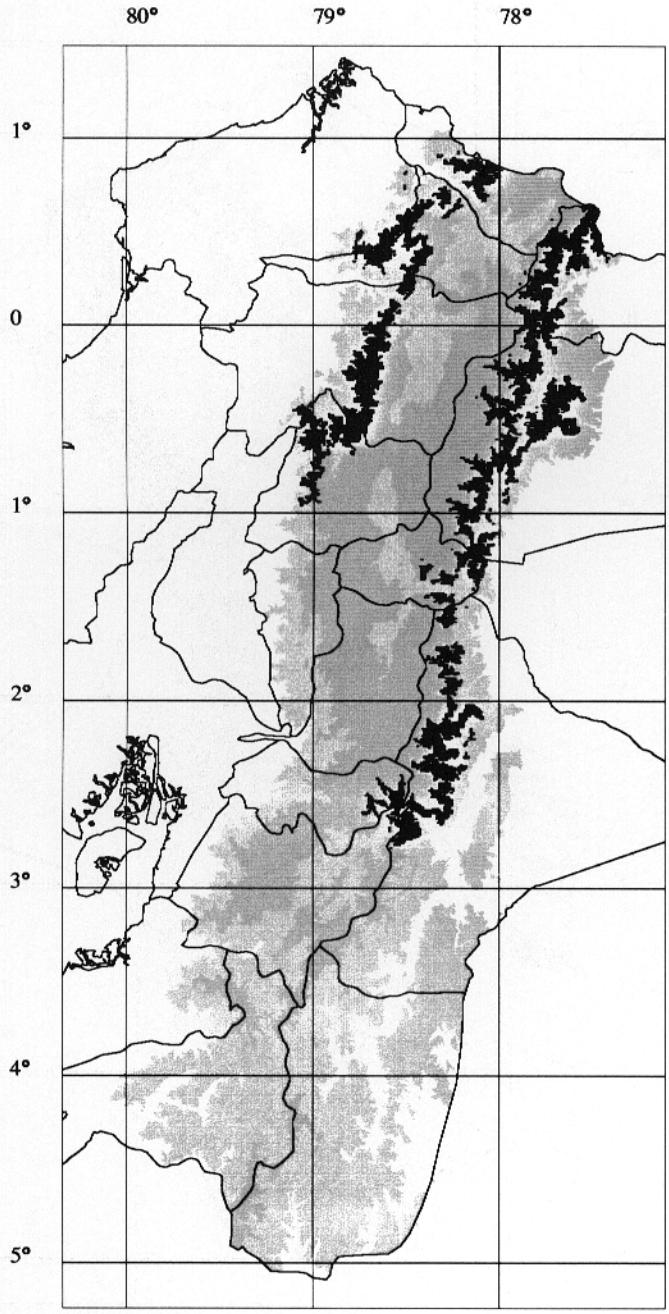
NE: Not found

S: Not found

Habitat: HPF (HSF)

Total distribution: 9 cells





Spillmann's Tapaculo
Tapaculo de Spillmann

Scytalopus spillmanni

Altitudinal range:

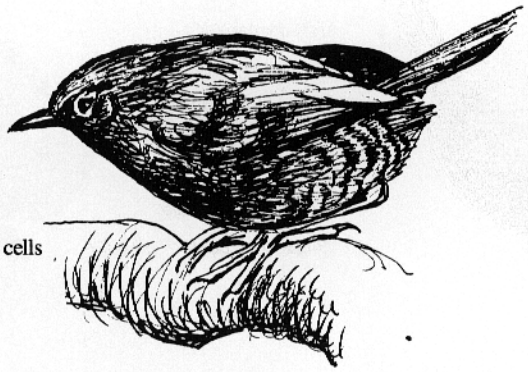
NW: 2000 –3200

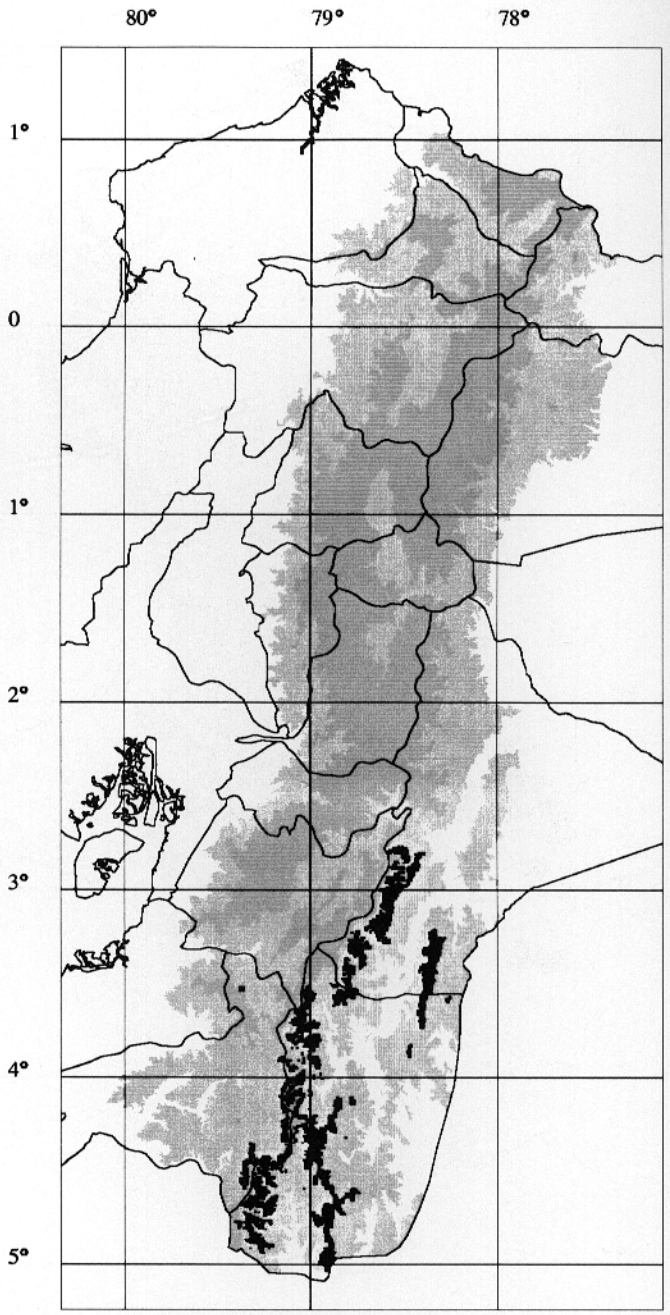
NE: 2050 –3200

S: 2050 –2500

Habitat: HPF HSF

Total distribution: 7 cells





Chusquea Tapaculo
Tapaculo de Bambú

Scytalopus parkeri

Altitudinal range:

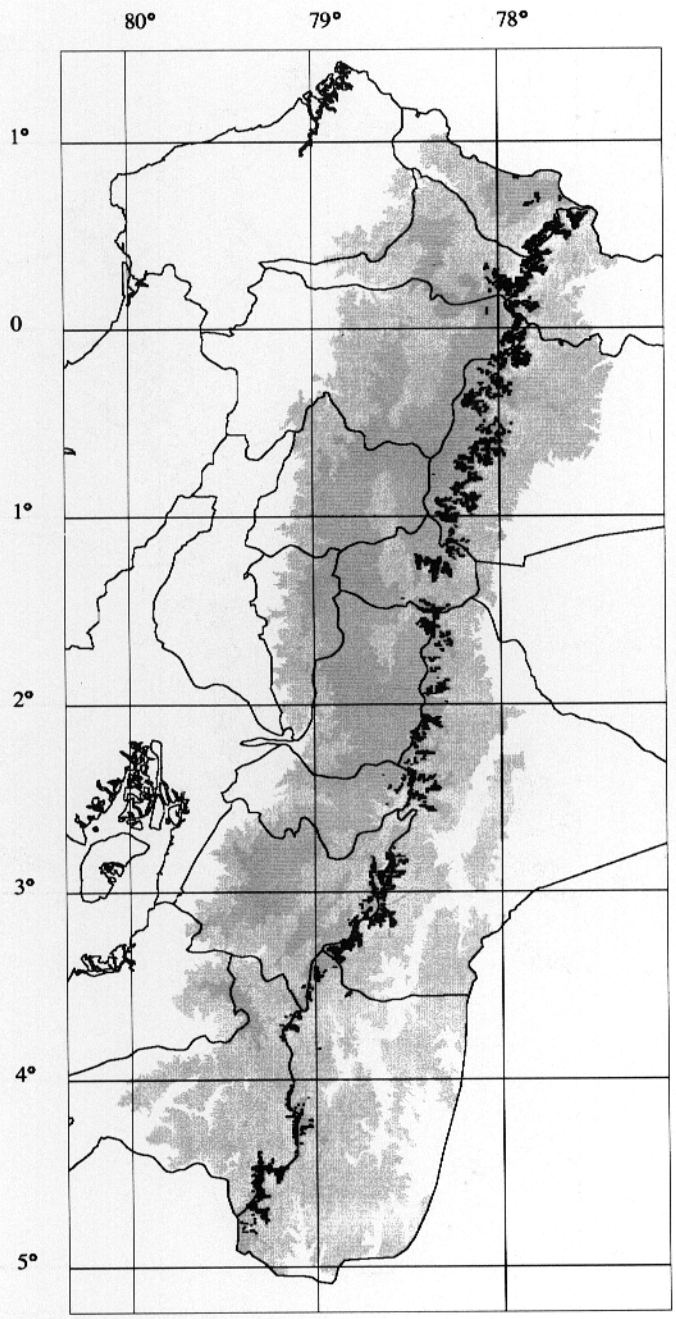
NW: Not found

NE: Not found

S: 2250 –3200

Habitat: HPF HSF

Total distribution: 5 cells



Paramo Tapaculo
Tapaculo Paramero

Scytalopus canus

Altitudinal range:

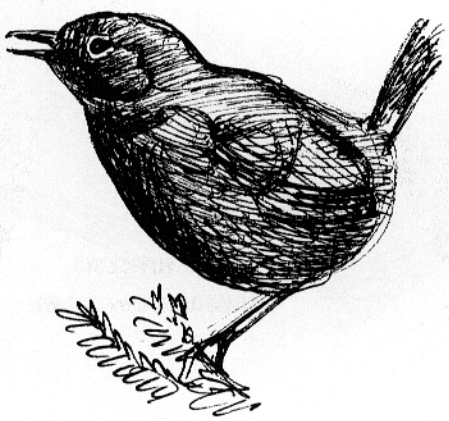
NW: Limited: 3400 –3980

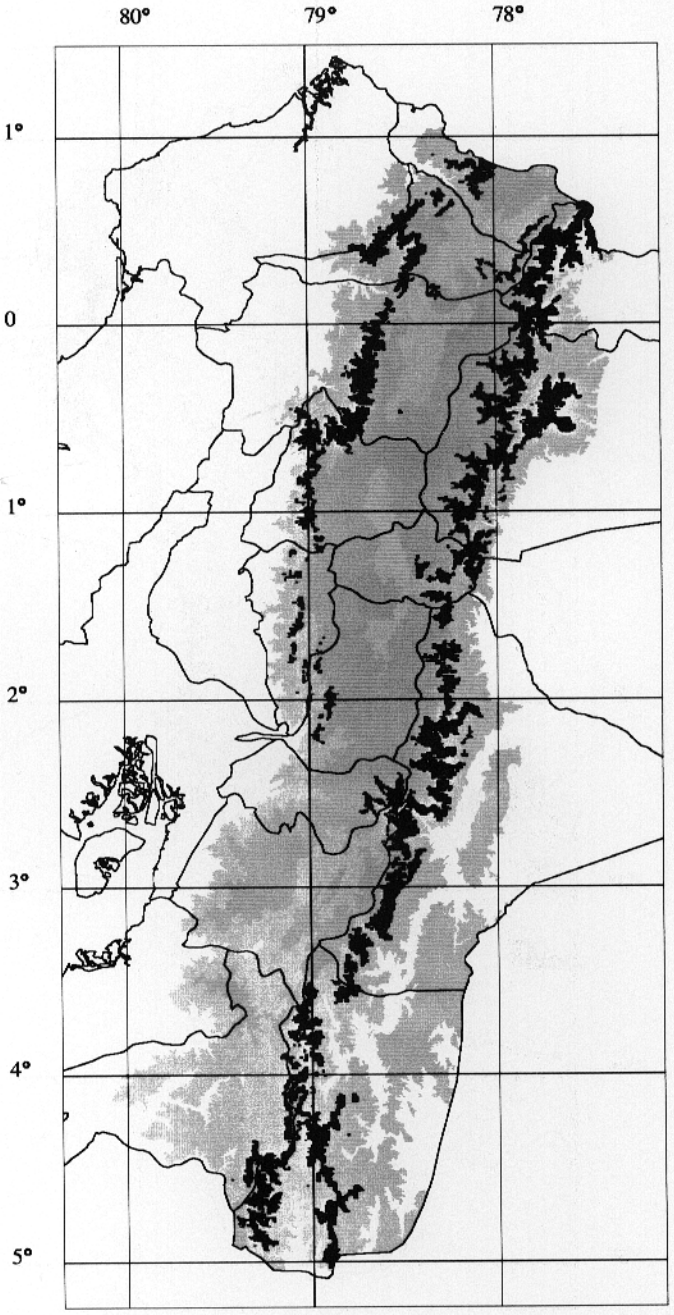
NE: 3200 –3950

S: 3050 –3650

Habitat: HS

Total distribution: 16 cells





Ocellated Tapaculo
Tapaculo Ocelado

Acropternis orthonyx

Altitudinal range:

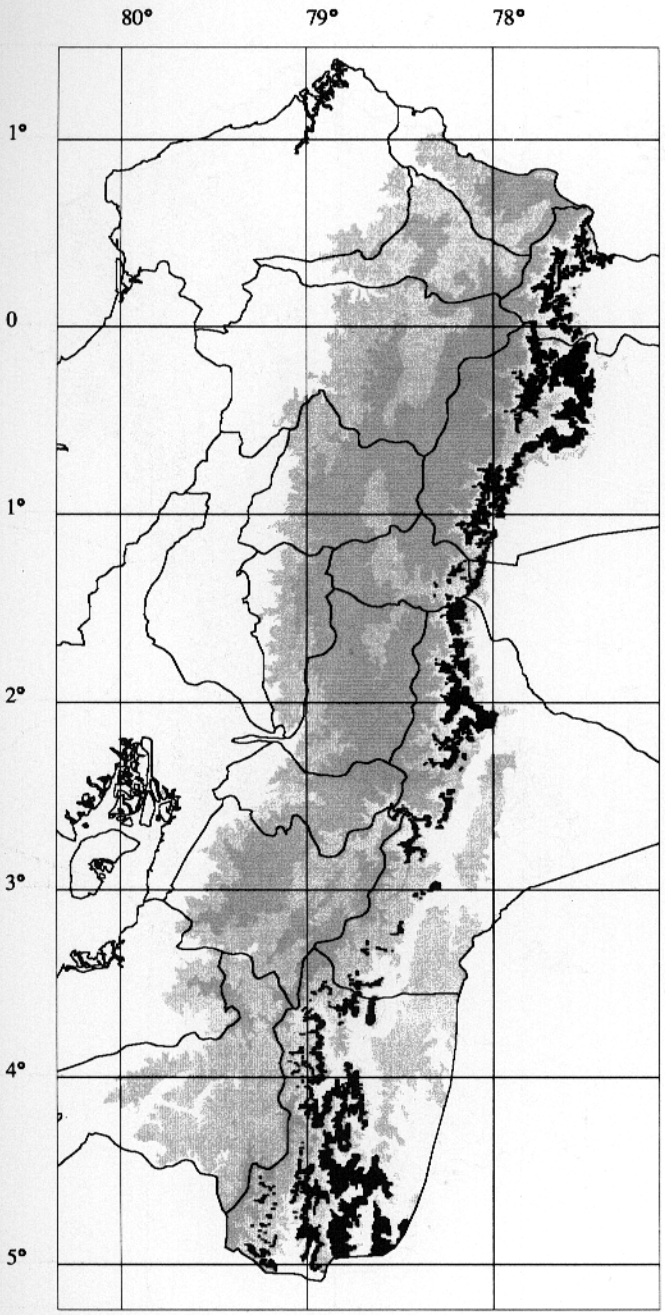
NW: 2200 –3350

NE: 2100 –3350

S: 2250 –3300

Habitat: HPF HSF

Total distribution: 19 cells



Plumbeous-crowned Tyrannulet
Tiranolete Coroniplomizo

Phyllomyias plumbeiceps

Altitudinal range:

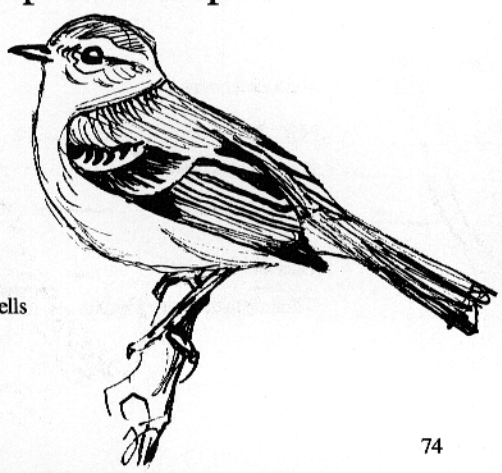
NW: Not found

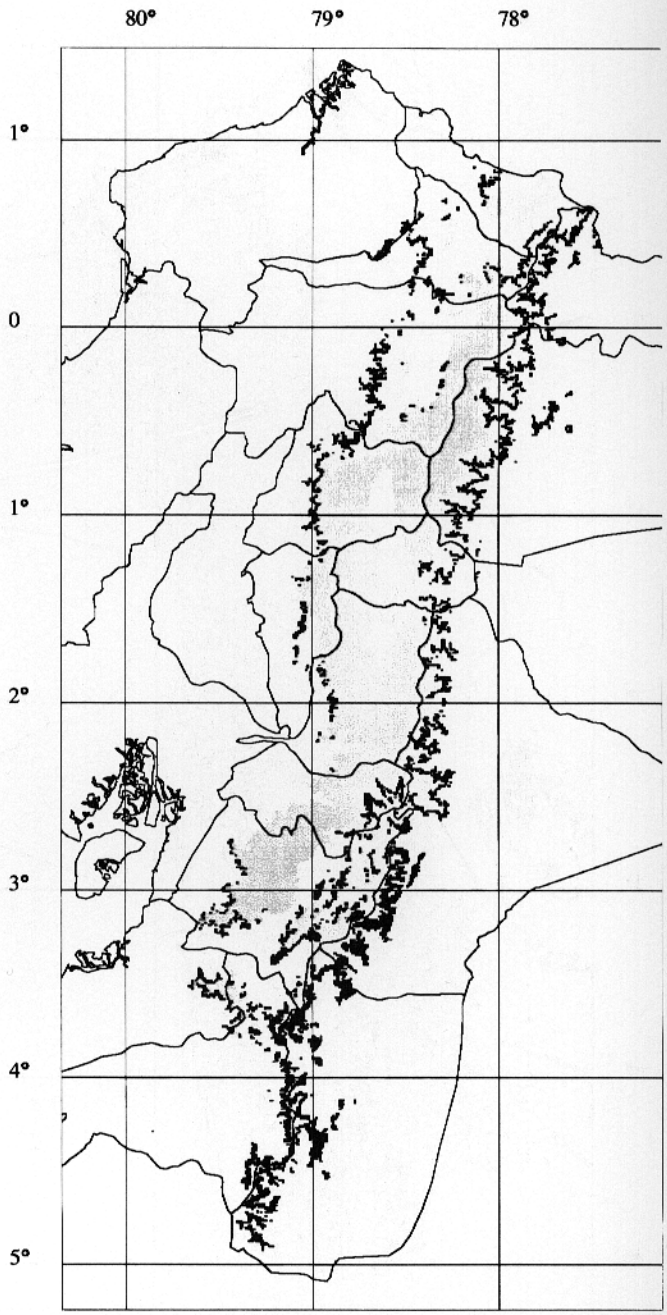
NE: 1500 –2000

S: 1500 –2000

Habitat: HPF HSF

Total distribution: 22 cells





Black-capped Tyrannulet
Tiranolete Gorrinegro

Phyllomyias nigrocapillus

Altitudinal range:

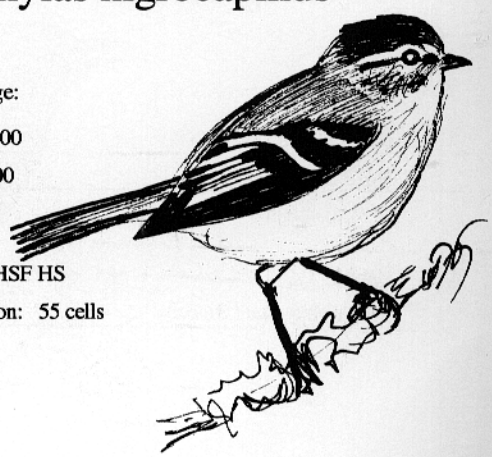
NW: 2800 –3200

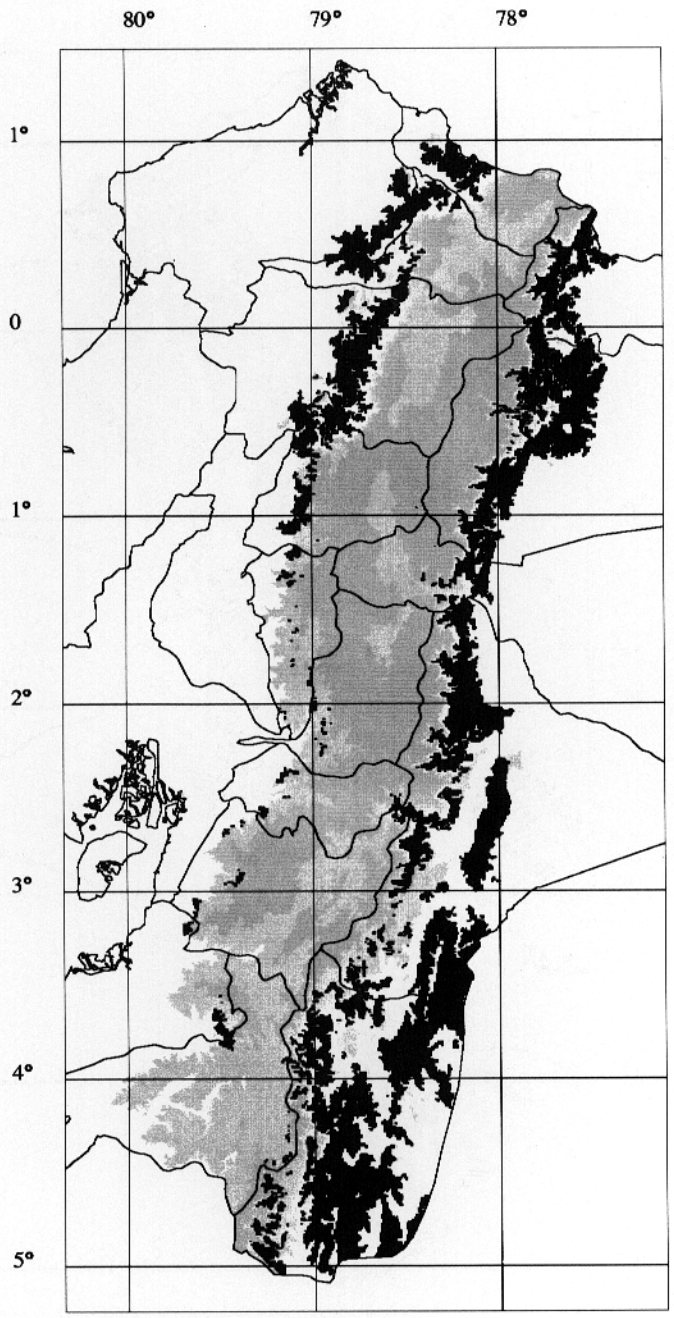
NE: 2800 –3200

S: 2500 –3200

Habitat: HPF HSF HS

Total distribution: 55 cells





Ashy-headed Tyrannulet
Tiranolete cabeciazulado

Phyllomyis cinereiceps

Altitudinal range:

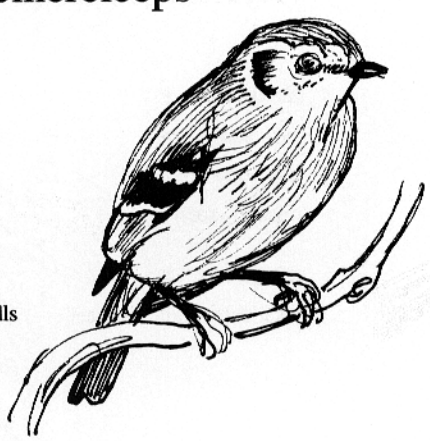
NW: 1350 –2500

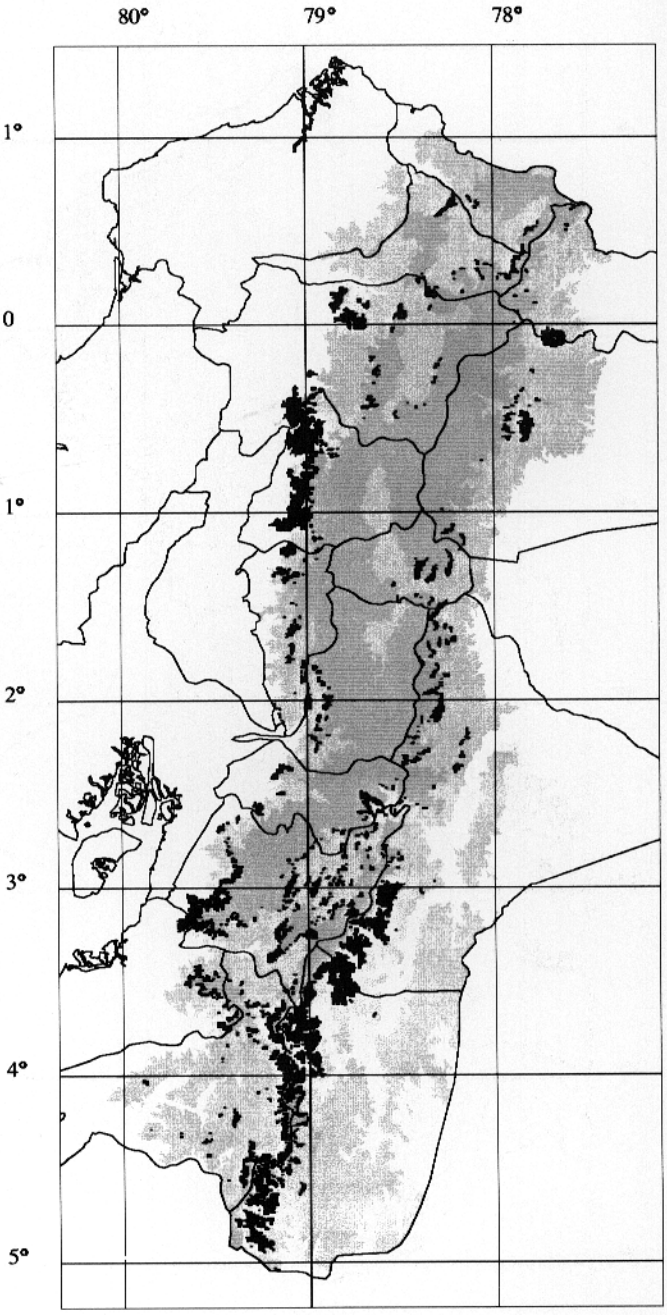
NE: 1350 –2500

S: 1350 –2500

Habitat: HPF HSF

Total distribution: 32 cells





Tawny-rumped Tyrannulet
Tiranolete Lomileonado

Phyllomyias uropygialis

Altitudinal range:

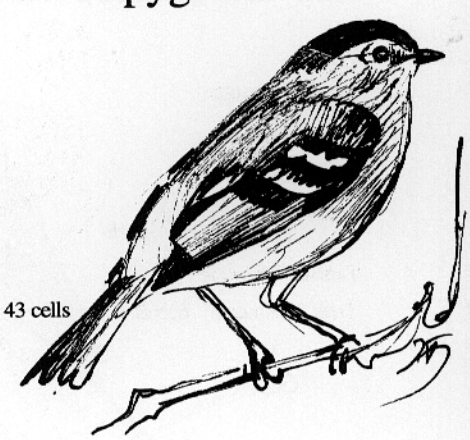
NW: 2100 –3100

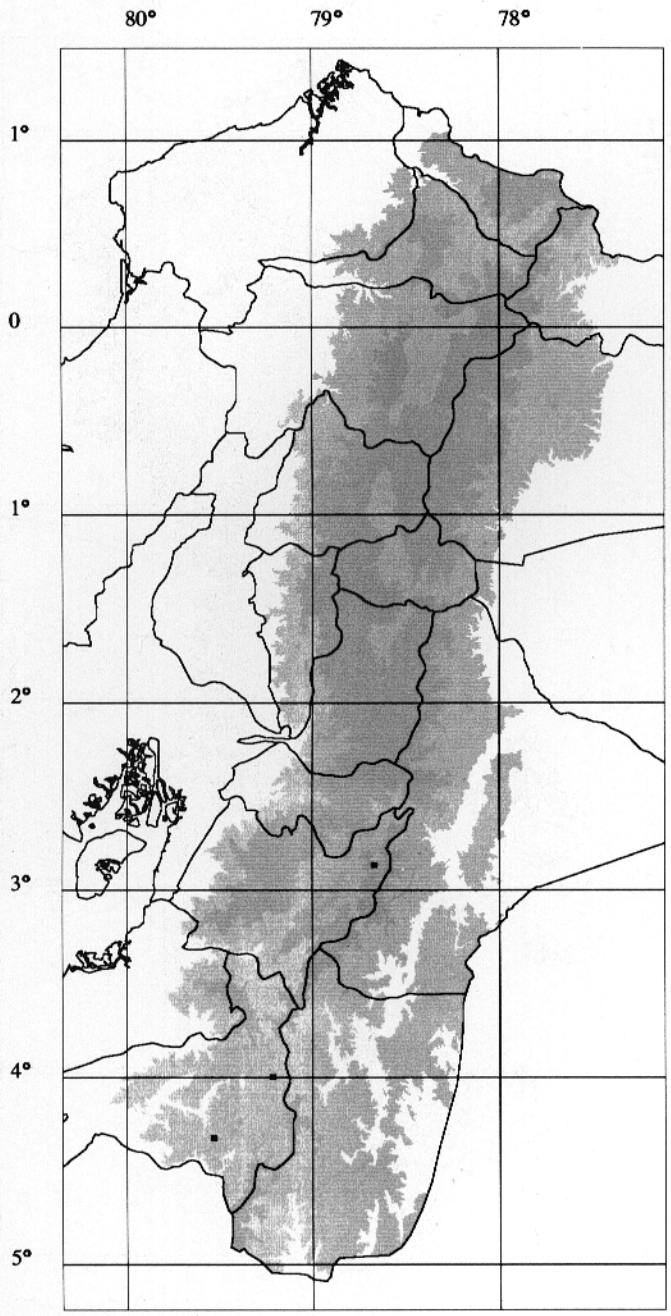
NE: 2100 –3100

S: 2100 –3100

Habitat: HSF HS

Total distribution: 43 cells





Highland Elaenia
Elenia Oscura

Elaenia obscura

Altitudinal range:

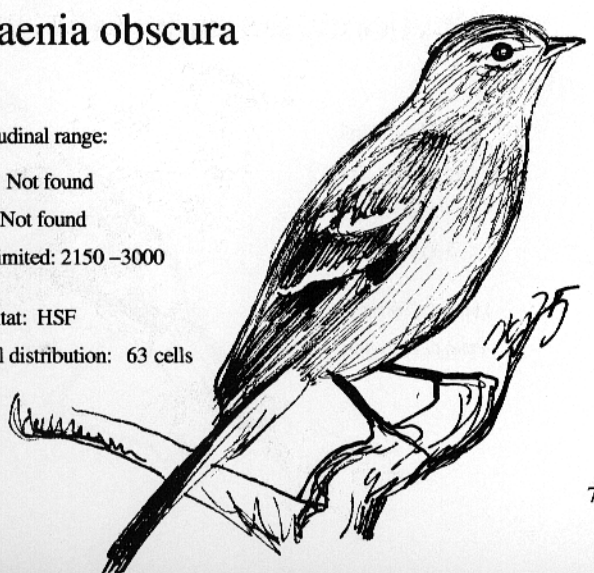
NW: Not found

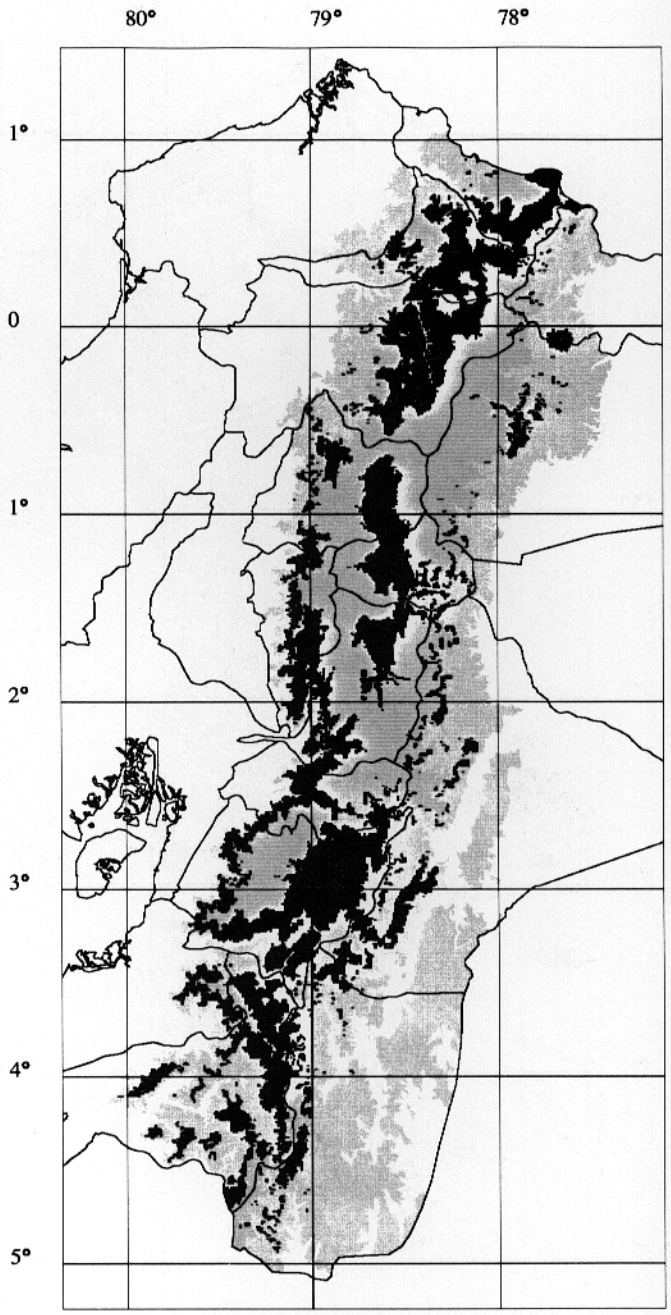
NE: Not found

S: Limited: 2150 –3000

Habitat: HSF

Total distribution: 63 cells





White-crested Elaenia
Elenia Crestiblanca

Elaenia albiceps

Altitudinal range:

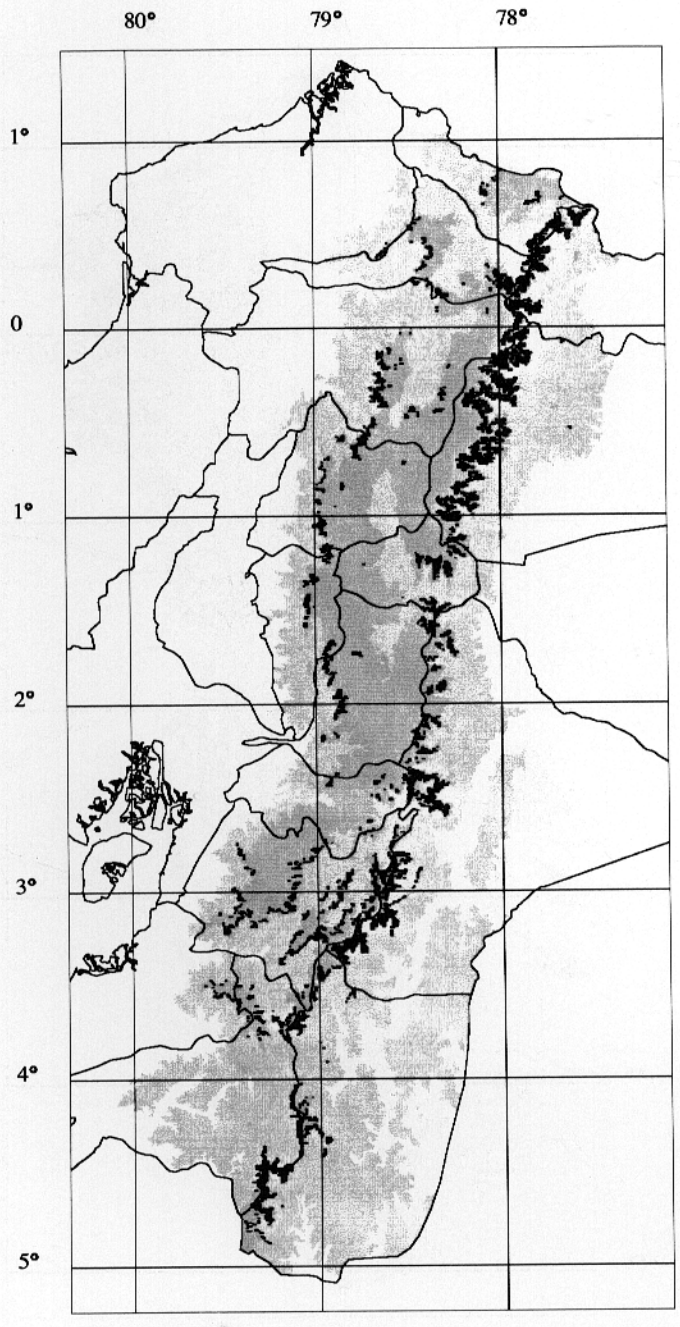
NW: 1900 –3200

NE: 1900 –3200

S: 1900 –3000

Habitat: HS DA

Total distribution: 281 cells



White-throated Tyrannulet
Tiranillo Barbiblanco

Mecocerculus leucophrys

Altitudinal range:

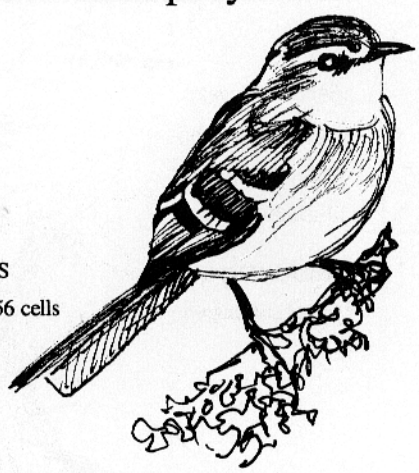
NW: 3200 –3800

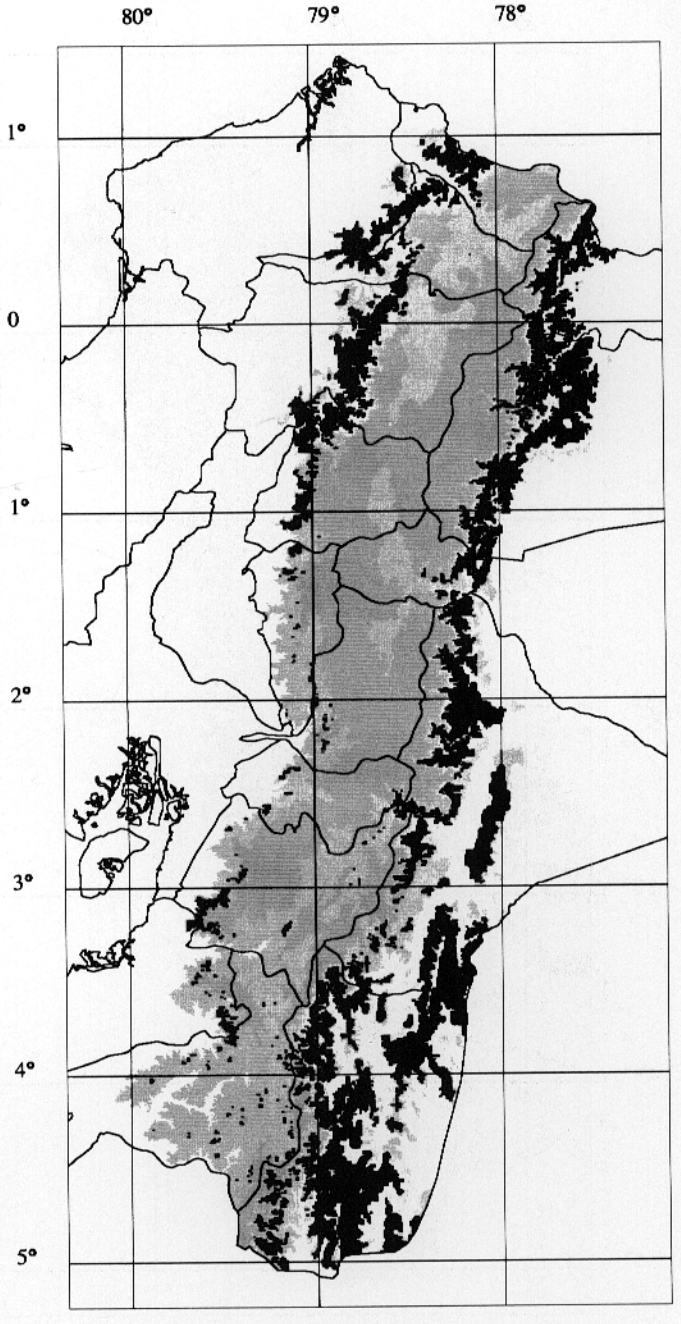
NE: 3300 –3900

S: 3000 –3700

Habitat: HPF HSF HS

Total distribution: 156 cells





White-tailed Tyrannulet
Tiranillo Coliblanco

Mecocerculus poecilocercus

Altitudinal range:

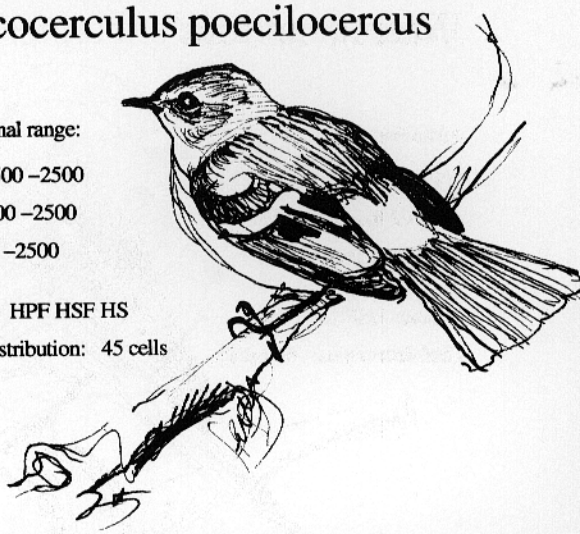
NW: 1500 –2500

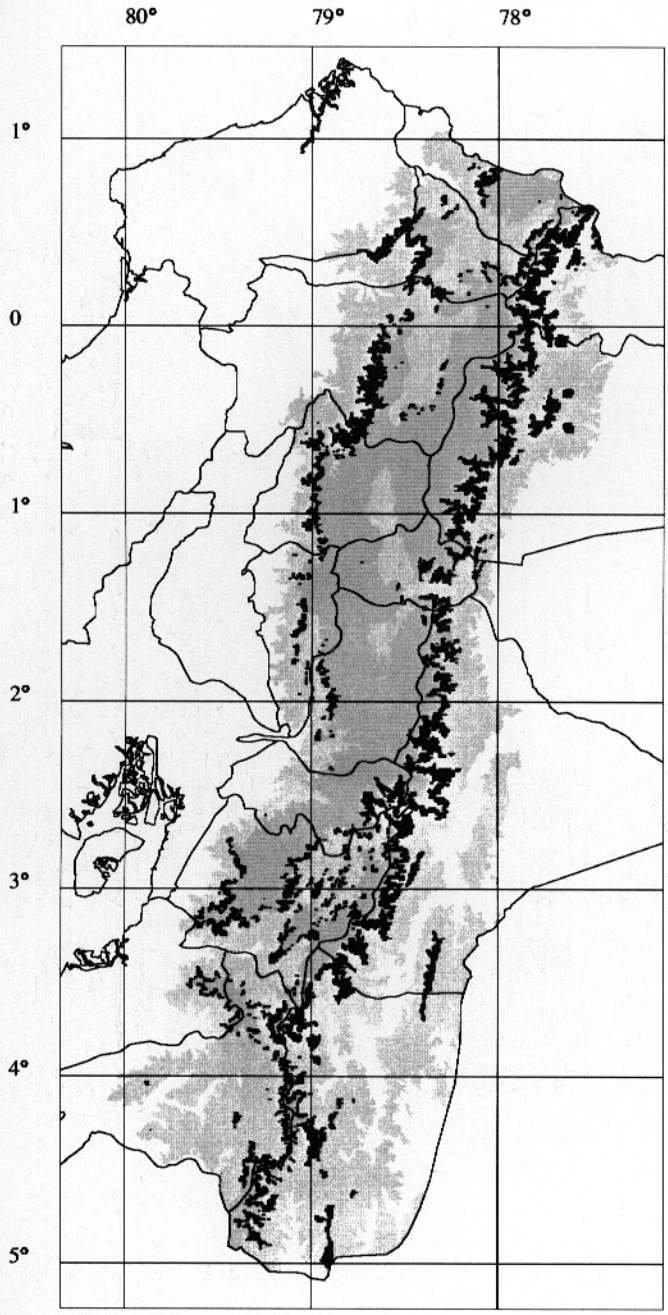
NE: 1500 –2500

S: 1500 –2500

Habitat: HPF HSF HS

Total distribution: 45 cells



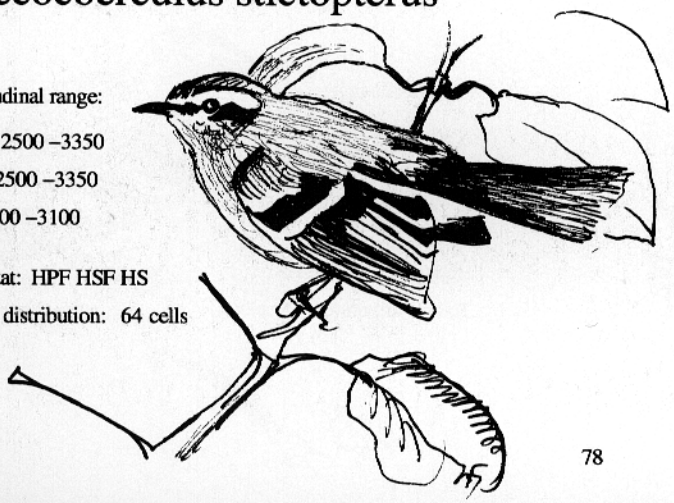


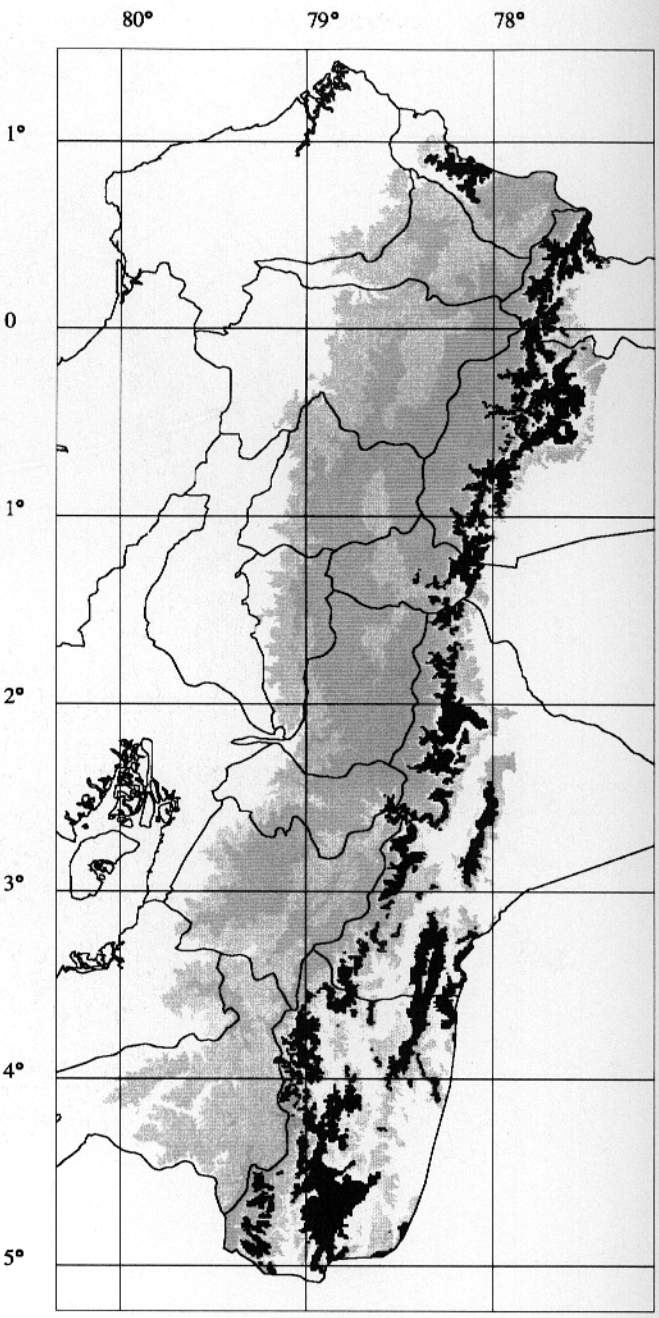
White-banded Tyrannulet
Tiranillo Alibandeado

Mecocoerculus stictopterus

Altitudinal range:
NW: 2500 –3350
NE: 2500 –3350
S: 2500 –3100

Habitat: HPF HSF HS
Total distribution: 64 cells



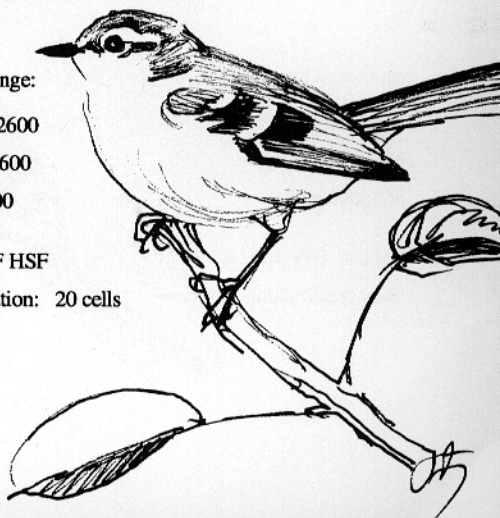


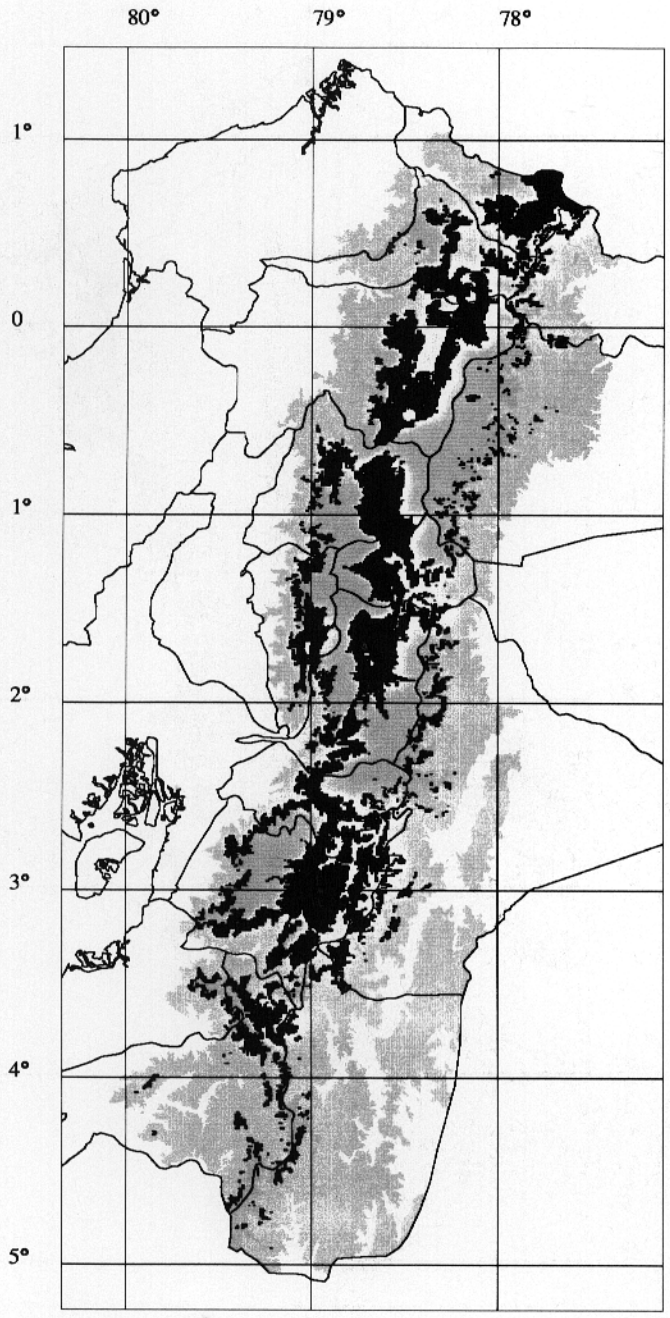
Sulphur-bellied Tyrannulet
Tiranillo Ventriazufrado

Mecocerculus minor

Altitudinal range:
NW: 1800 –2600
NE: 1800 –2600
S: 1800 –2600

Habitat: HPF HSF
Total distribution: 20 cells





Tufted Tit-tyrant

Cachudito Torito

Anairetes parulus

Altitudinal range:

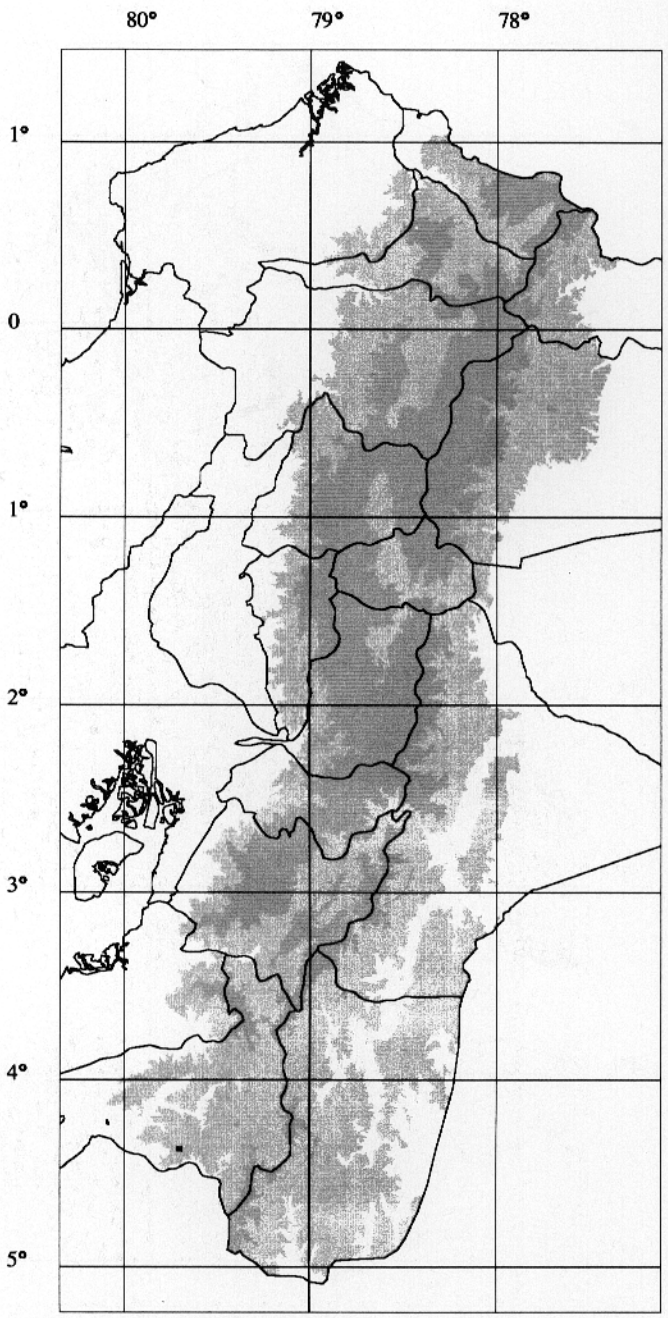
NW: 2500 –3500

NE: 2500 –3500

S: 2500 –3500

Habitat: HS DA

Total distribution: 270 cells



Black-crested Tit-tyrant

Cachudito Crestinegro

Anairetes nigrocristatus

Altitudinal range:

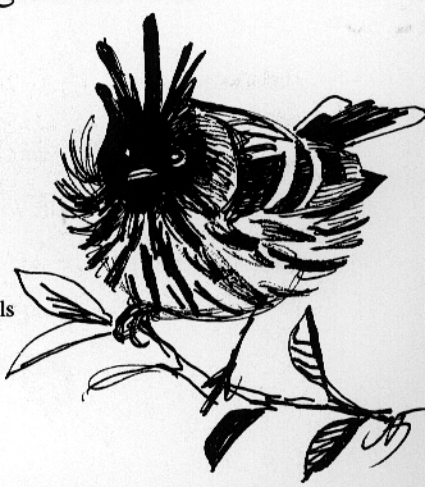
NW: Not found

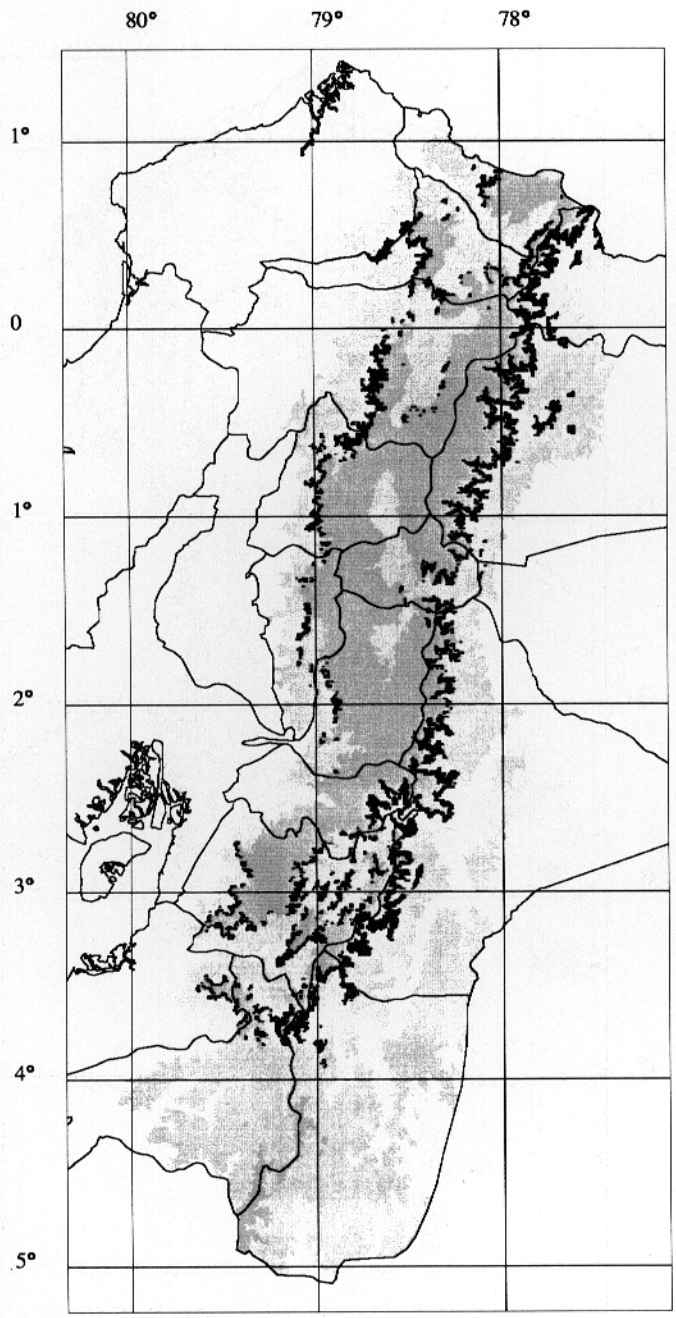
NE: Not found

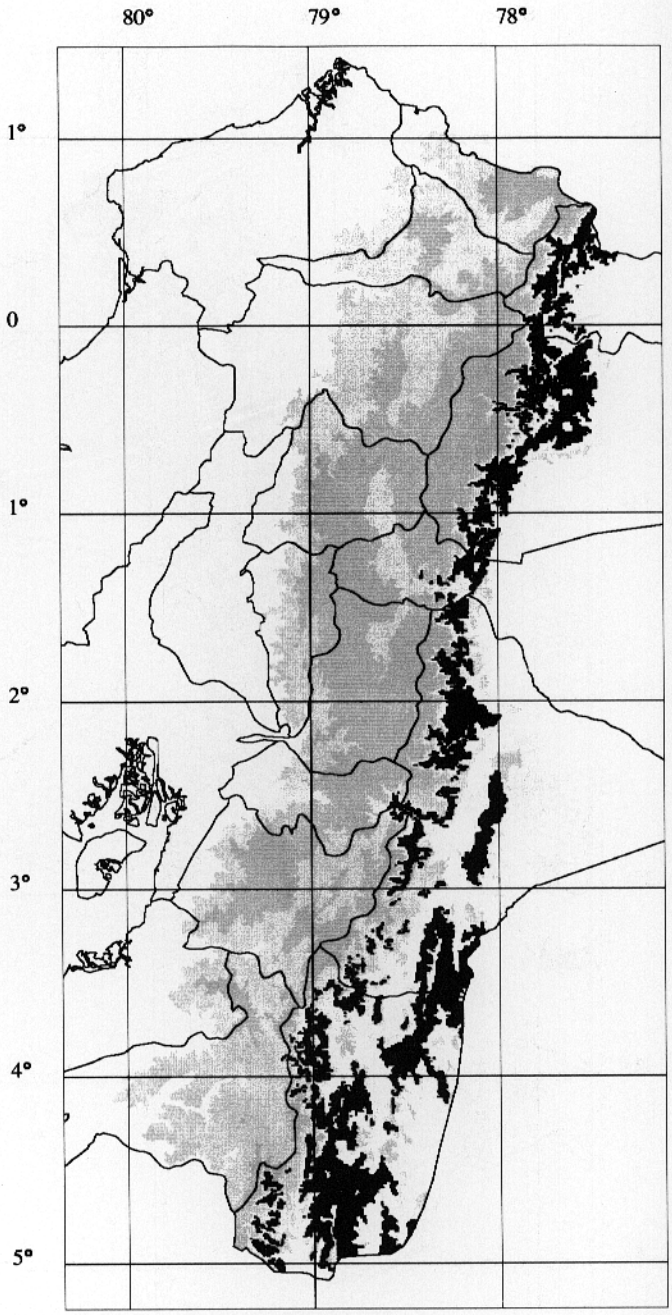
S: Limited: 2400 –2500

Habitat: HS

Total distribution: 16 cells







Agile Tit-tyrant
Cachudito Agil

Uromyias agilis

Altitudinal range:

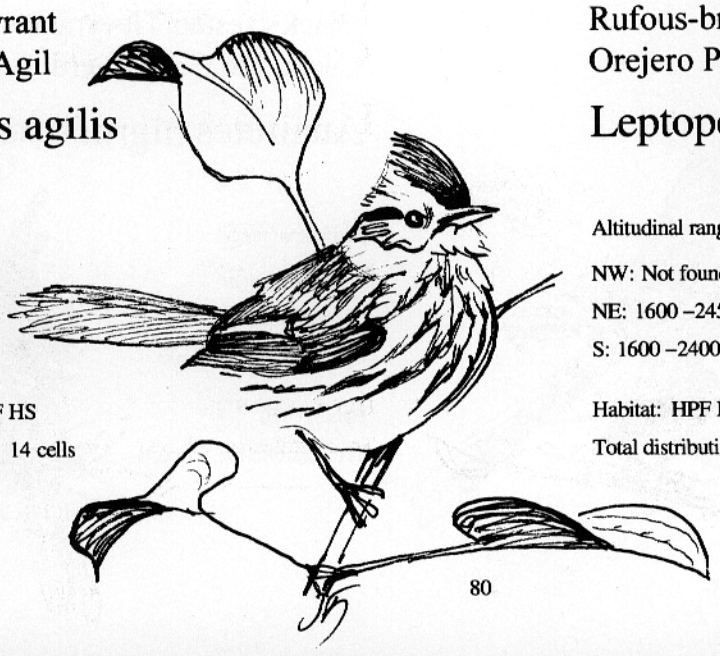
NW: 2700 –3200

NE: 2700 –3300

S: 2700 –3300

Habitat: HPF HSF HS

Total distribution: 14 cells



Rufous-breasted Flycatcher
Orejero Pechirrufo

Leptopogon rufipectus

Altitudinal range:

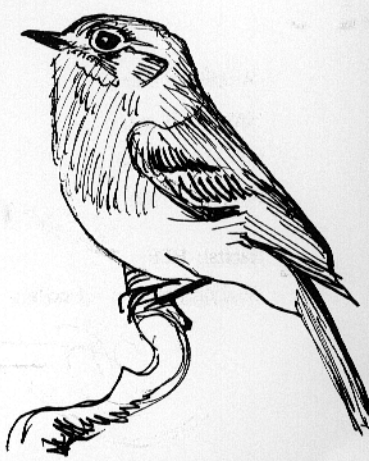
NW: Not found

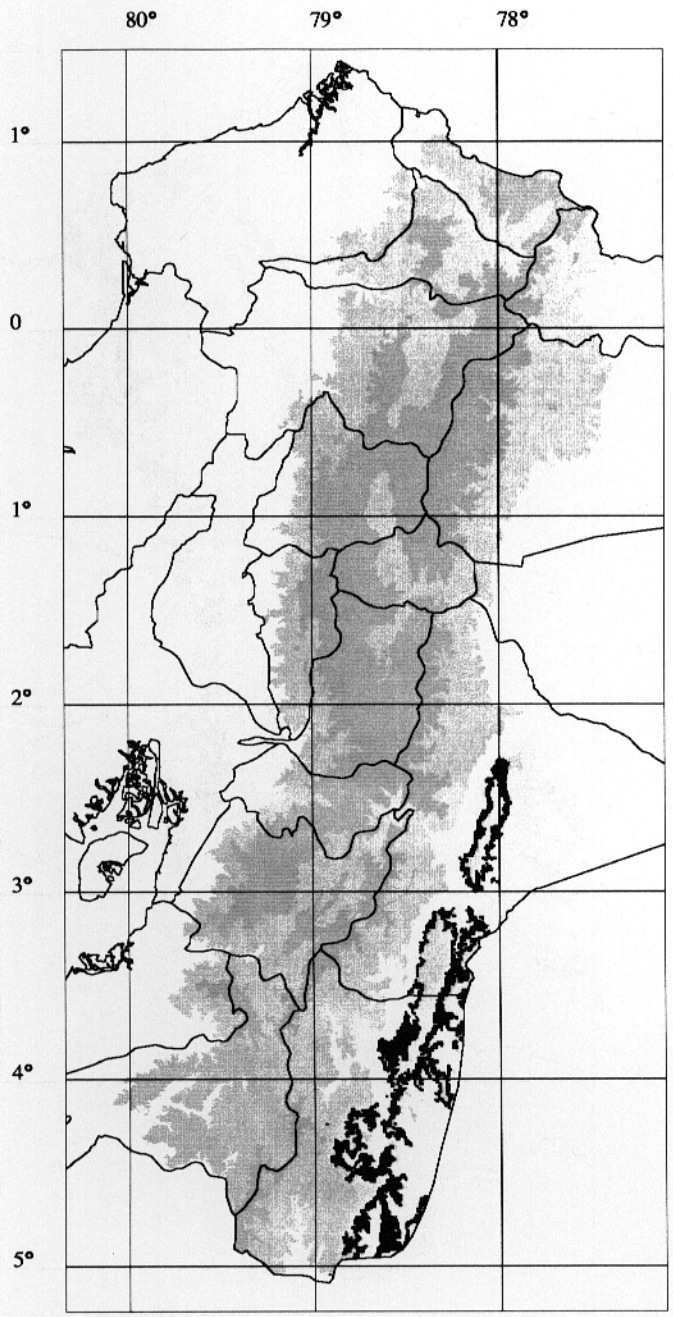
NE: 1600 –2450

S: 1600 –2400

Habitat: HPF HSF

Total distribution: 23 cells





Rufous-browed Tyrannulet
Orejerito Cejirrufo

Phylloscartes superciliaris

Altitudinal range:

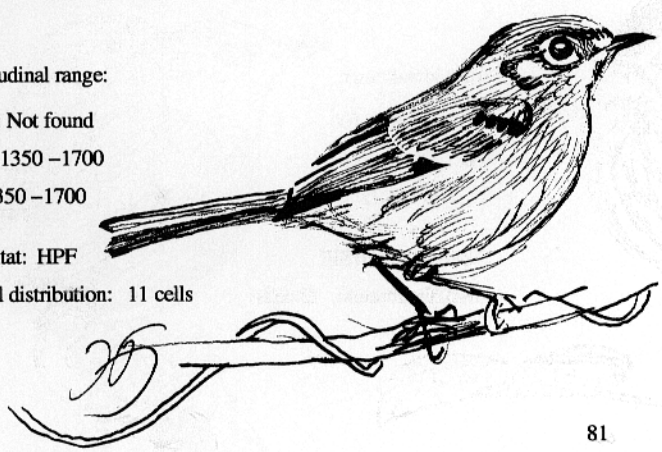
NW: Not found

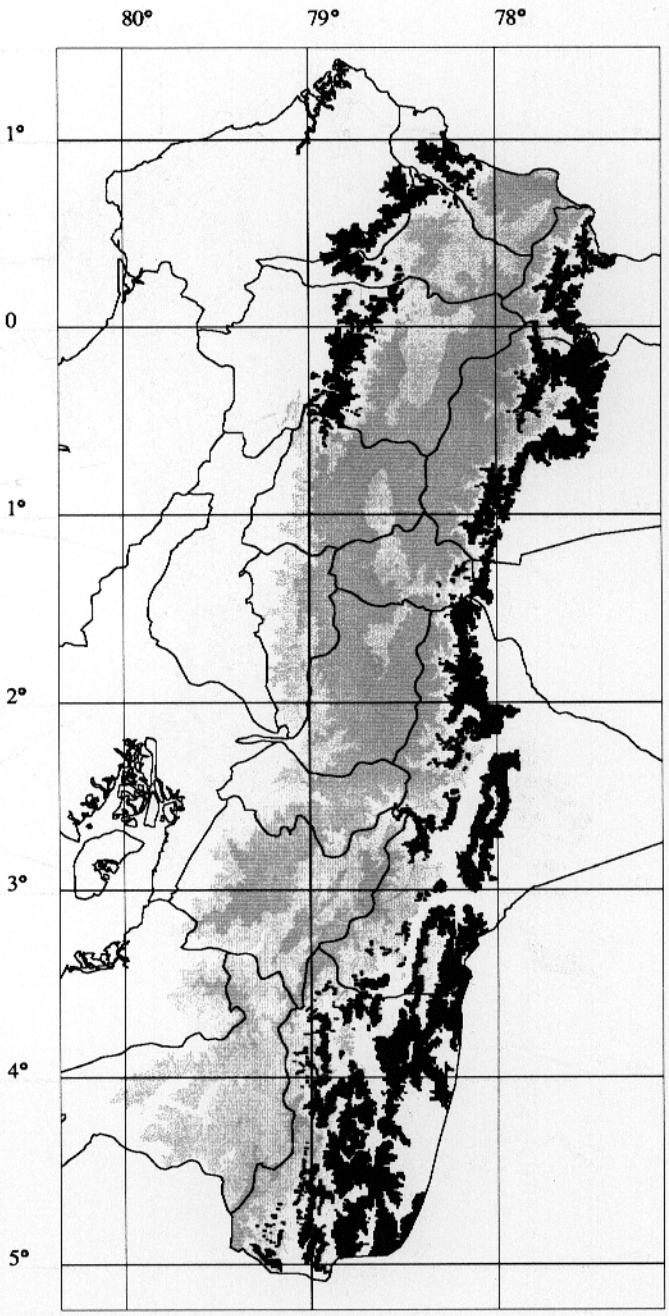
NE: 1350 –1700

S: 1350 –1700

Habitat: HPF

Total distribution: 11 cells





Marble-faced Bristle-tyrant
Orejerito Caripunteado

Phylloscartes ophthalmicus

Altitudinal range:

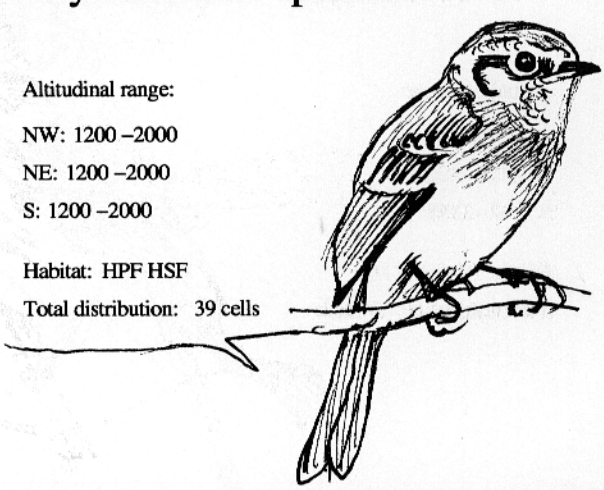
NW: 1200 –2000

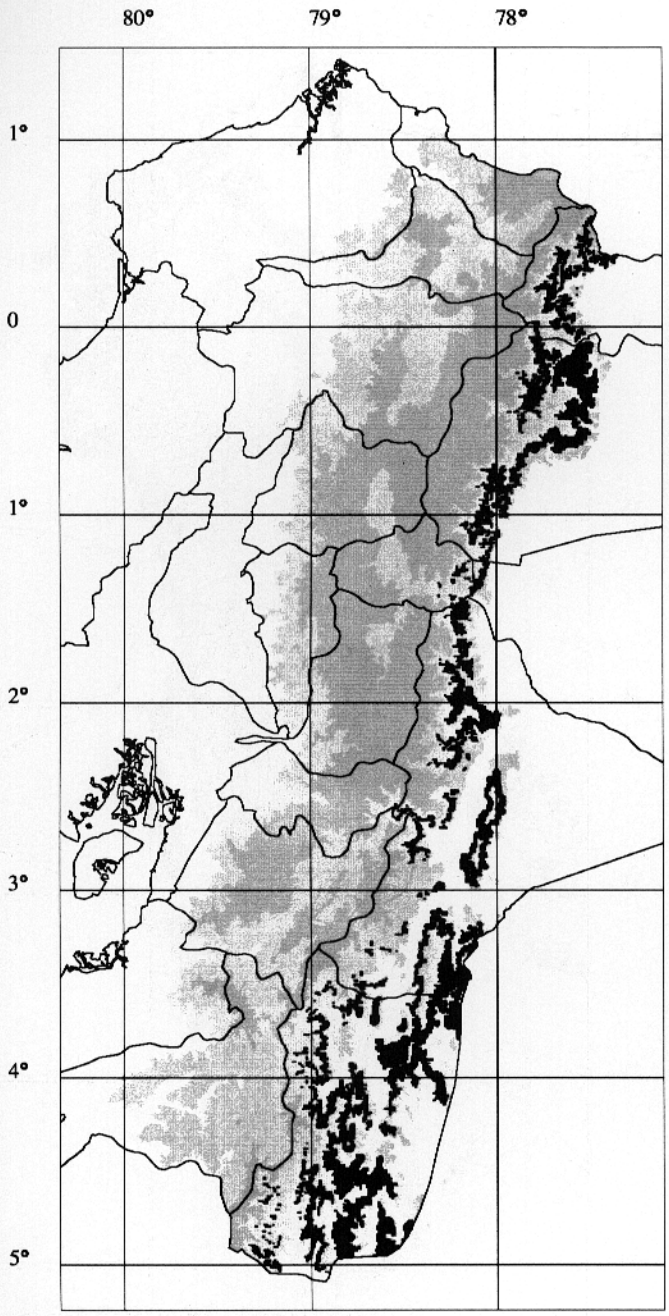
NE: 1200 –2000

S: 1200 –2000

Habitat: HPF HSF

Total distribution: 39 cells





Variegated Bristle-tyrant
Orejerito Variegado

Phylloscartes poecilotis

Altitudinal range:

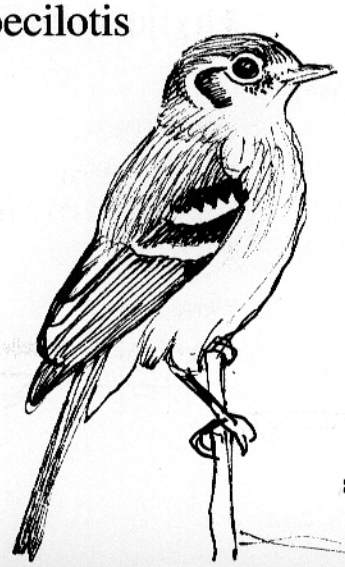
NW: Not found

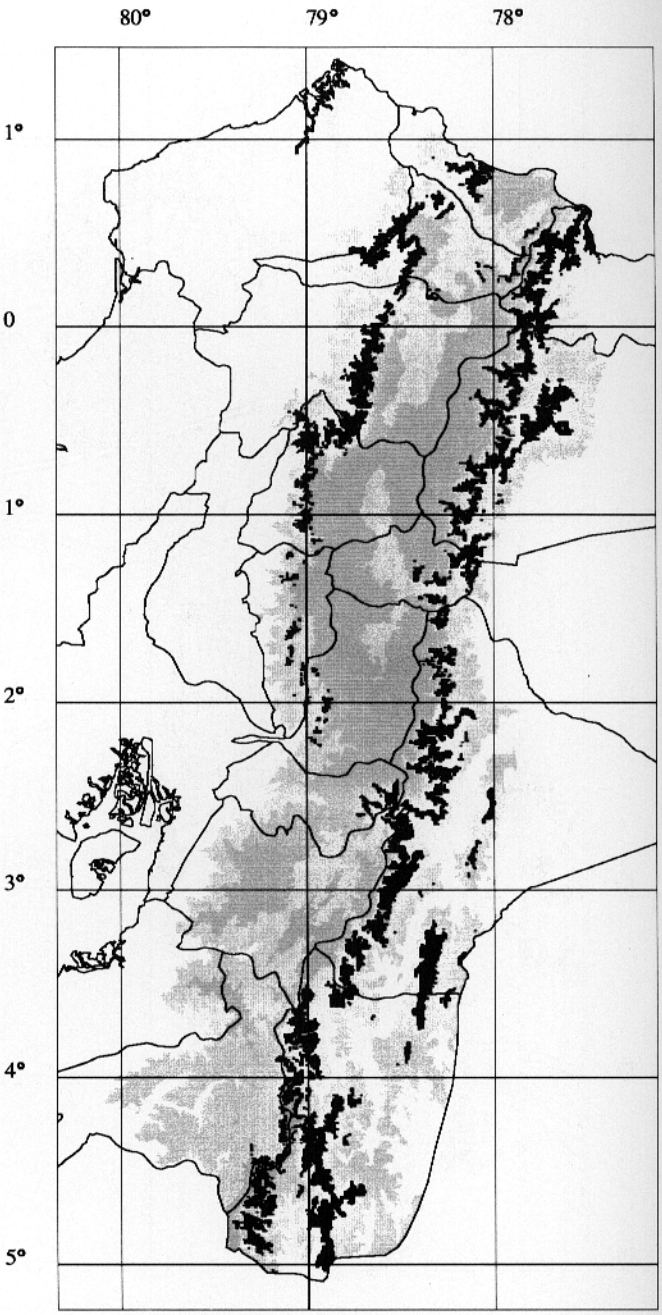
NE: 1500 –2000

S: 1500 –2000

Habitat: HPF

Total distribution: 34 cells





Rufous-headed Pygmy-tyrant
Tirano-enano Cabecirrufo

Pseudotriccus ruficeps

Altitudinal range:

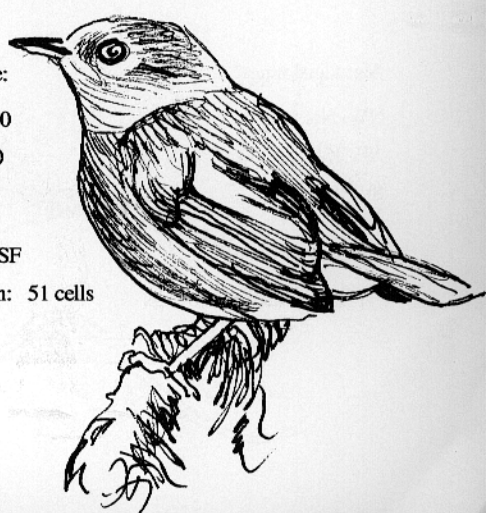
NW: 2200 –3100

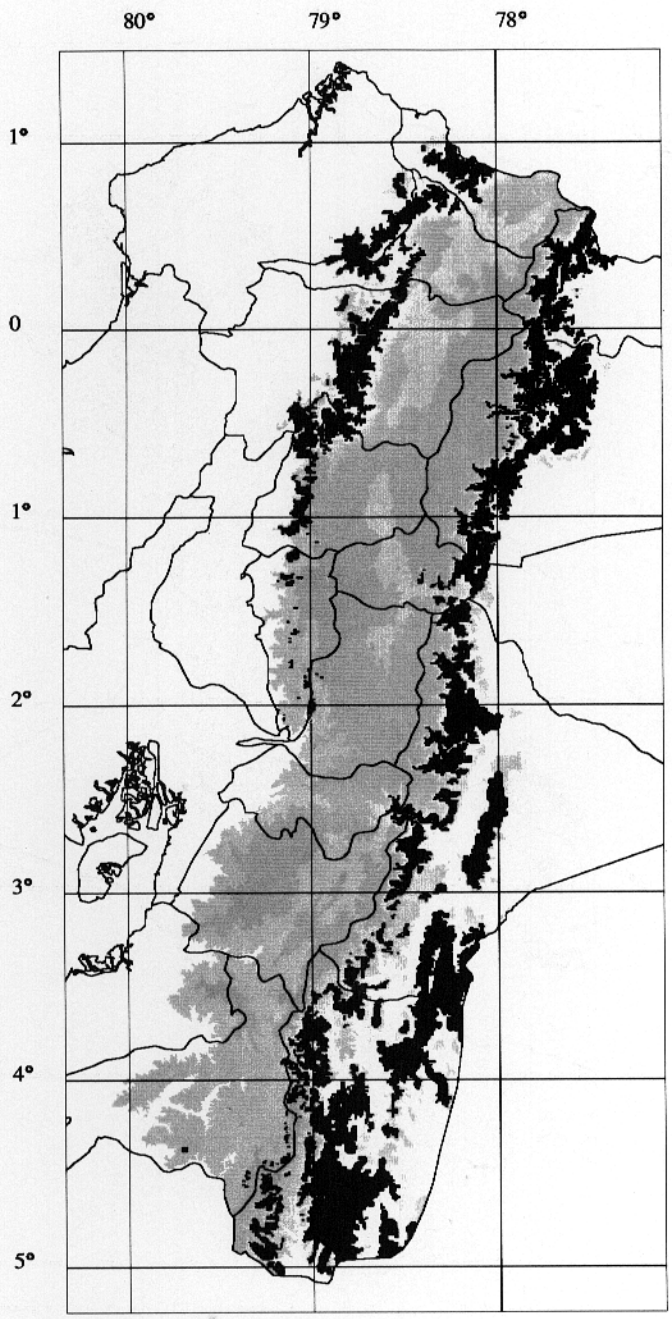
NE: 2200 –3100

S: 2100 –3100

Habitat: HPF HSF

Total distribution: 51 cells





Rufous-crowned Tody-tyrant
Tirano-todi Coronirrufo

Poecilotriccus ruficeps

Altitudinal range:

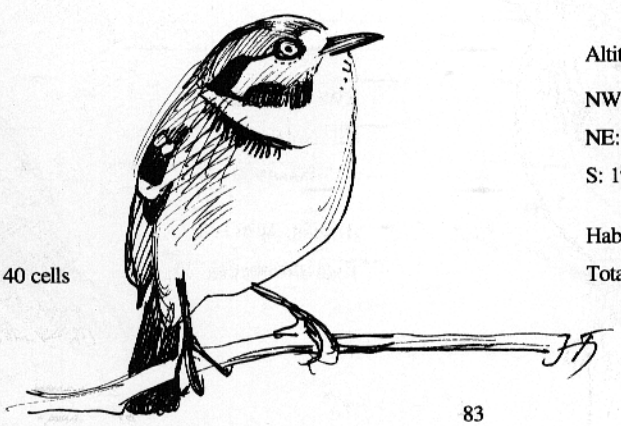
NW: 1500 –2600

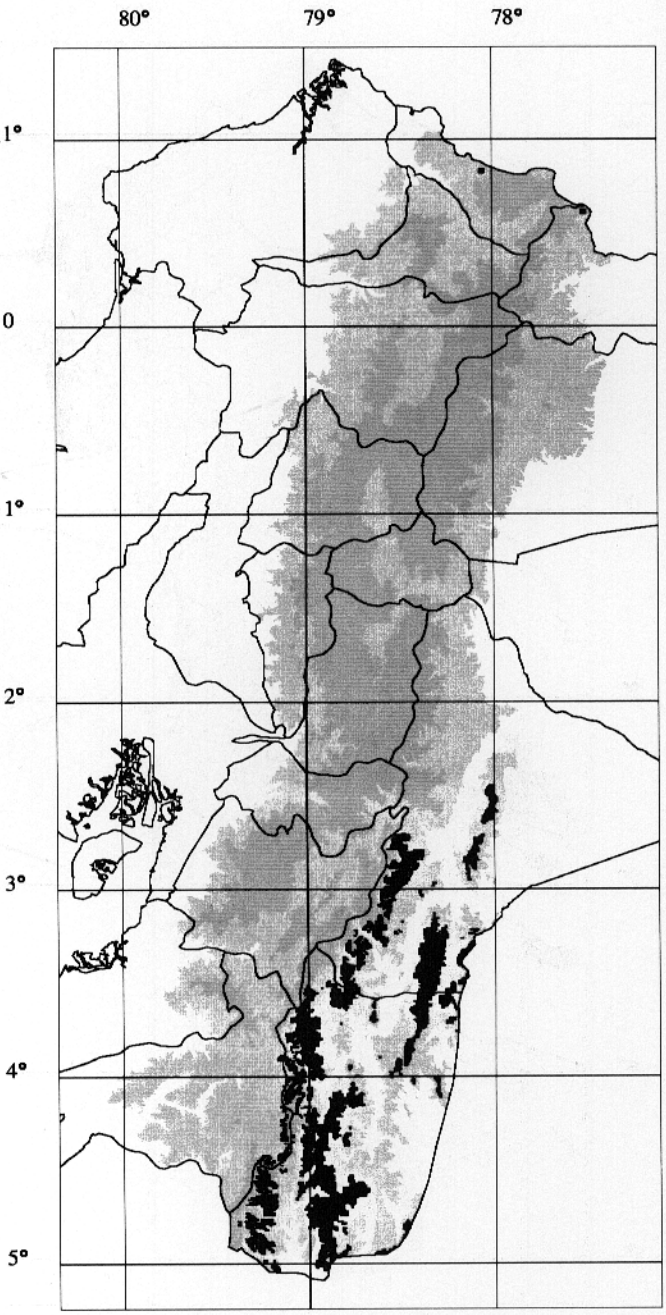
NE: 1500 –2600

S: 1500 –2600

Habitat: HPF HSF

Total distribution: 40 cells





Black-throated Tody-tyrant
Tirano-todi Golinegro

Hemitriccus granadensis

Altitudinal range:

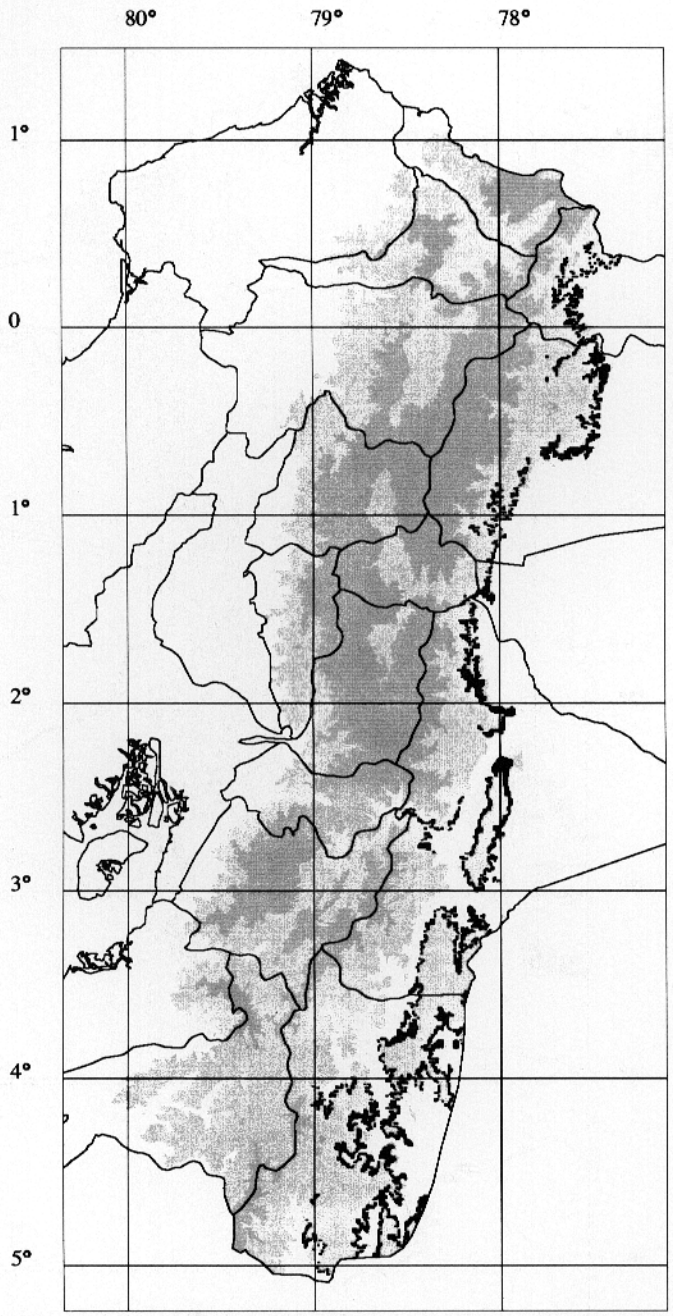
NW: Limited: 2700

NE: Limited: N 2750, S 2000 –2300

S: 1900 –2950

Habitat: HPF

Total distribution: 54 cells



Buff-throated Tody-tyrant
Tirano-todi Pechihabano

Hemitriccus rufigularis

Altitudinal range:

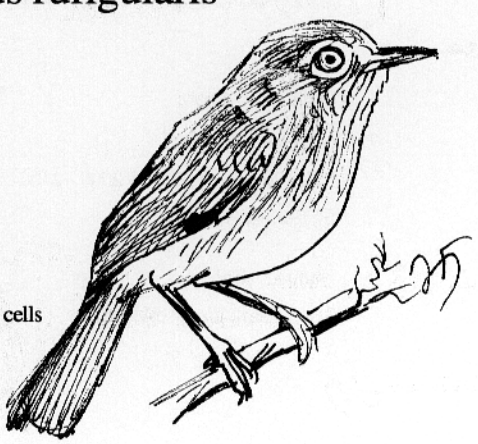
NW: Not found

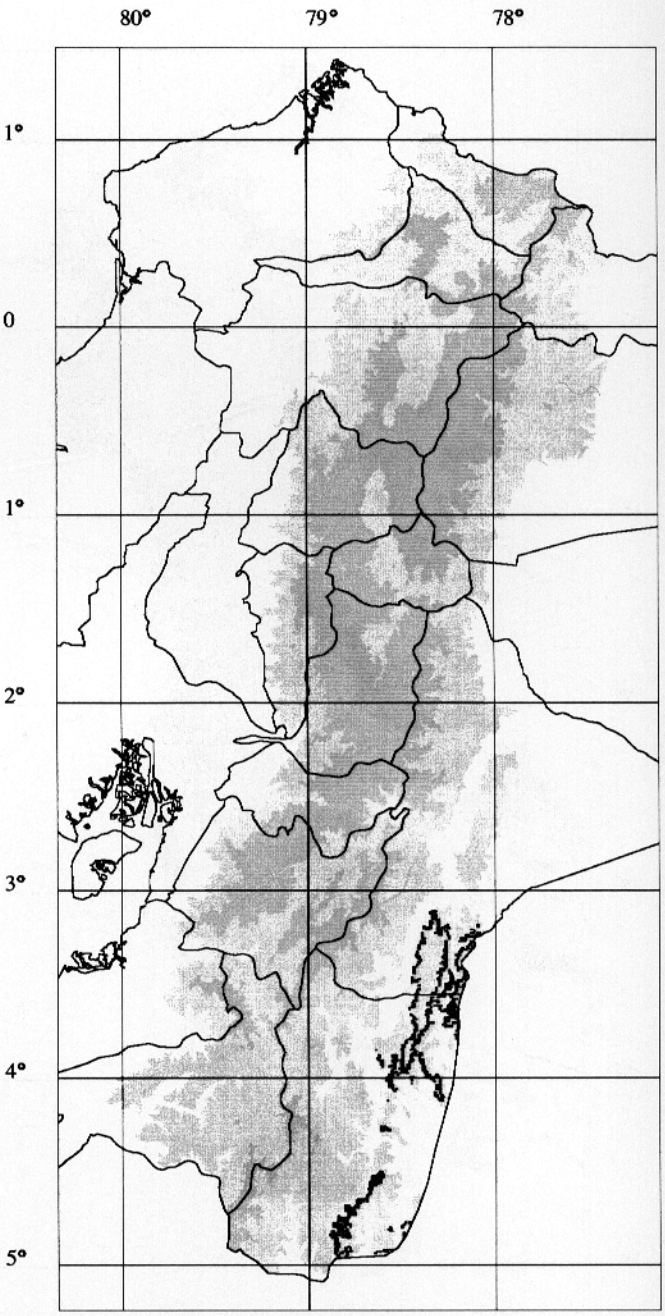
NE: 1300 –1500

S: 1300 –1500

Habitat: HPF

Total distribution: 20 cells





Cinnamon-breasted Tody-tyrant
Tirano-todi Pechicanelo

Hemitriccus cinnamomeipectus

Altitudinal range:

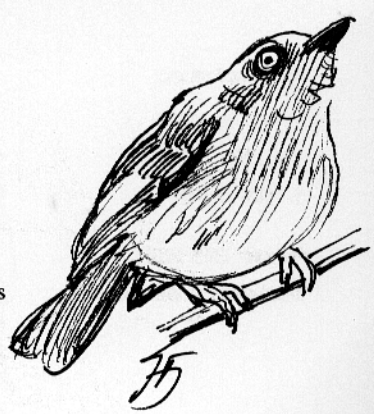
NW: Not found

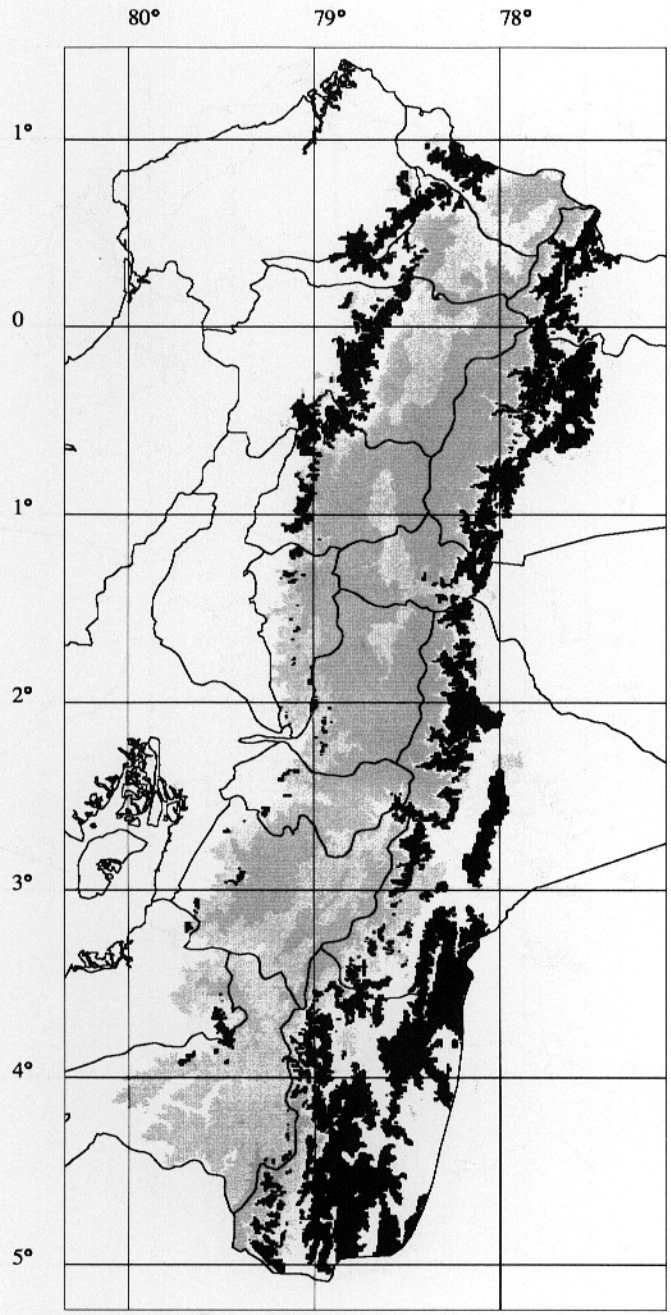
NE: Not found

S: 1700 –1900

Habitat: HPF

Total distribution: 3 cells





Flavescent Flycatcher
Mosqueta Flavescente

Myiophobus flavicans

Altitudinal range:

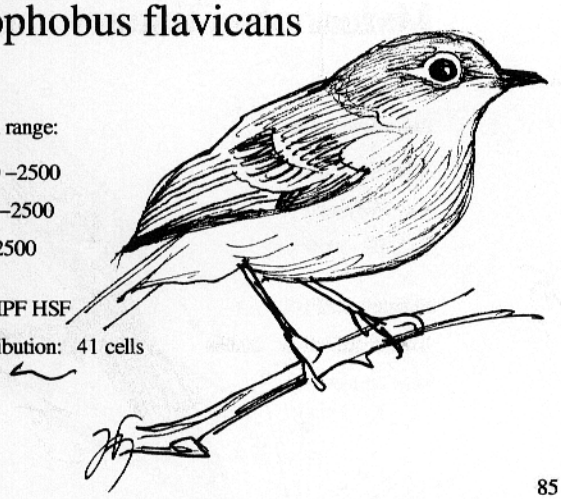
NW: 1500 –2500

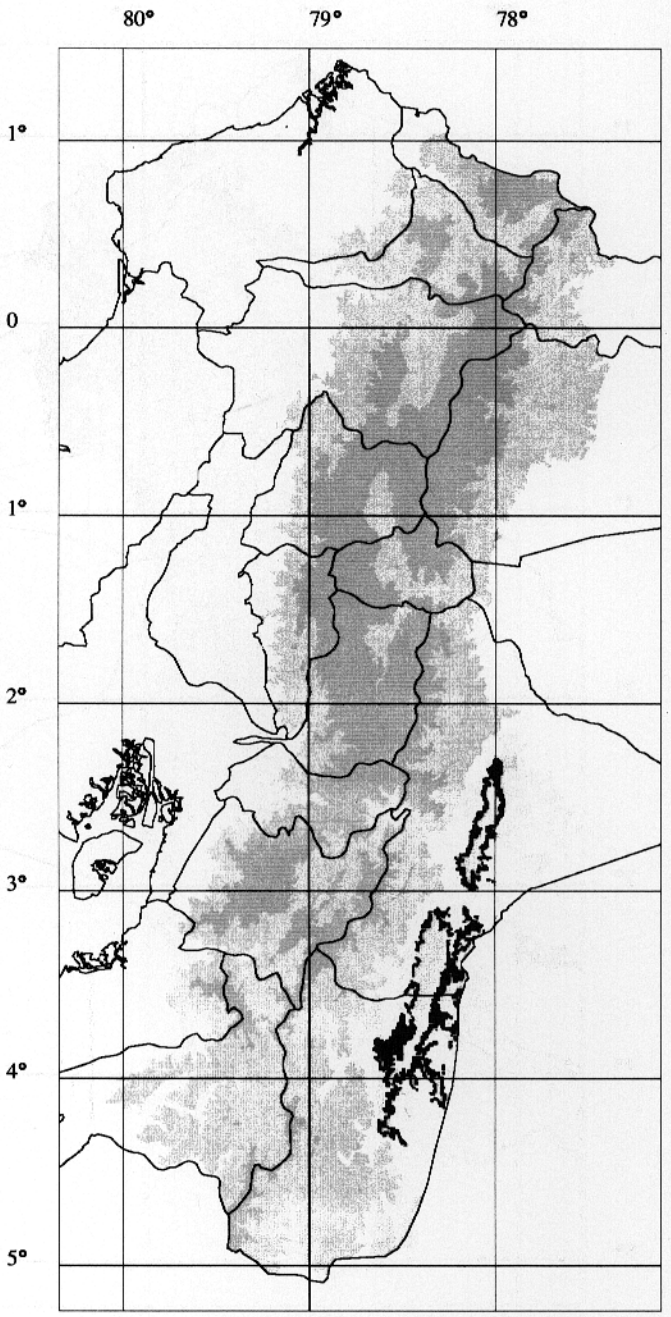
NE: 1500 –2500

S: 1300 –2500

Habitat: HPF HSF

Total distribution: 41 cells





Roraiman Flycatcher
Mosqueta de Roraima

Myiophobus roraimae

Altitudinal range:

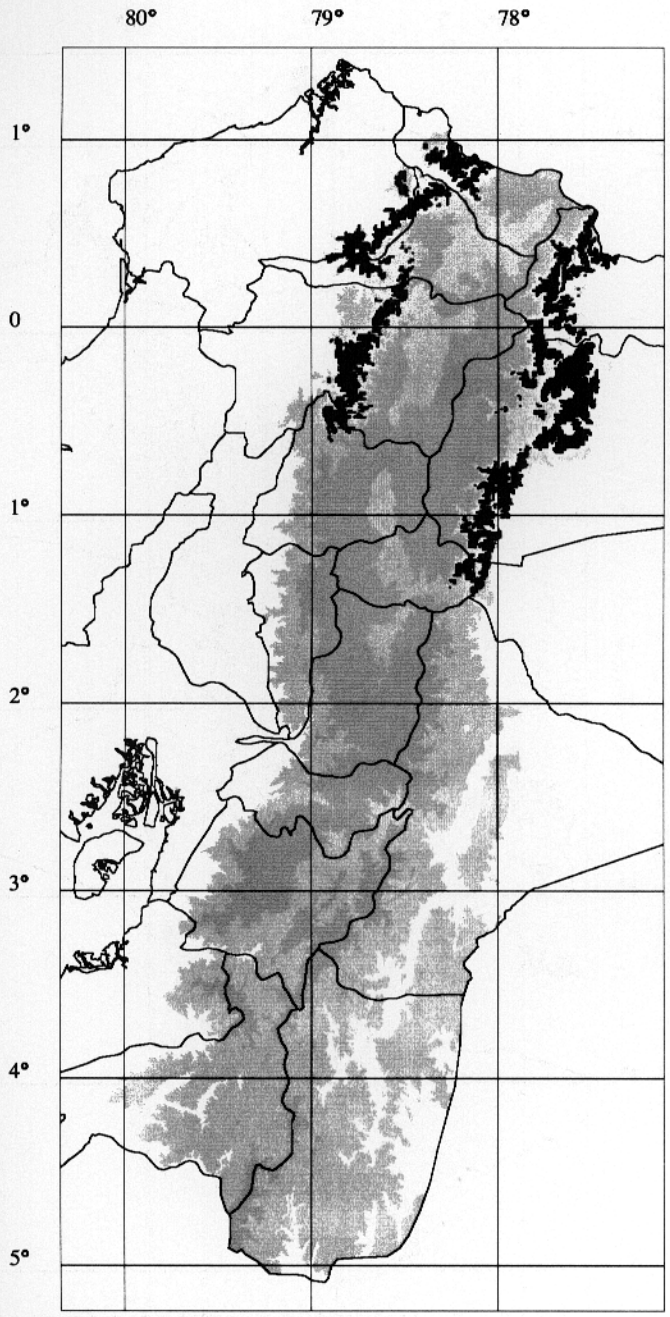
NW: Not found

NE: 1400 –1700

S: 1400 –1700

Habitat: HPF

Total distribution: 24 cells



Handsome Flycatcher
Mosqueta Hermosa

Myiophobus pulcher

Altitudinal range:

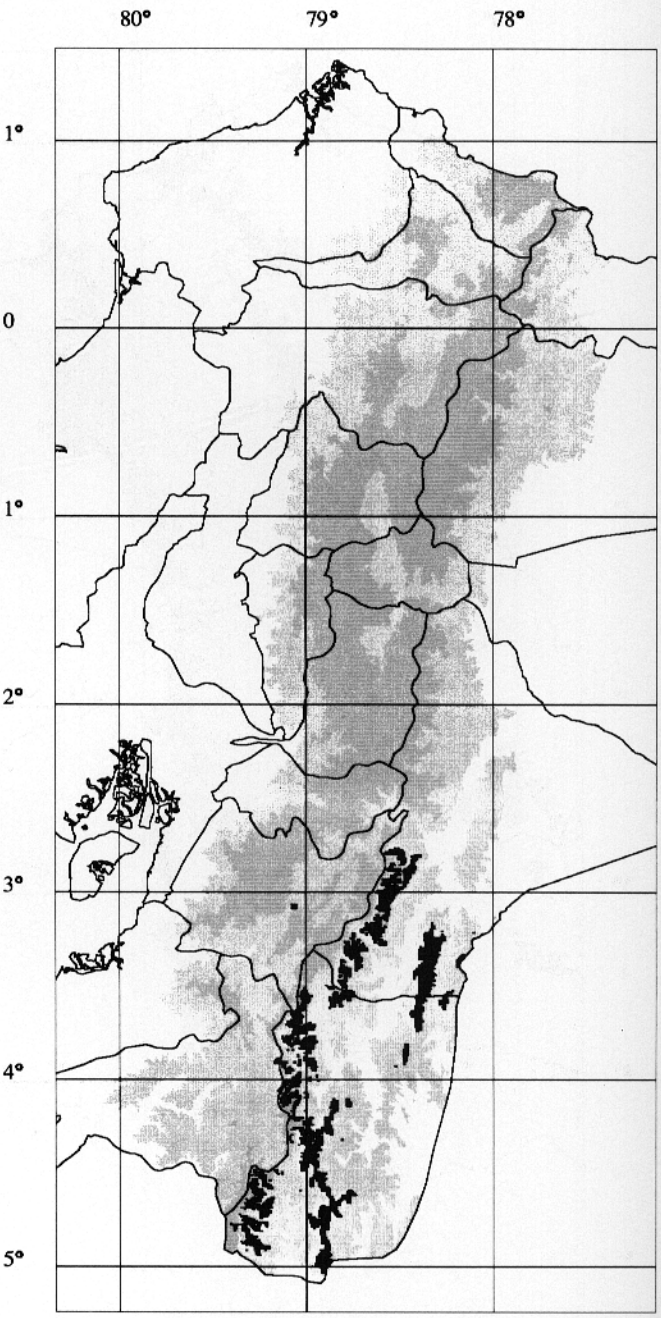
NW: 1500 –2300

NE: 1500 –2300

S: Not found

Habitat: HPF

Total distribution: 24 cells



Orange-banded Flycatcher
Mosqueta Franjinaranja

Myiophobus lintoni

Altitudinal range:

NW: Not found

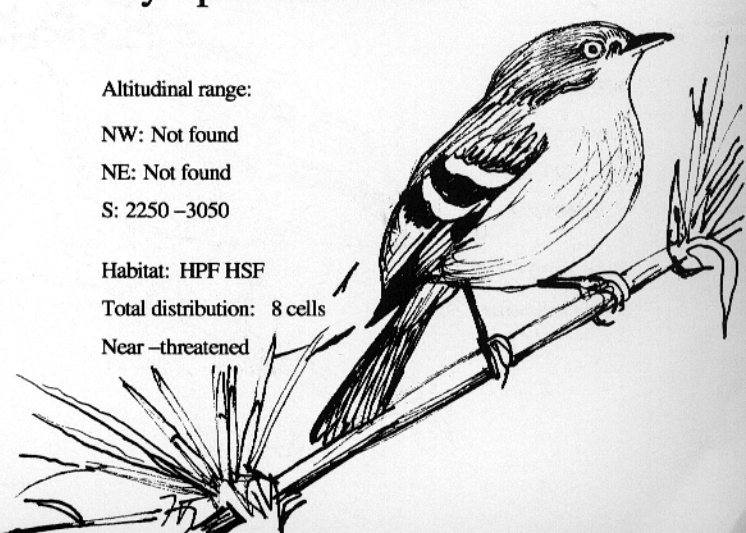
NE: Not found

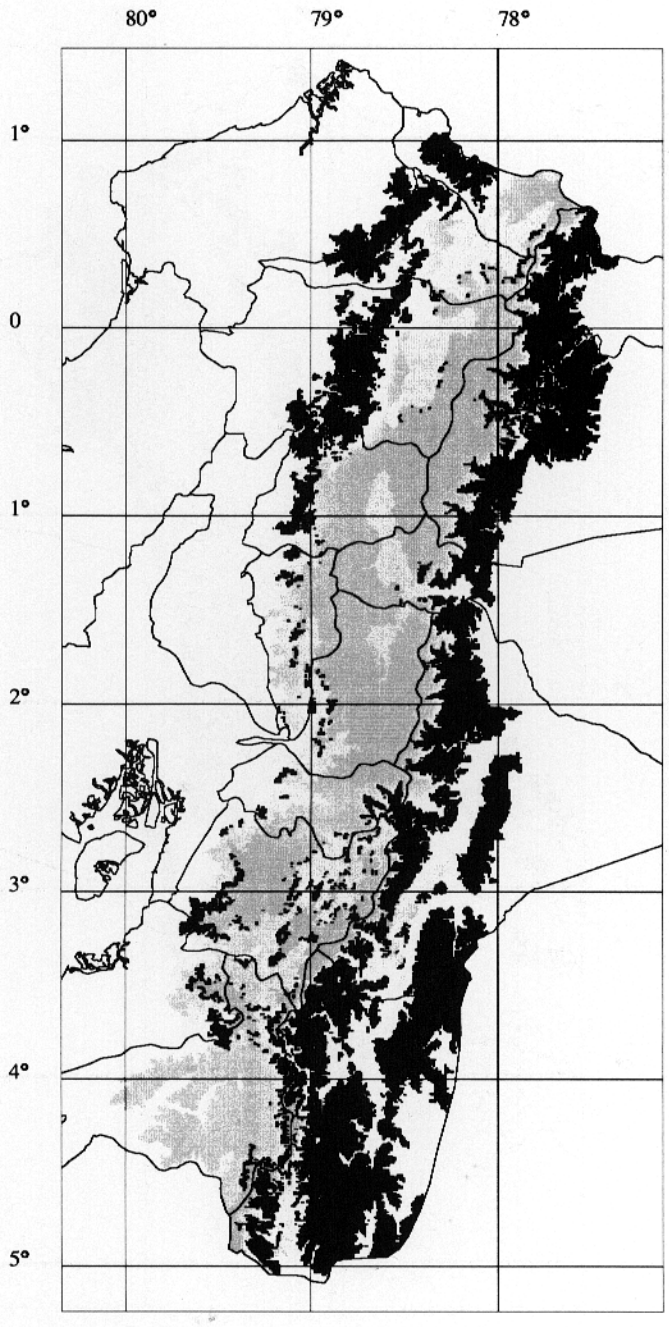
S: 2250 –3050

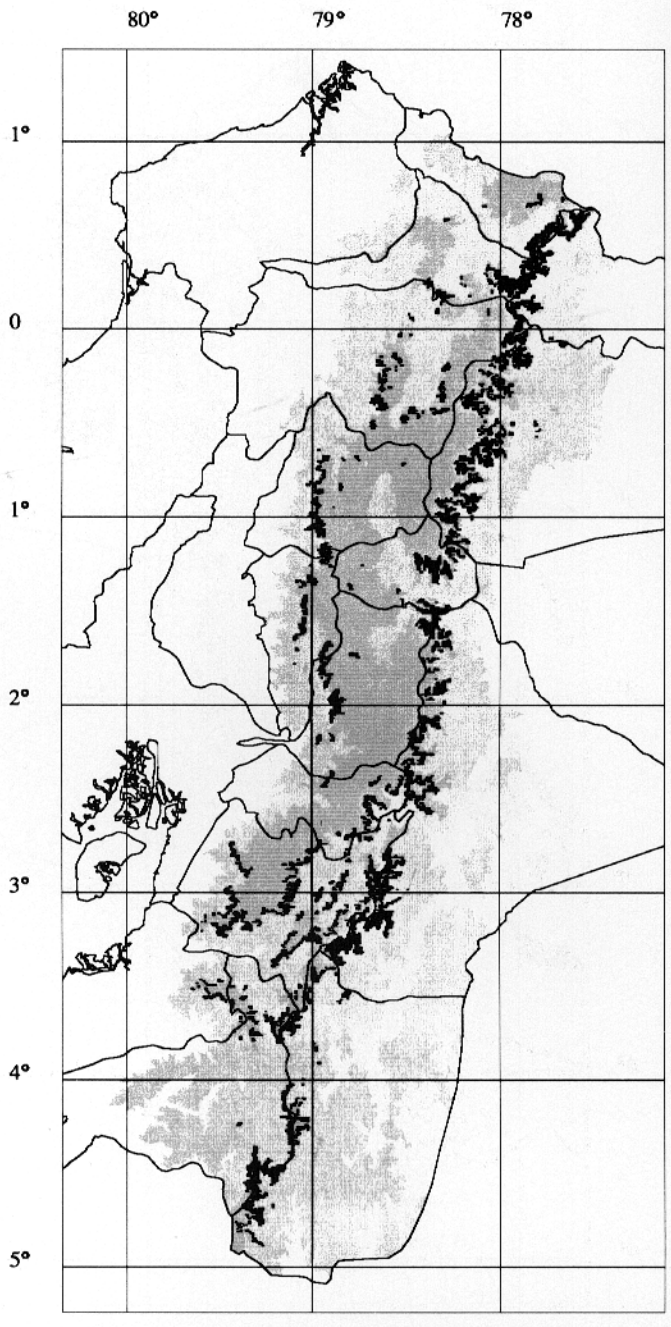
Habitat: HPF HSF

Total distribution: 8 cells

Near –threatened







Cinnamon Flycatcher
Mosquerito Canelo

Pyrrhomyias cinnamomea

Altitudinal range:

NW: 1200 –3000

NE: 1200 –3100

S: 1200 –3000

Habitat: HPF HSF HS

Total distribution: 91 cells

Brown-backed Chat-tyrant
Pitajo Dorsipardo

Ochthoeca fumicolor

Altitudinal range:

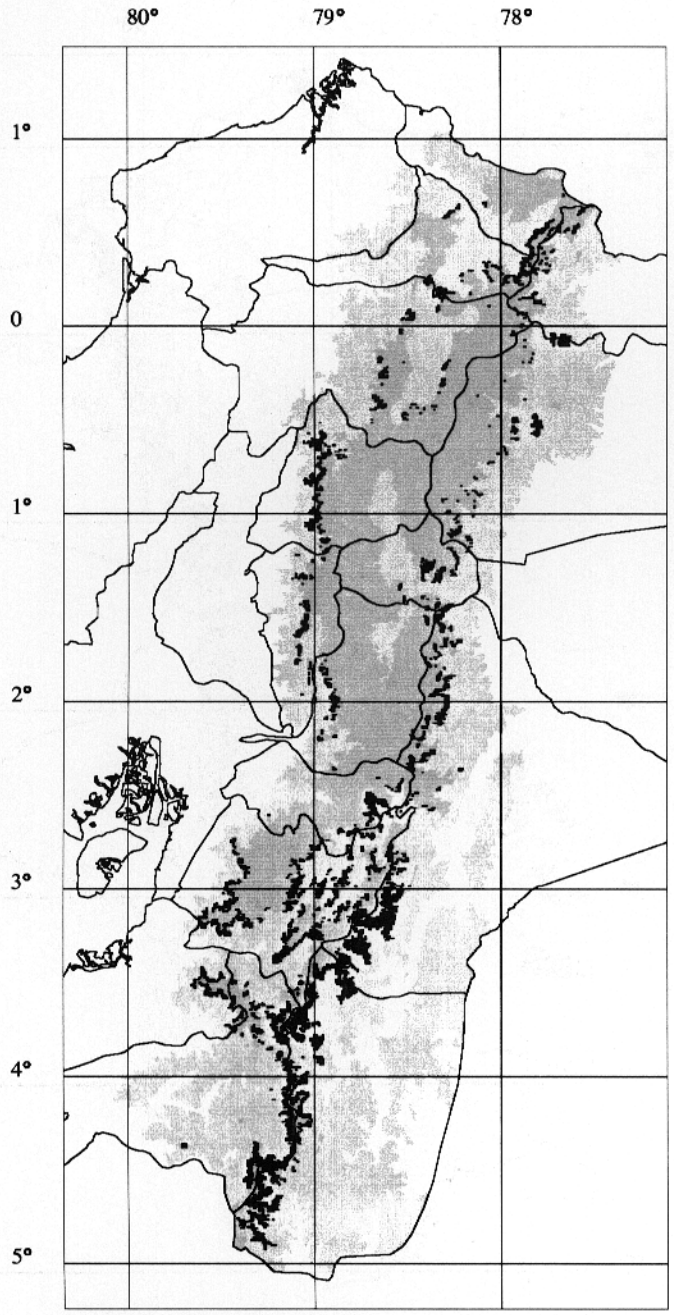
NW: 2900 –4200

NE: 2900 –4200

S: 2900 –4200

Habitat: HS HSF

Total distribution: 62 cells



Rufous-breasted Chat-tyrant
Pitajo Pechirrufo

Ochthoeca rufipectoralis

Altitudinal range:

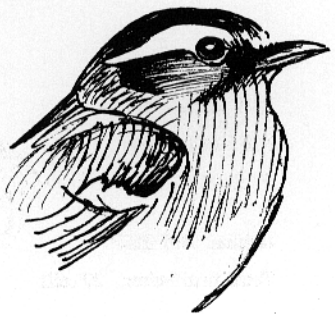
NW: 2500 –3200

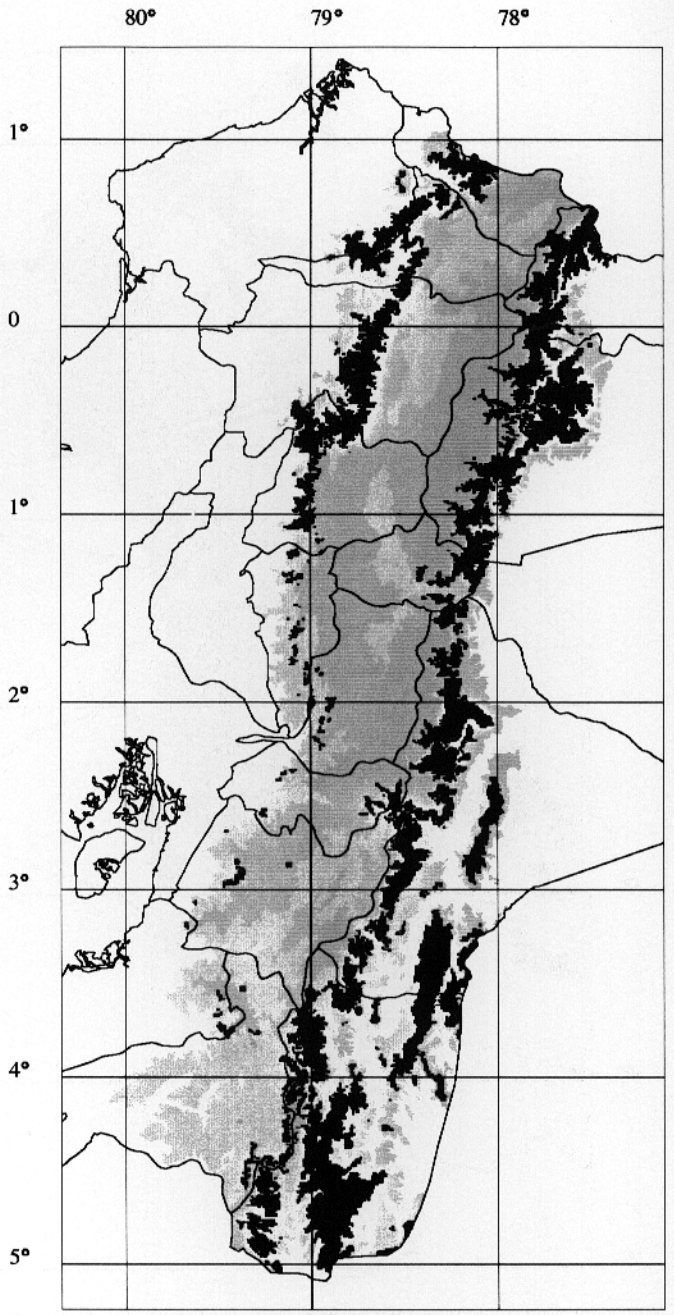
NE: 2500 –3300

S: 2500 –3300

Habitat: HSF HS

Total distribution: 79 cells





Slaty-backed Chat-tyrant
Pitajo Dorsipizarra

Ochthoeca cinnamomeiventris

Altitudinal range:

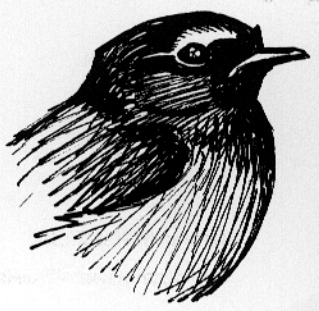
NW: 1700 –3000

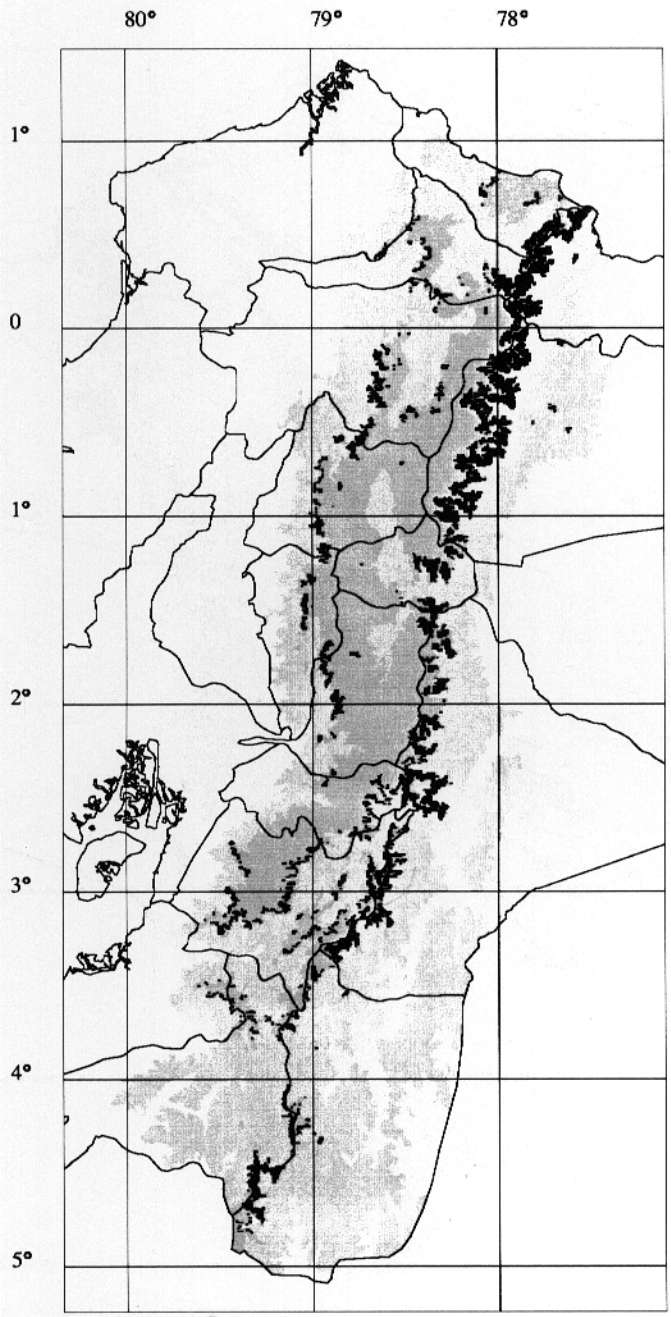
NE: 1700 –3000

S: 1700 –3000

Habitat: HPF HSF

Total distribution: 69 cells





Crowned Chat-tyrant
Pitajo Coronado

Ochthoeca frontalis

Altitudinal range:

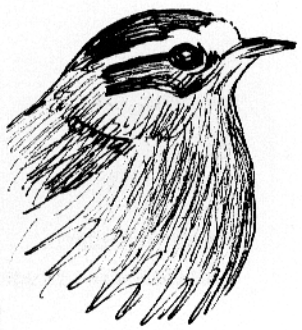
NW: 3100 –3800

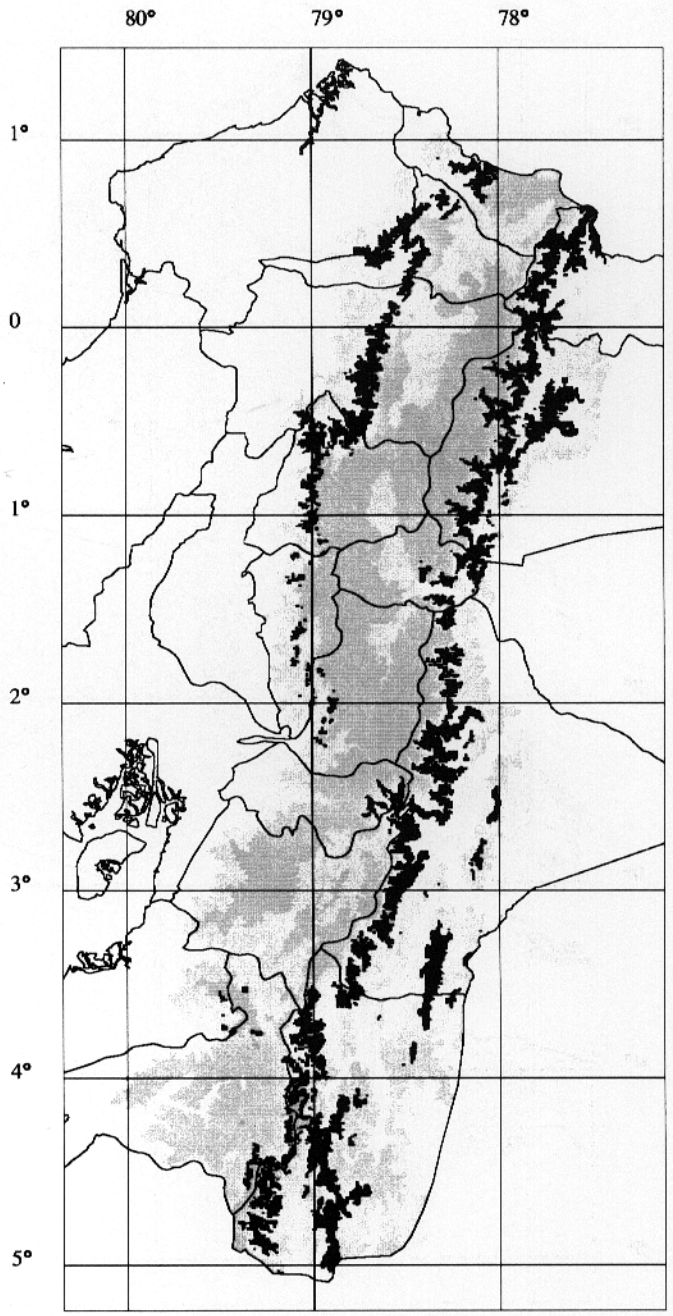
NE: 3050 –3800

S: 3050 –3700

Habitat: HPF HSF HS

Total distribution: 47 cells





Yellow-bellied Chat-tyrant
Pitajo Ventriamarillo

Ochthoeca diadema

Altitudinal range:

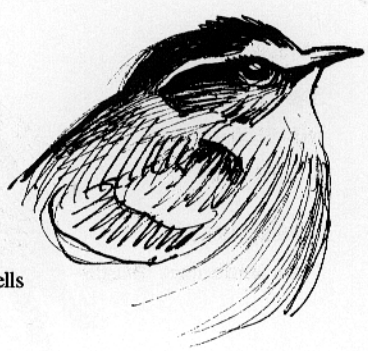
NW: 2100 –3100

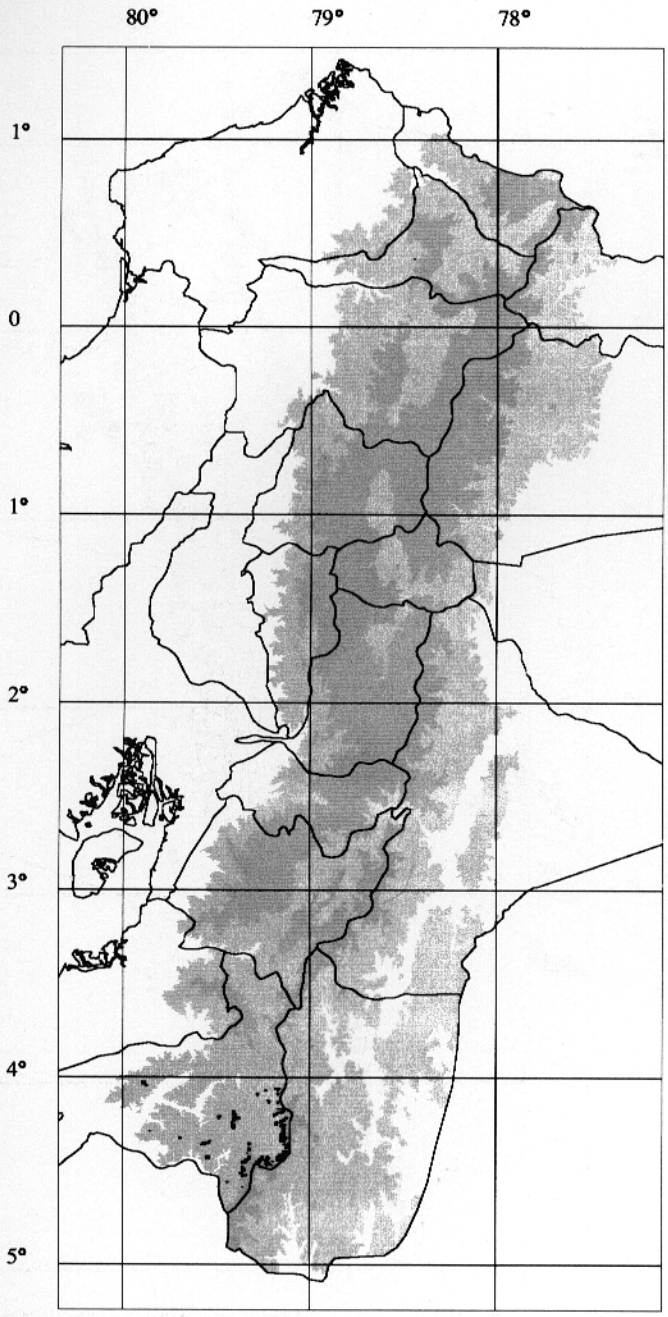
NE: 2100 –3200

S: 2100 –3100

Habitat: HPF HSF

Total distribution: 20 cells





Jelski's Chat-tyrant
Pitajo de Jelski

Ochthoeca jelskii

Altitudinal range:

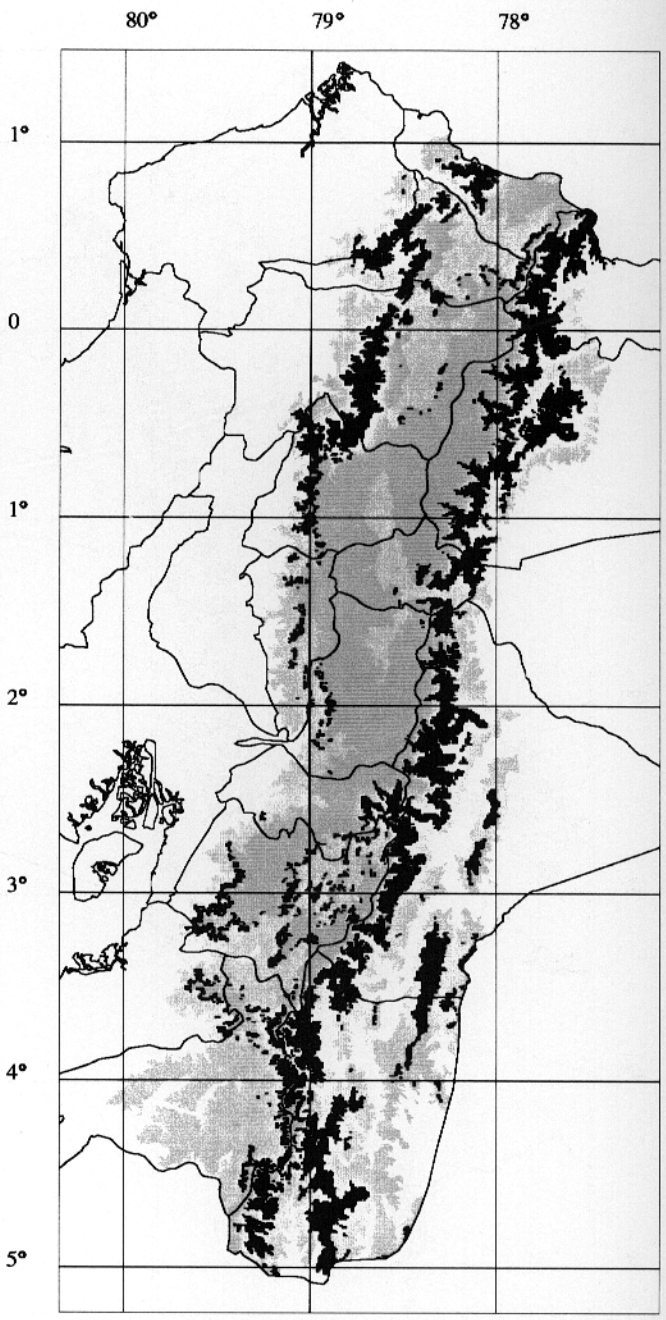
NW: Not found

NE: Not found

S: 2200 –2800

Habitat: HSF HS

Total distribution: 19 cells



Smoky Bush-tyrant
Alinaranja Ahumada

Myiotheretes fumigatus

Altitudinal range:

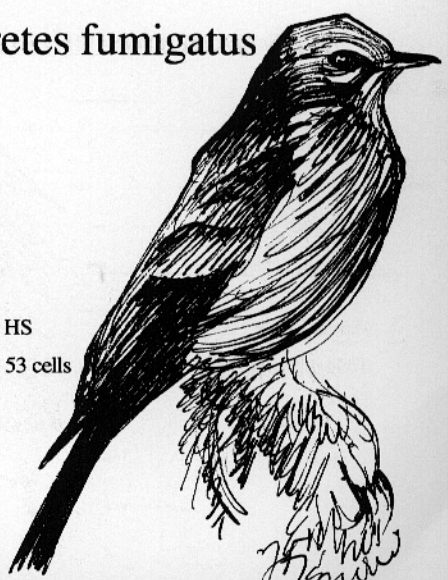
NW: 2000 –3200

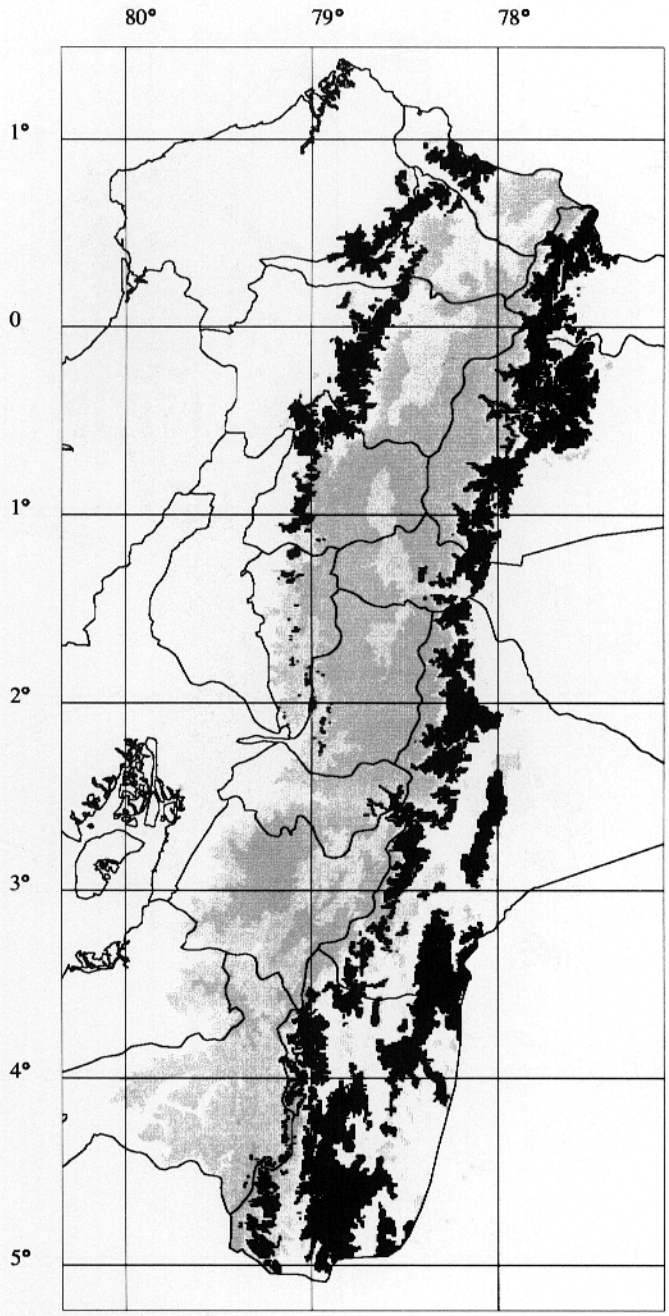
NE: 2000 –3200

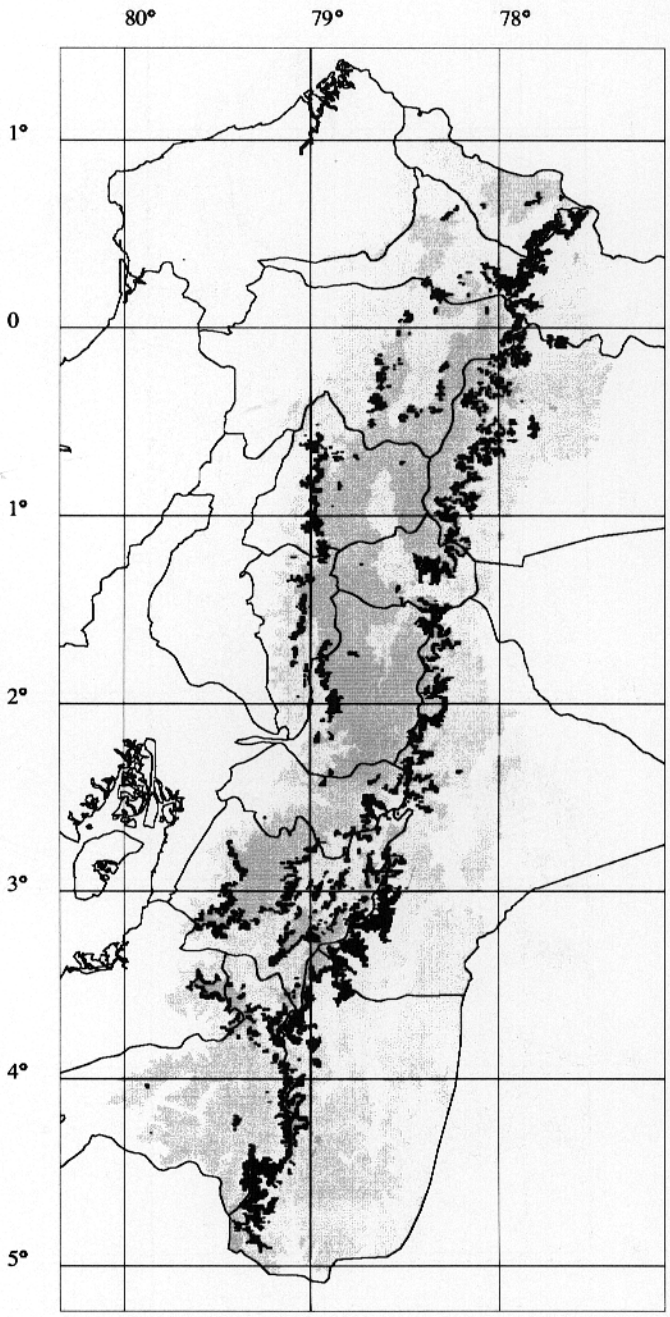
S: 2000 –3050

Habitat: HPF HSF HS

Total distribution: 53 cells







Barred Becard
Cabezón Ondeado

Pachyramphus versicolor

Altitudinal range:

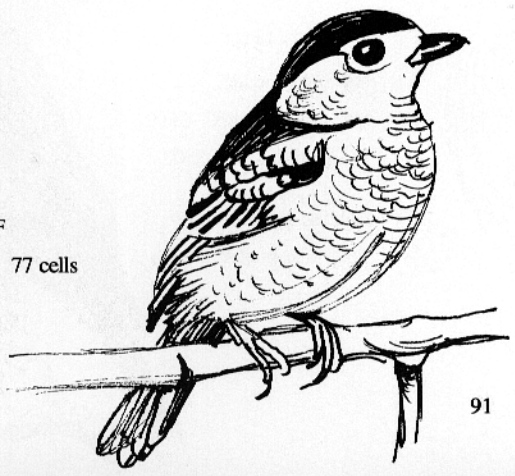
NW: 1500 –2700

NE: 1500 –2900

S: 1500 –2900

Habitat: HPF HSF

Total distribution: 77 cells



Red-crested Cotinga
Cotinga Penachirroja

Ampelion rubrocristatus

Altitudinal range:

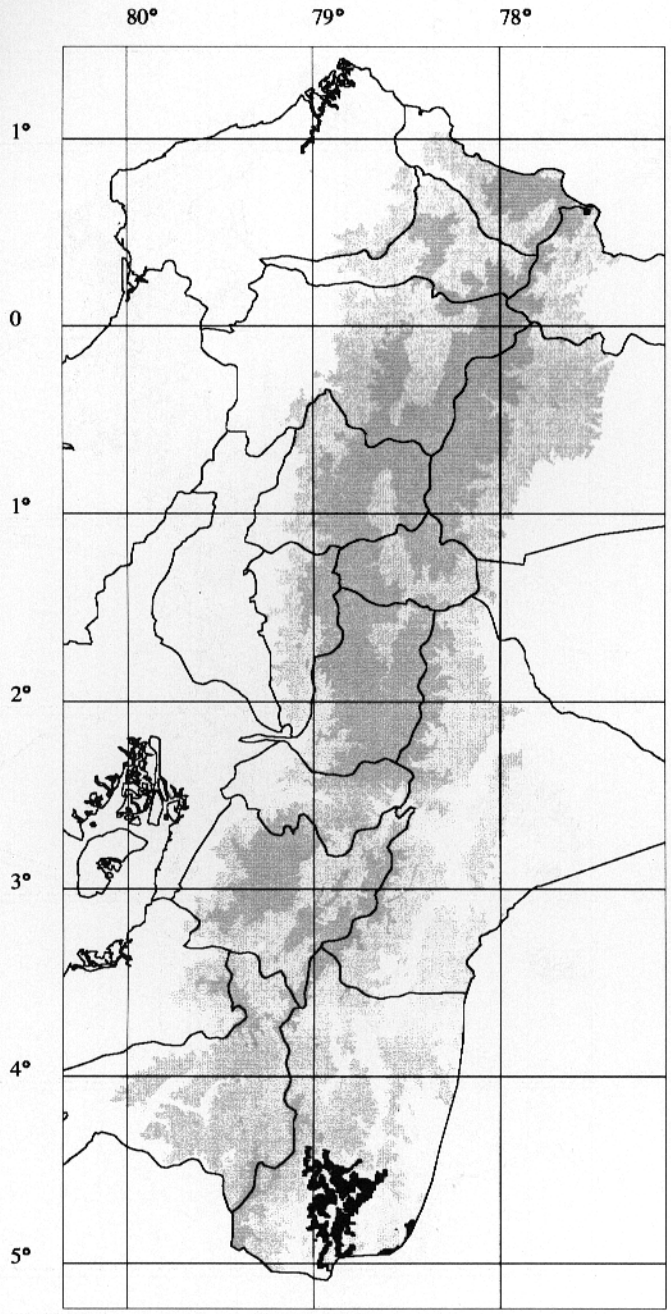
NW: 2500 –3800

NE: 2500 –3900

S: 2500 –3500

Habitat: HSF HS

Total distribution: 70 cells



Chestnut-crested Cotinga
Cotinga Cresticastaña

Ampelion rufaxilla

Altitudinal range:

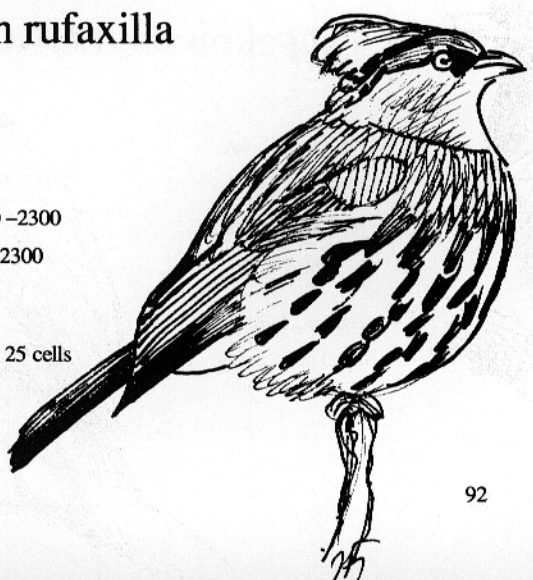
NW: Not found

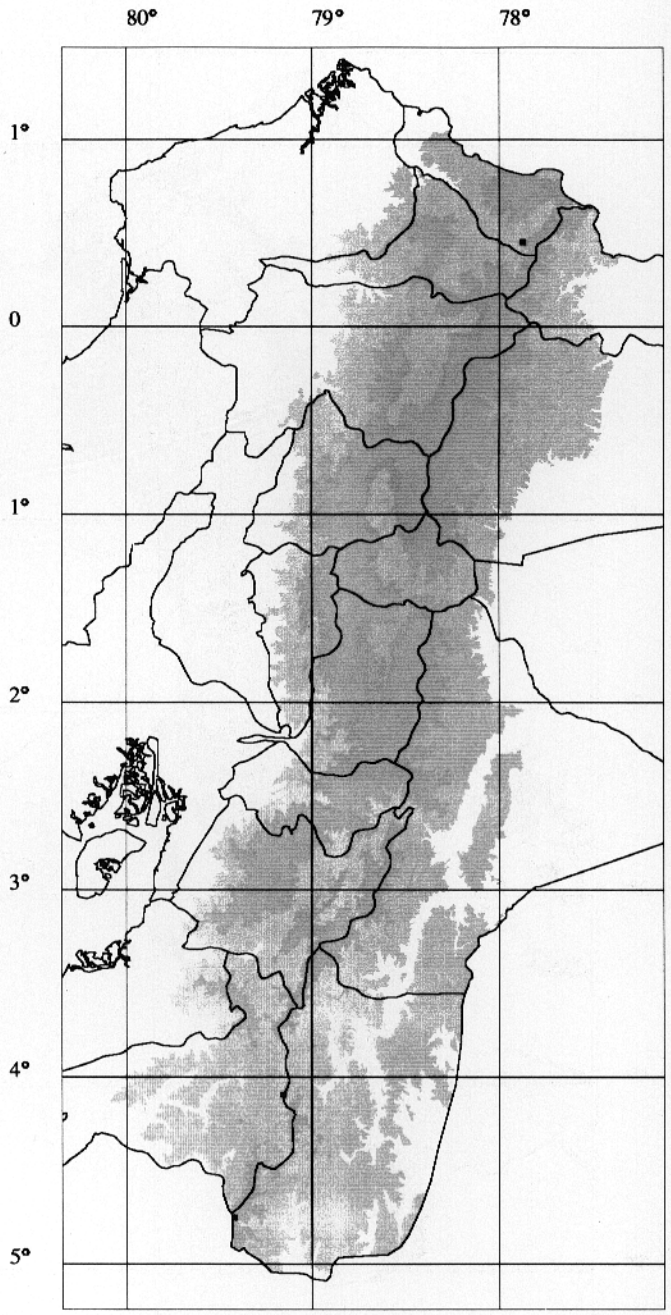
NE: Limited: 1800 –2300

S: Limited: 1800 –2300

Habitat: HPF

Total distribution: 25 cells





Chestnut-bellied Cotinga
Cotinga Ventricastaña

Doliornis remseni

Altitudinal range:

NW: Not found

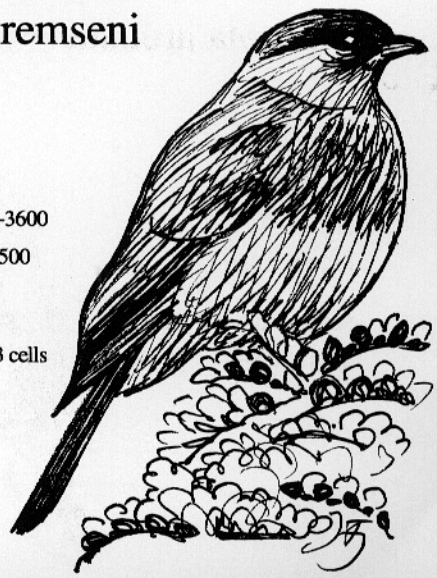
NE: Limited: 3400 –3600

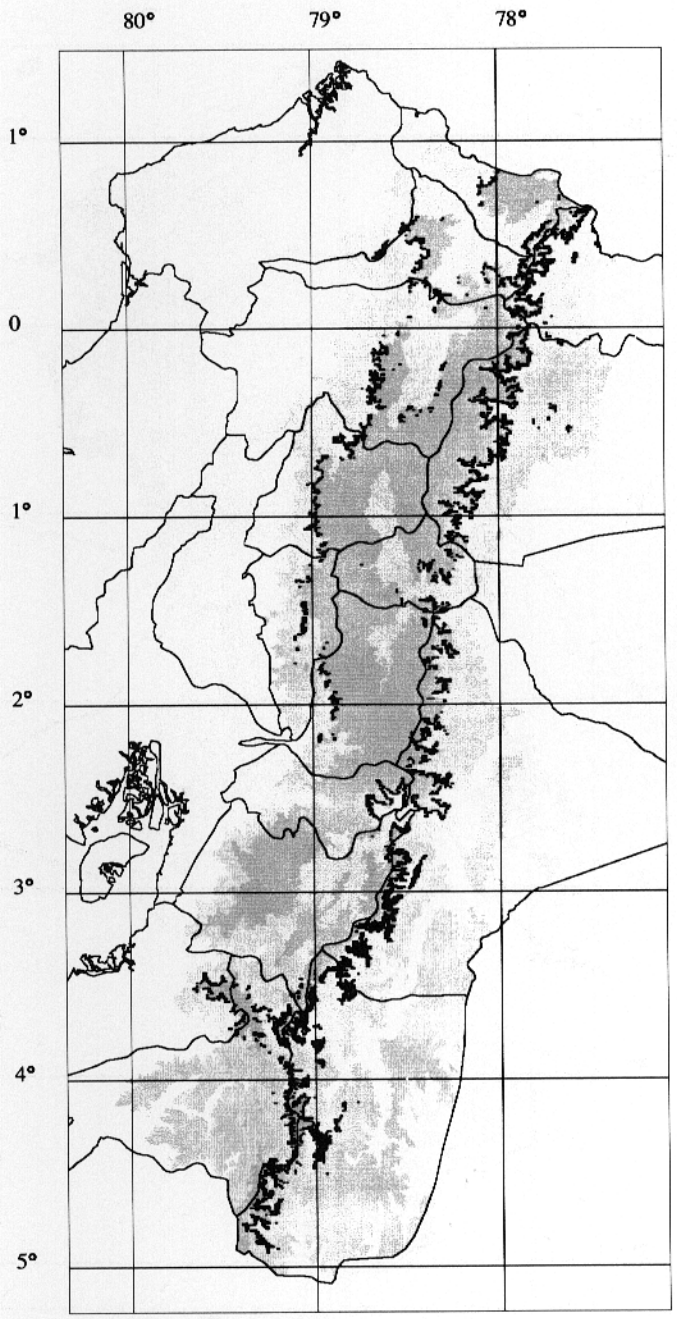
S: Limited: 3150 –3500

Habitat: HS

Total distribution: 3 cells

Vulnerable





Barred Fruiteater
Frutero Altoandino

Pipreola arcuata

Altitudinal range:

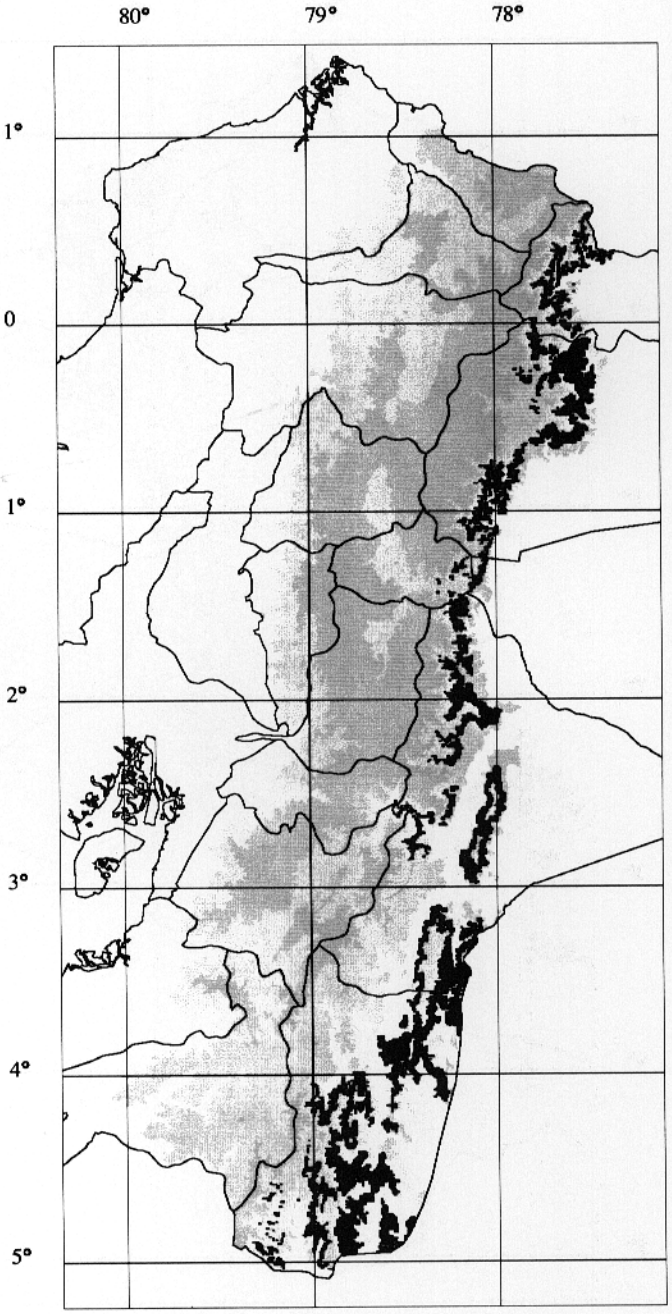
NW: 3000 –3350

NE: 3000 –3350

S: 2600 –3150

Habitat: HPF HSF HS

Total distribution: 57 cells



Black-chested Fruiteater
Frutero Pechinegro

Pipreola lubomirskii

Altitudinal range:

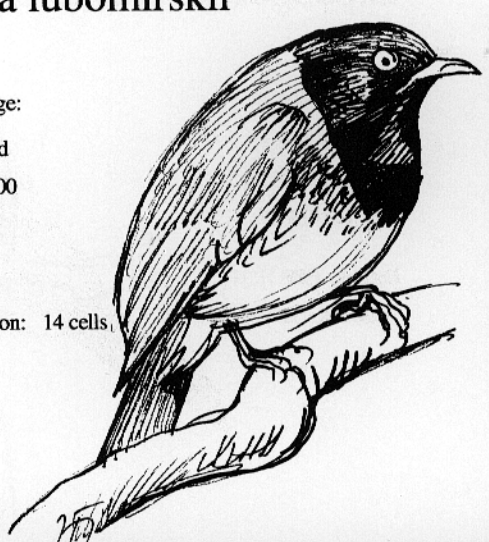
NW: Not found

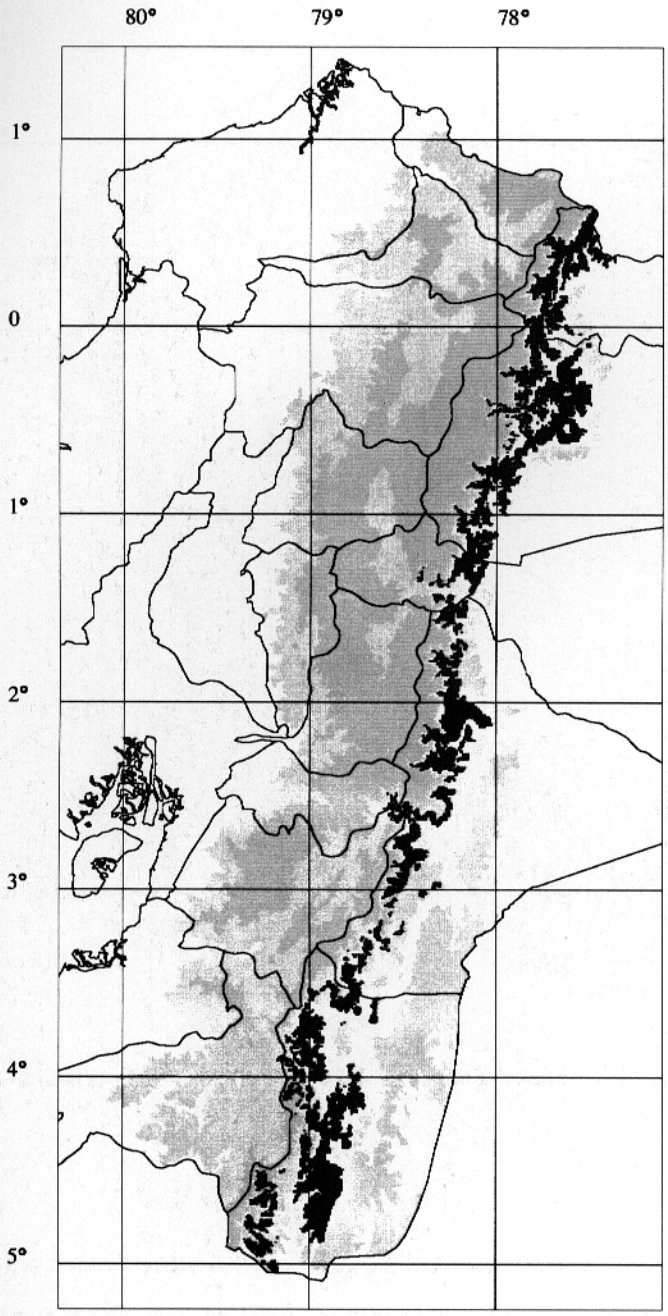
NE: 1500 –2000

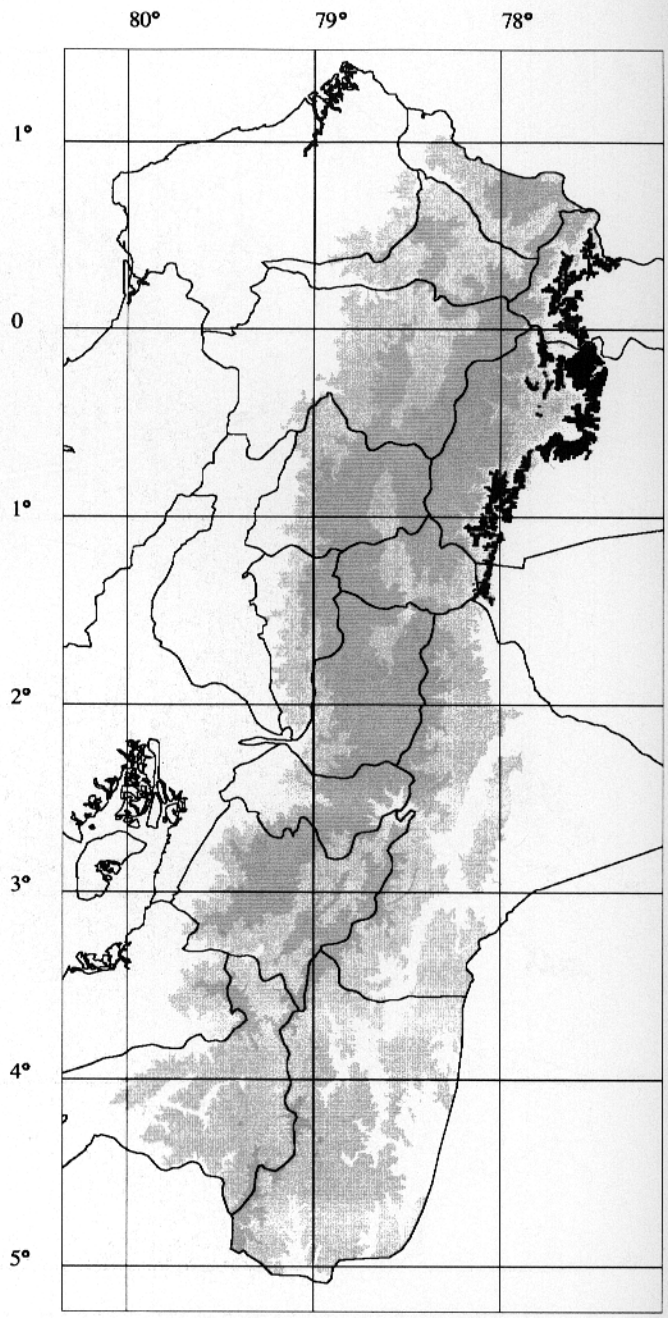
S: 1500 –2000

Habitat: HPF

Total distribution: 14 cells







Dusky Piha
Piha Oscura

Lipaugus fuscocinereus

Altitudinal range:

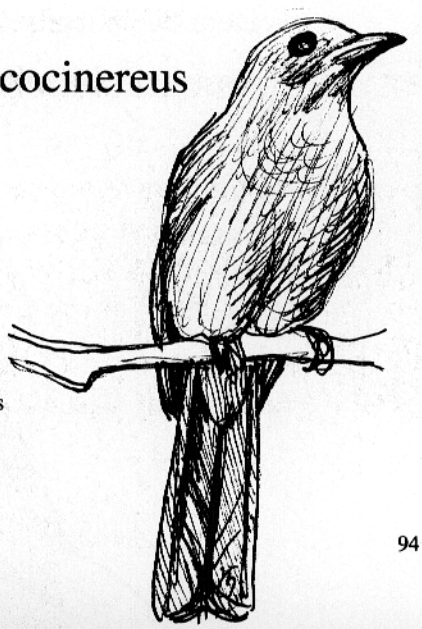
NW: Not found

NE: 1700 –2600

S: 1700 –2600

Habitat: HPF HSF

Total distribution: 15 cells



Yellow-headed Manakin
Saltarín Cabeciamarillo

Chloropipo flavicapilla

Altitudinal range:

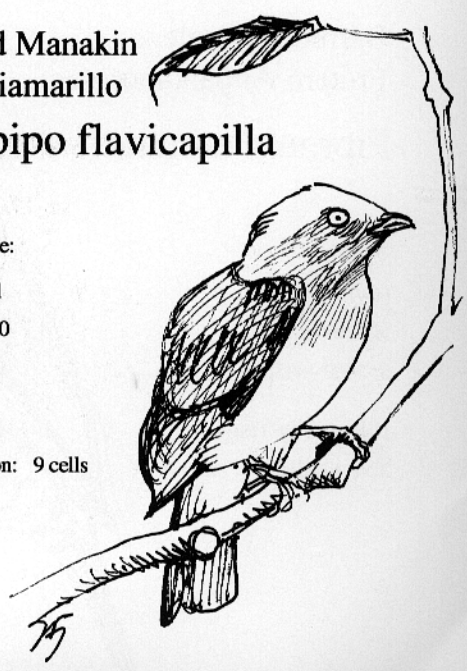
NW: Not found

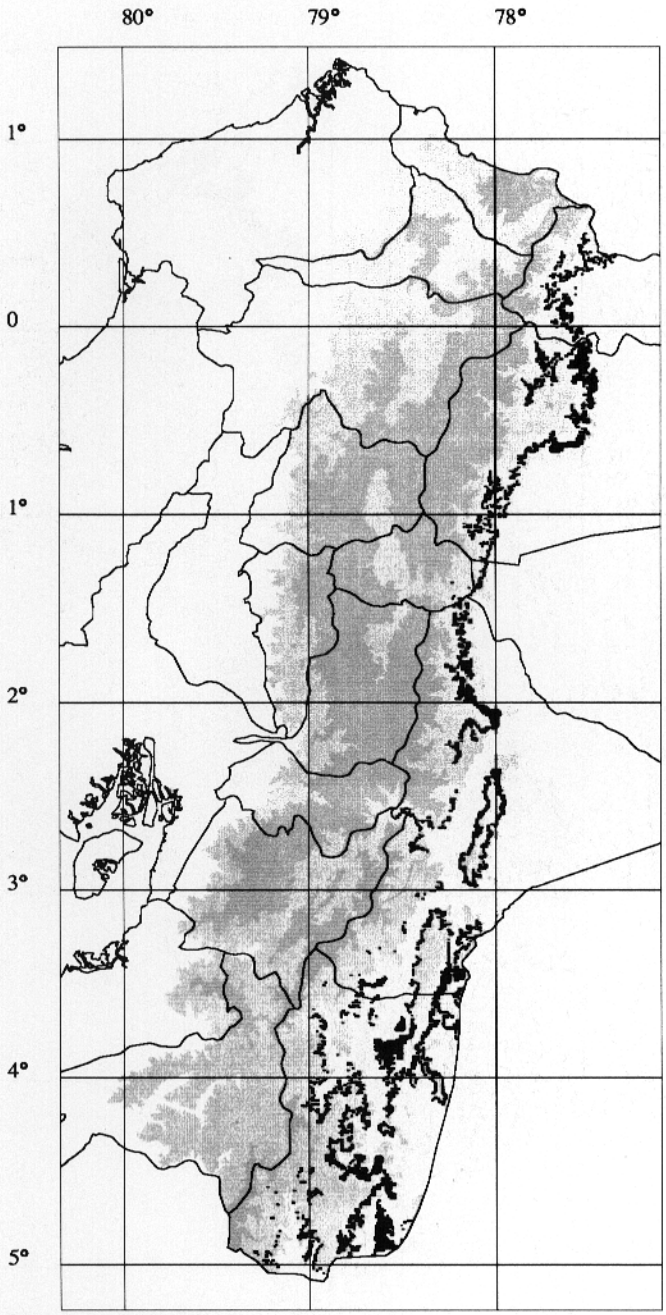
NE: 1400 –1900

S: Not found

Habitat: HPF

Total distribution: 9 cells





Jet Manakin
Saltarín Negro Azabache

Chloropipo unicolor

Altitudinal range:

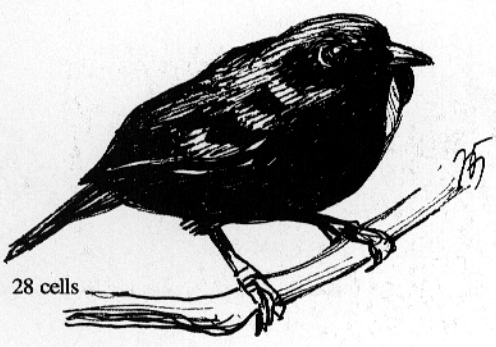
NW: Not found

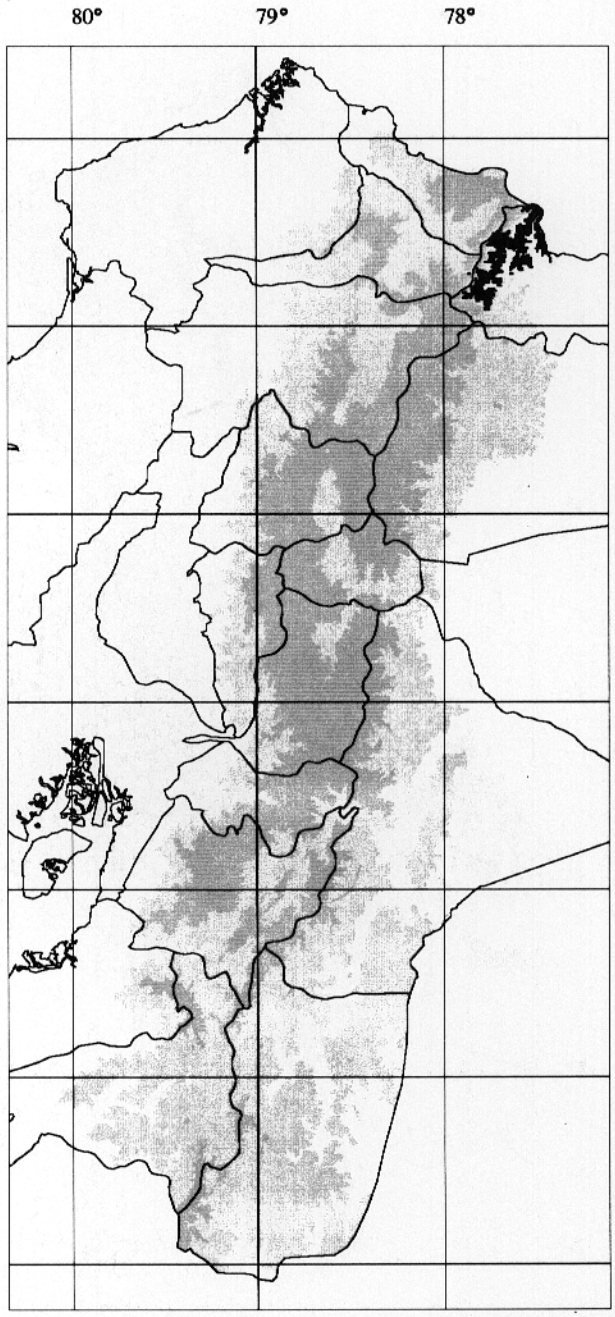
NE: 1450 –1700

S: 1450 –1700

Habitat: HPF

Total distribution: 28 cells





Black-collared Jay
Urraquita Cuellinegra

Cyanolyca armillata

Altitudinal range:

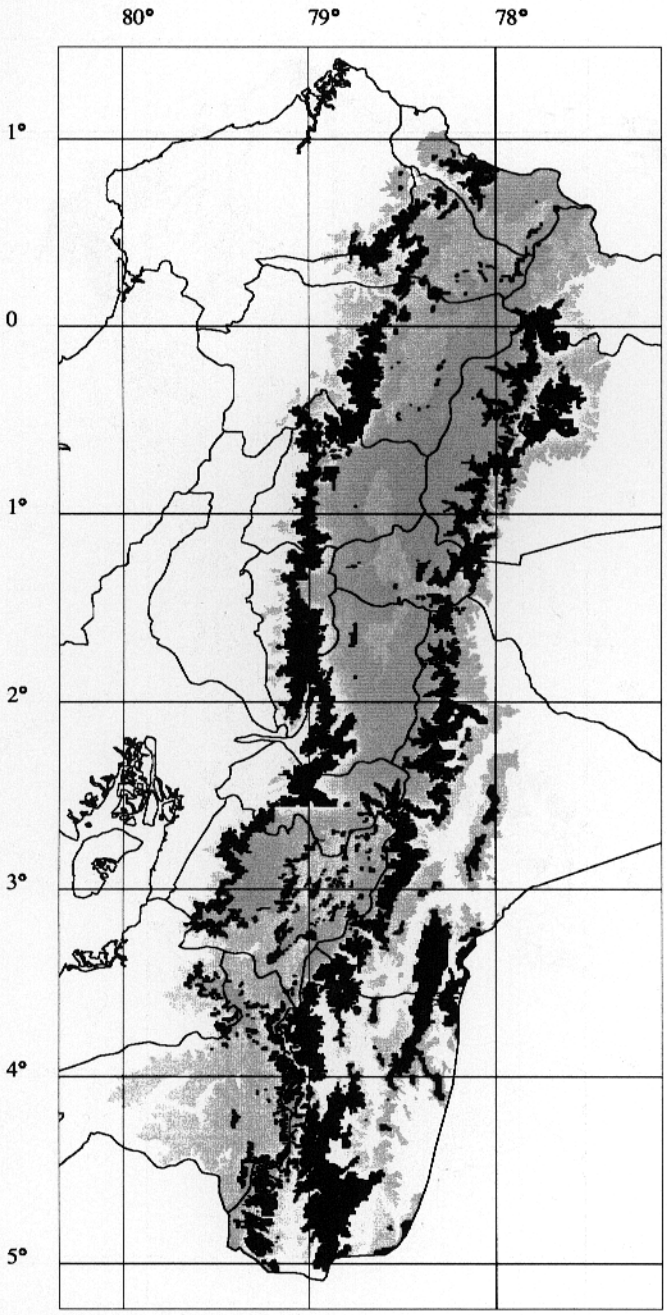
NW: Not found

NE: 2100 –3150

S: Not found

Habitat: HPF HSF

Total distribution: 19 cells



Turquoise Jay
Urraquita Turquesa

Cyanolyca turcosa

Altitudinal range:

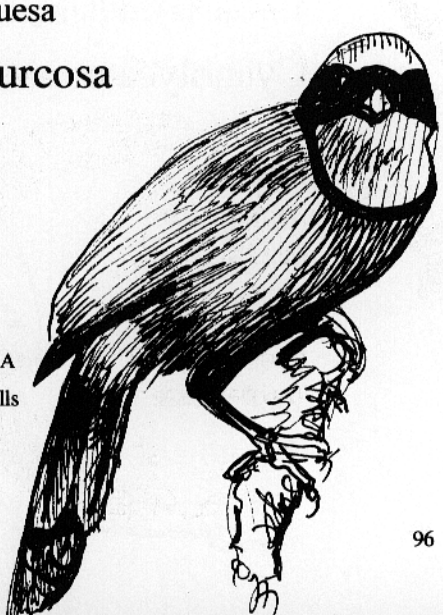
NW: 1950 –3300

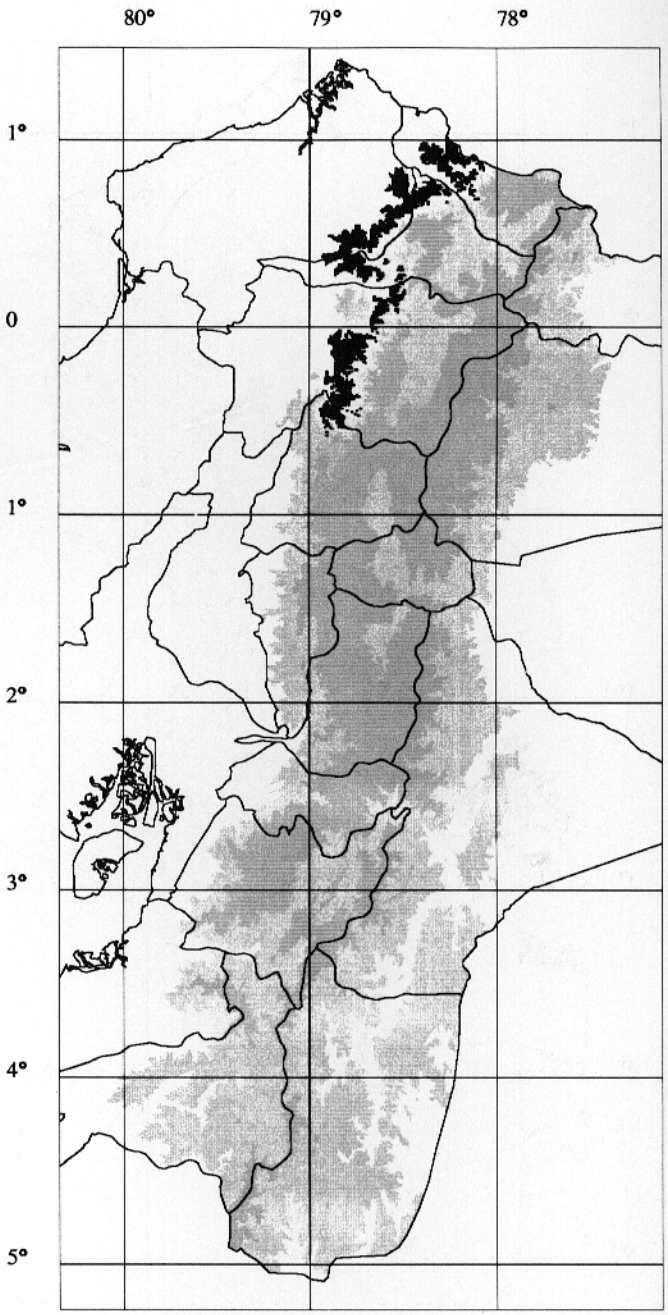
NE: 2000 –3100

S: 1700 –3100

Habitat: HPF HSF HS DA

Total distribution: 10 cells





Beautiful Jay
Urraquita Hermosa

Cyanolyca pulchra

Altitudinal range:

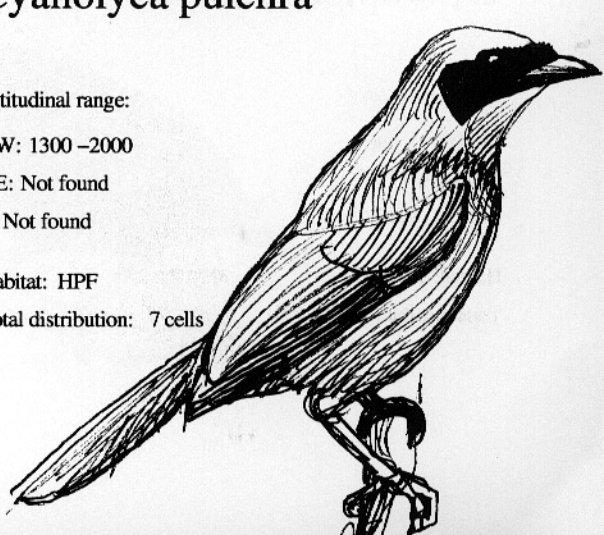
NW: 1300 –2000

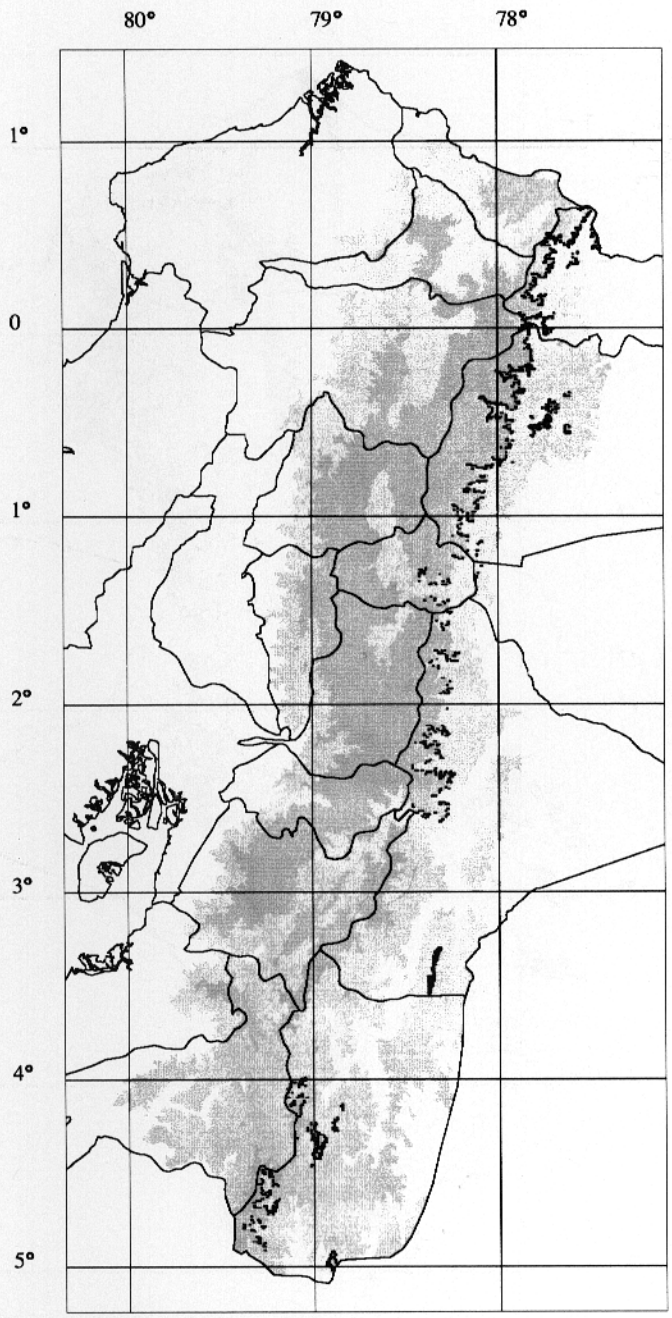
NE: Not found

S: Not found

Habitat: HPF

Total distribution: 7 cells





Pale-footed Swallow
Golondrina Patirrosada

Notiochelidon flavipes

Altitudinal range:

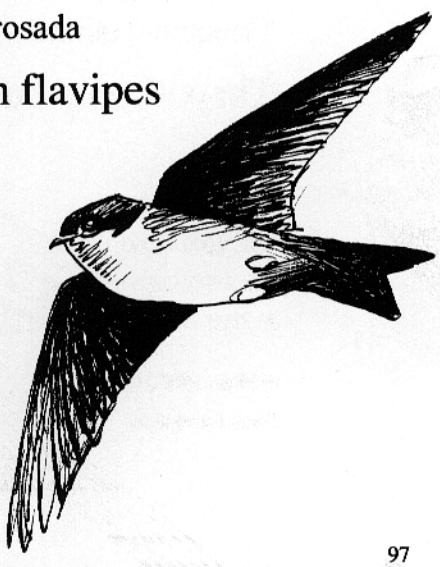
NW: Not found

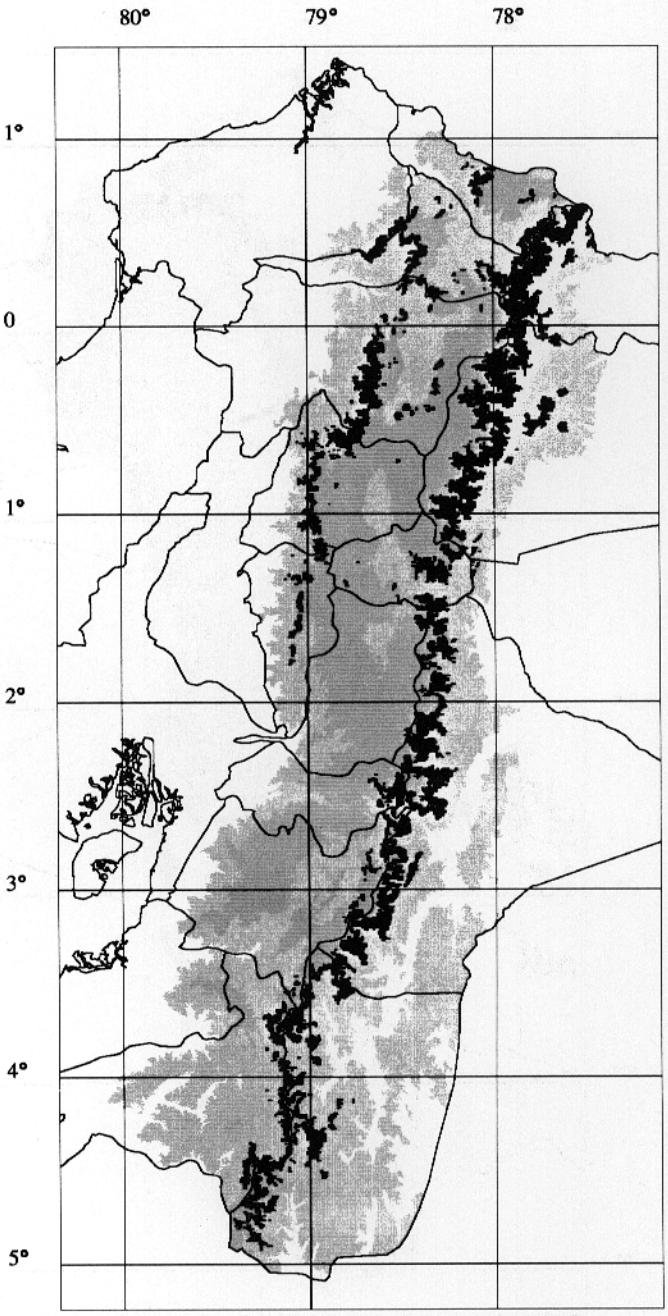
NE: 2650 –2900

S: 2650 –2900

Habitat: HPF HSF

Total distribution: 34 cells





Rufous Wren
Chochín Rufo

Cinnycerthia unirufa

Altitudinal range:

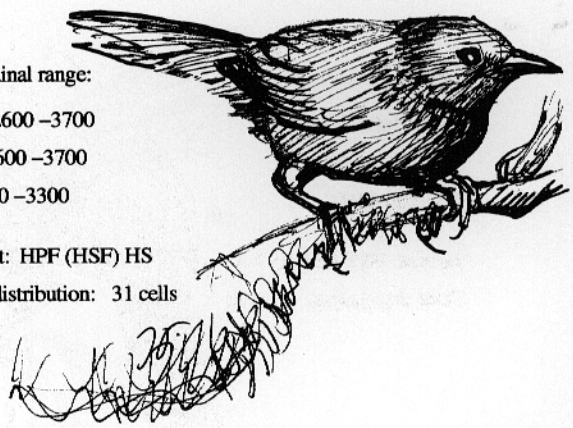
NW: 2600 –3700

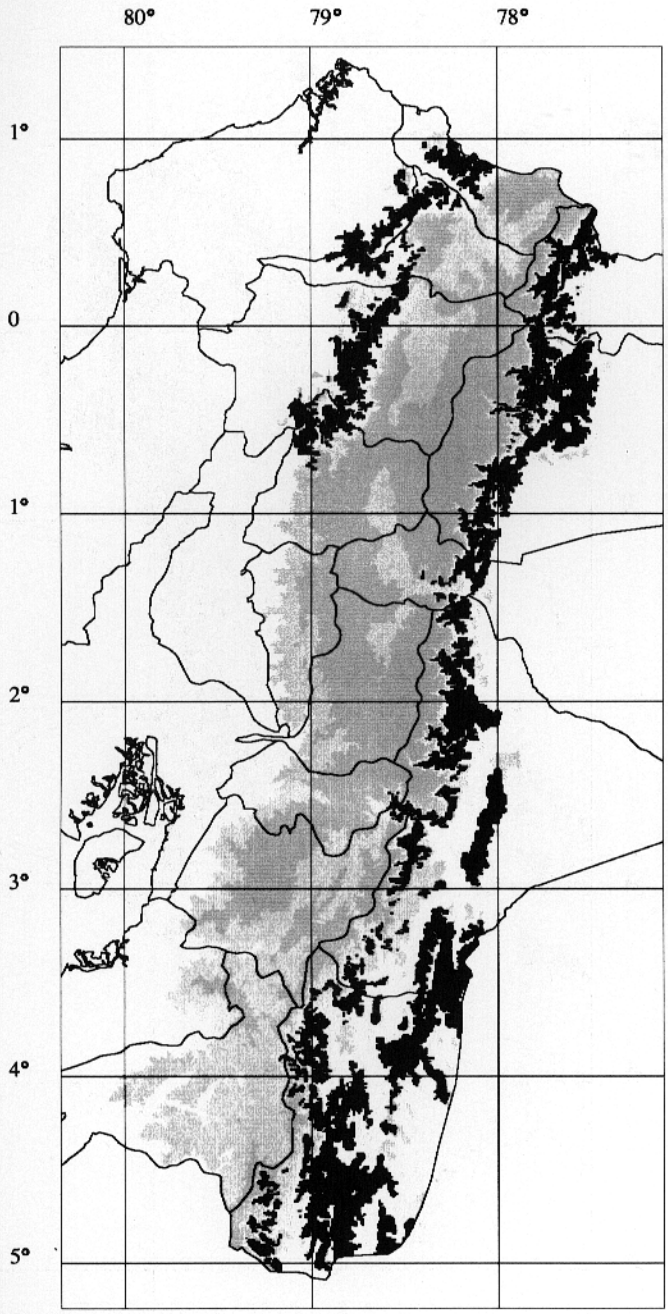
NE: 2600 –3700

S: 2500 –3300

Habitat: HPF (HSF) HS

Total distribution: 31 cells





Sepia-brown Wren
Chochín Caferrojizo

Cinnycerthia peruana

Altitudinal range:

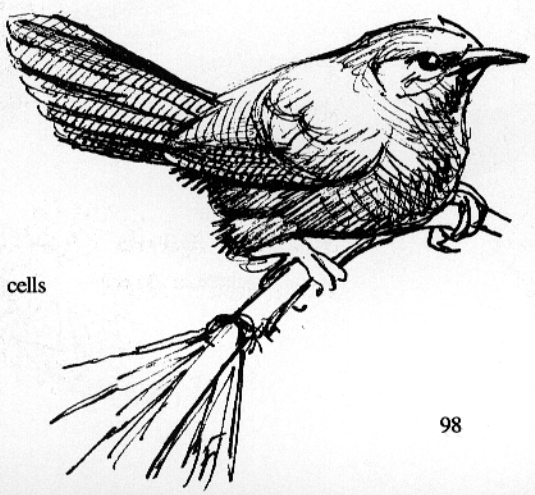
NW: 1500 –2500

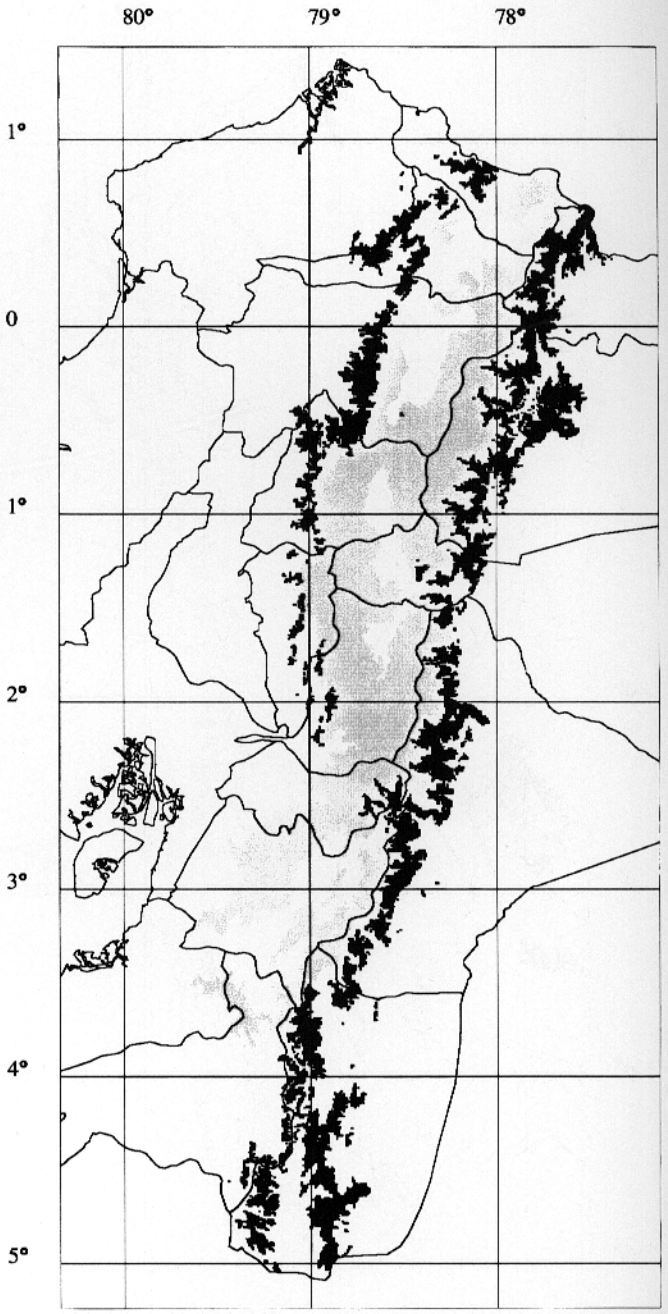
NE: 1500 –2500

S: 1500 –2500

Habitat: HPF HSF

Total distribution: 37 cells





Plain-tailed Wren
Chochín Colillano

Thryothorus euophrys

Altitudinal range:

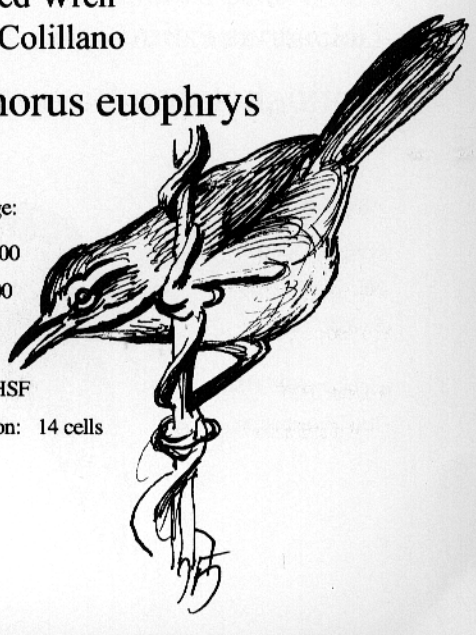
NW: 2000 –3500

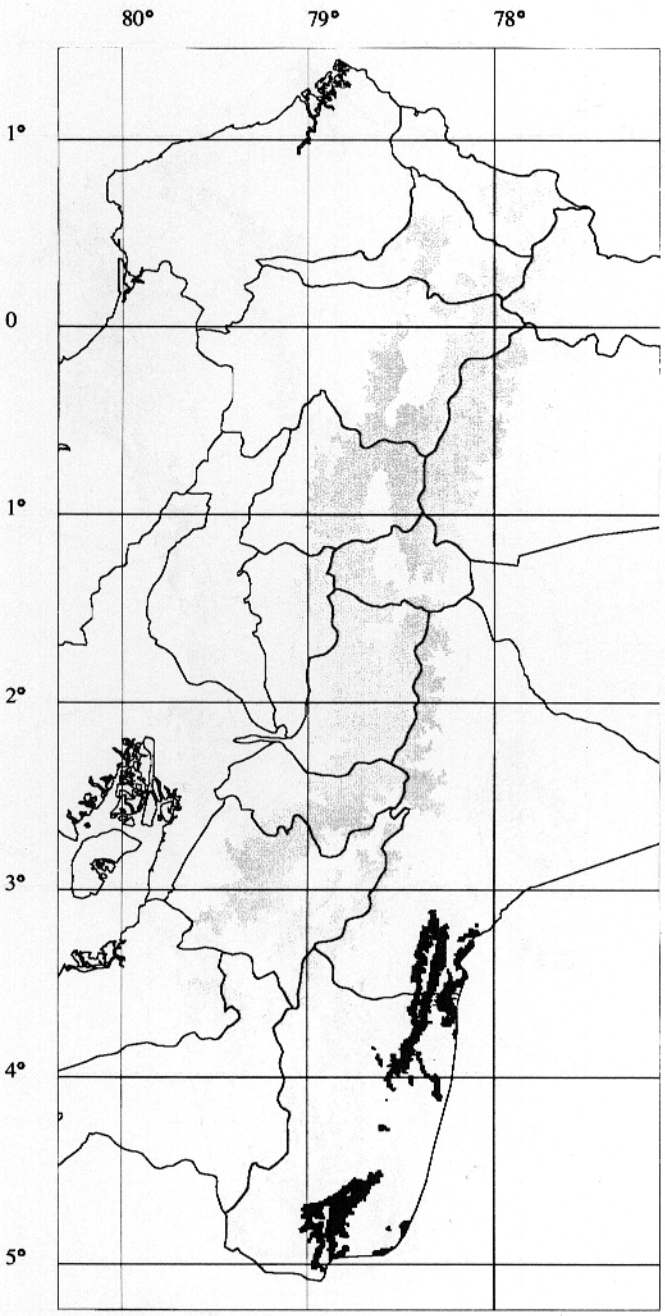
NE: 1900 –3200

S: 2000 –3100

Habitat: HPF HSF

Total distribution: 14 cells





Bar-winged Wood-wren
Chochín-montés Alibandeado

Henicorhina leucoptera

Altitudinal range:

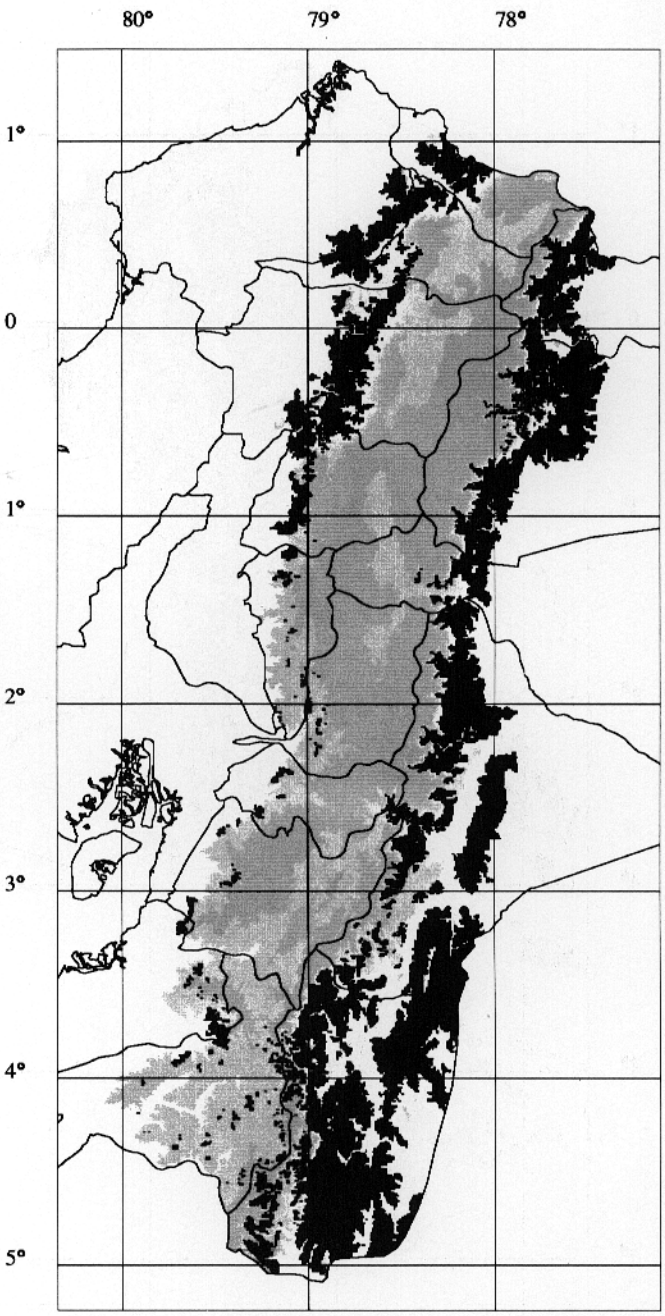
NW: Not found

NE: Not found

S: 1700 –2500

Habitat: HPF

Total distribution: 5 cells



Slaty-backed Nightingale-thrush
Zorzal Sombrio

Catharus fuscater

Altitudinal range:

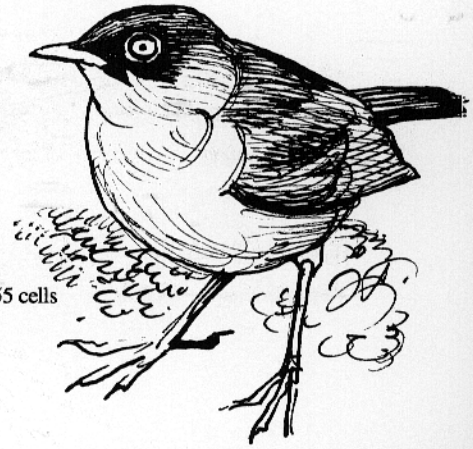
NW: 1200 –2600

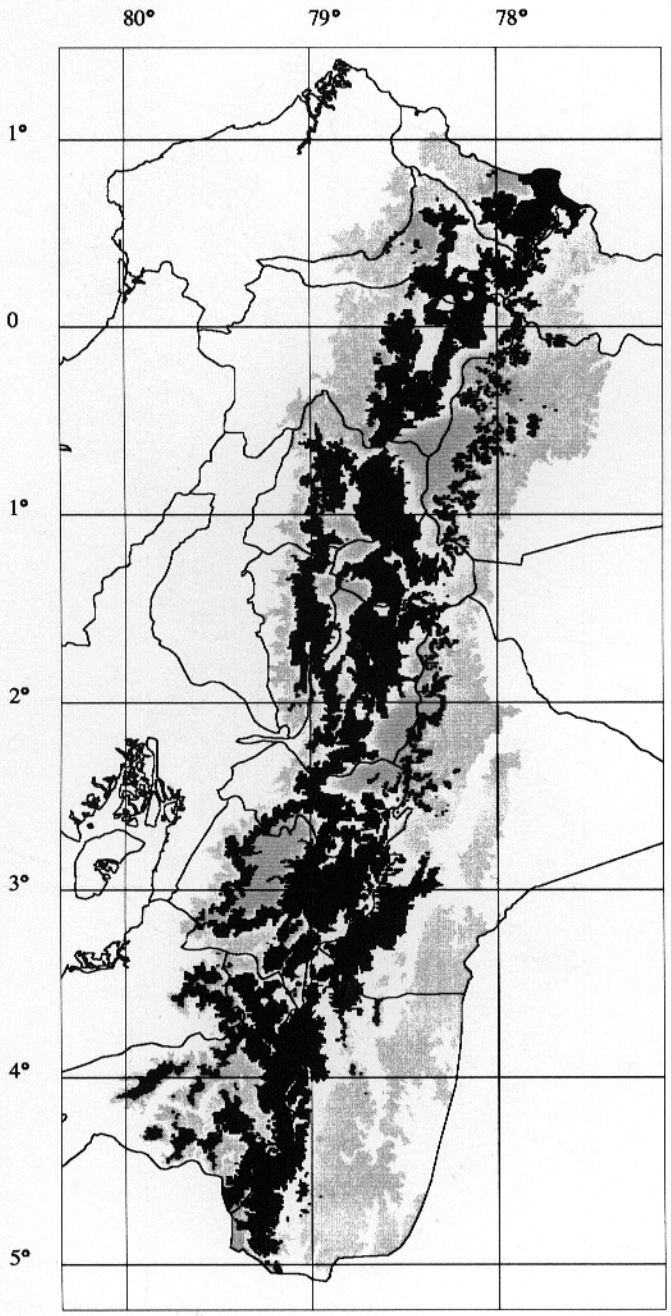
NE: 1200 –2600

S: 1200 –2600

Habitat: HPF HSF

Total distribution: 55 cells





Great Thrush
Mirlo Grande

Turdus fuscater

Altitudinal range:

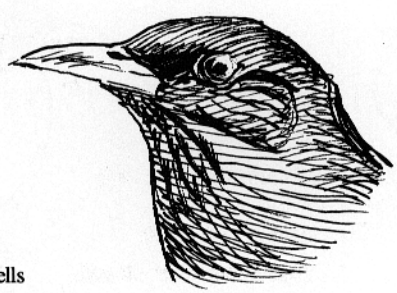
NW: 2500 –4000

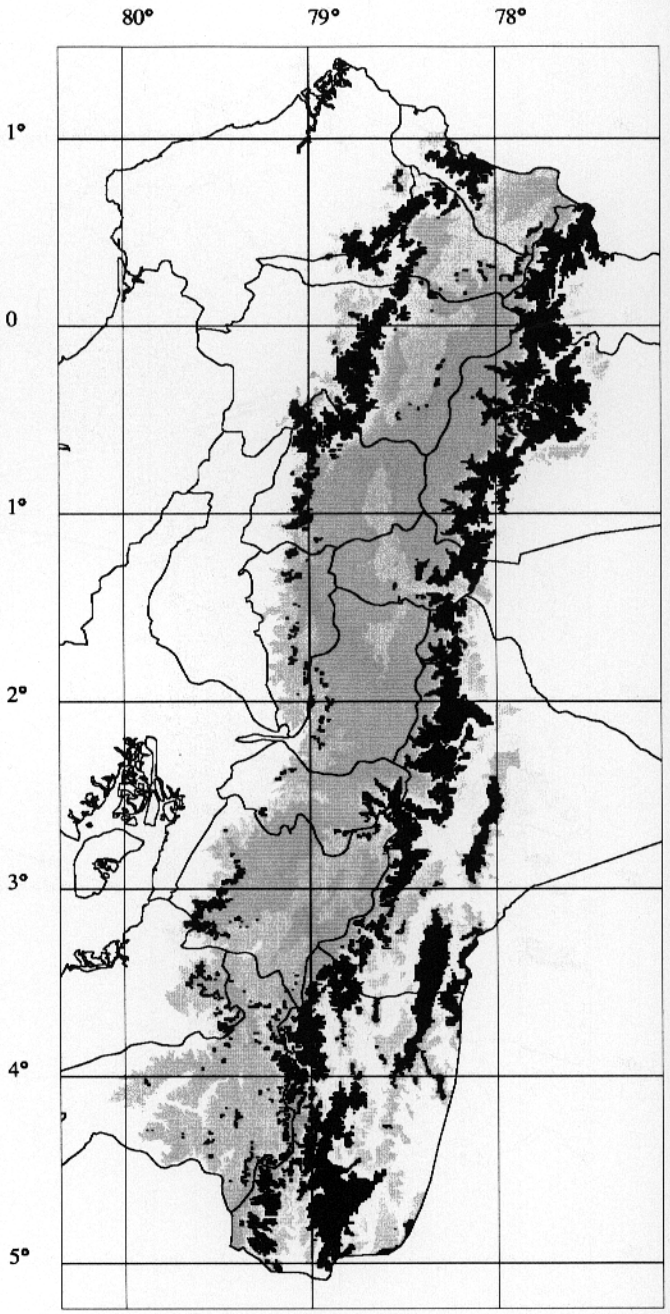
NE: 2500 –4000

S: 1800 –3700

Habitat: HSF HS DA

Total distribution: 66 cells





Glossy-black Thrush
Mirlo Negrobrilloso

Turdus serranus

Altitudinal range:

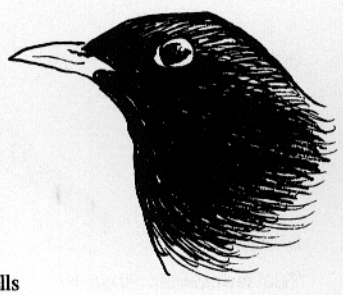
NW: 1700 –2900

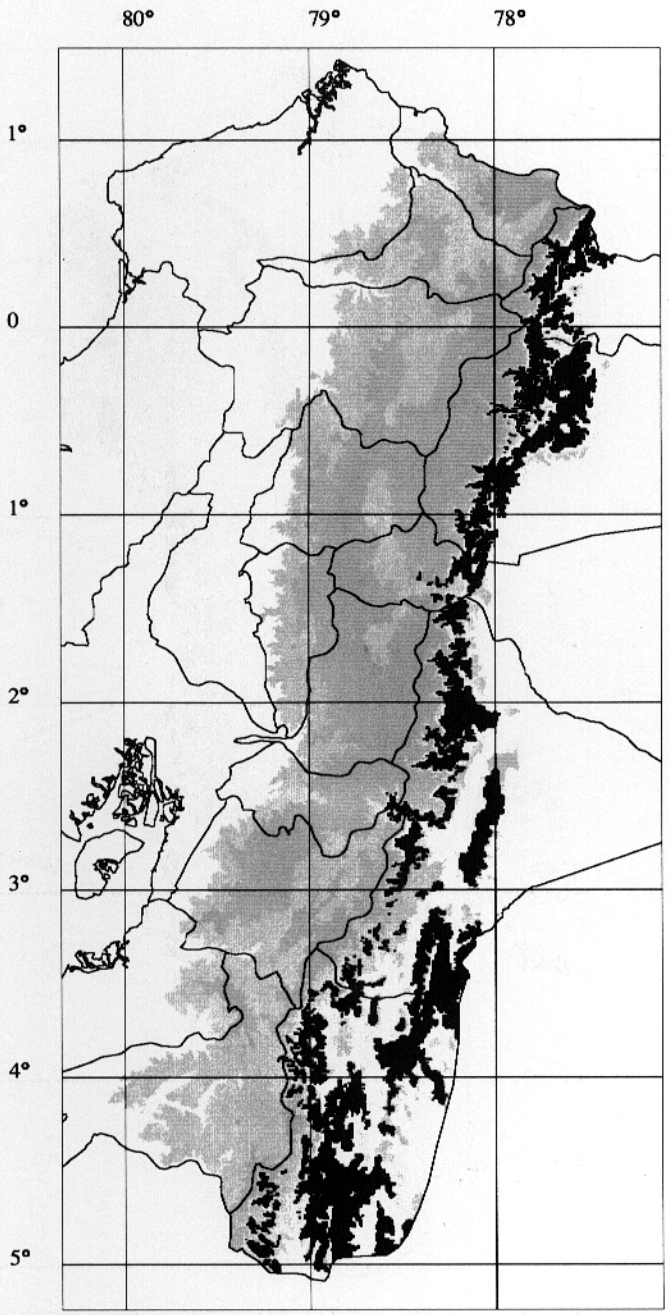
NE: 1700 –3150

S: 1800 –2900

Habitat: HPF HSF HS

Total distribution: 93 cells





Chestnut-bellied Thrush
Mirlo Ventricastaño

Turdus fulviventris

Altitudinal range:

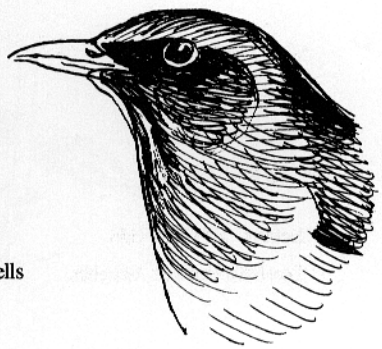
NW: Not found

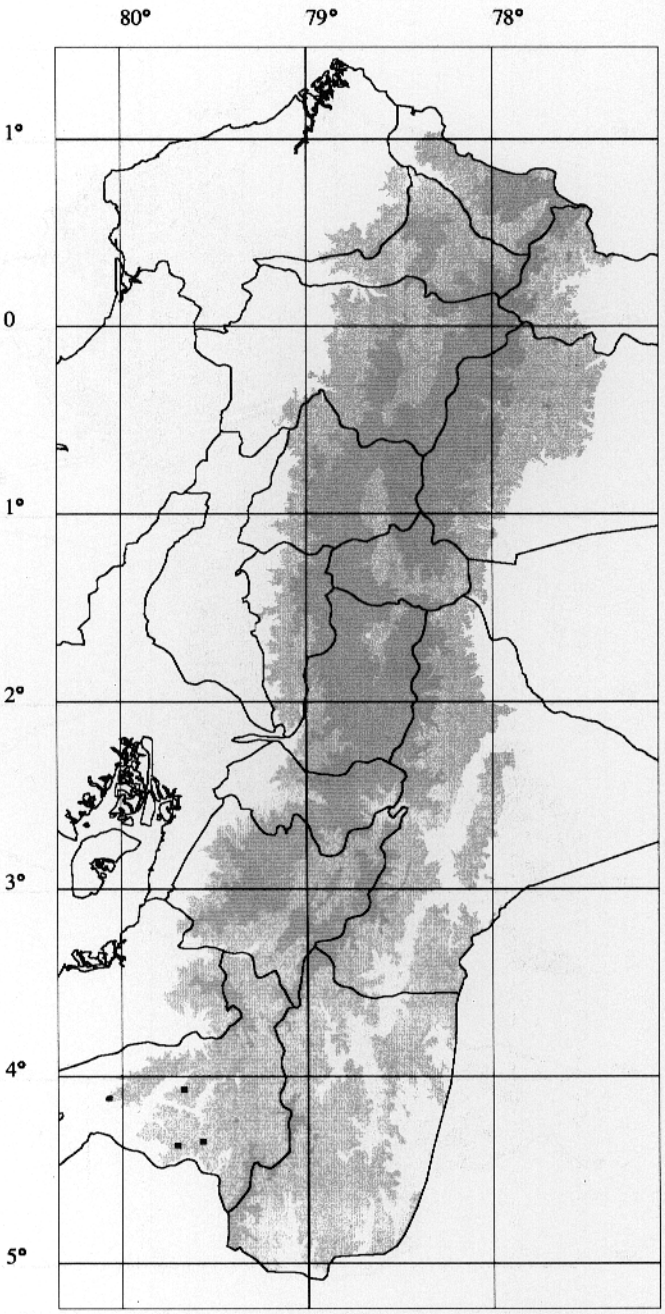
NE: 1500 –2500

S: 1500 –2500

Habitat: HPF HSF

Total distribution: 15 cells





Andean Slaty Thrush
Mirlo Pizarroso Andino

Turdus nigriceps

Altitudinal range:

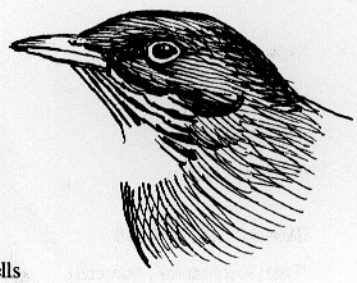
NW: Not found

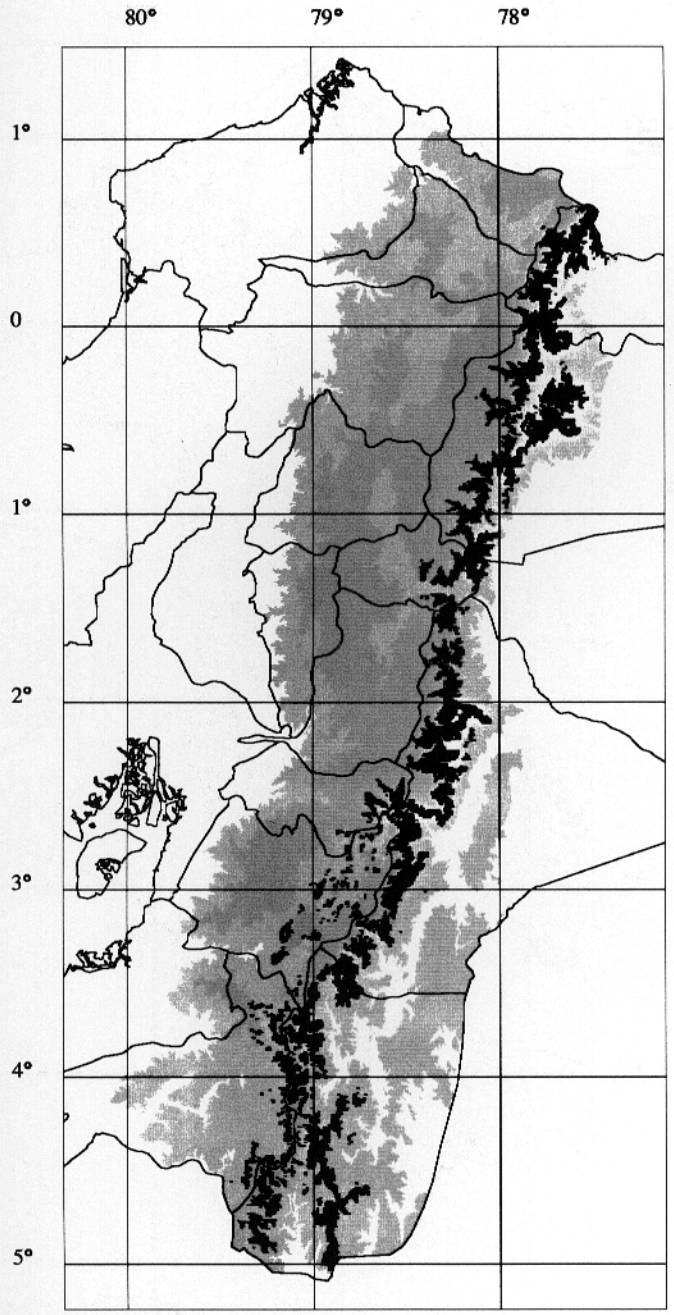
NE: Not found

S: Limited: 1400 –2300

Habitat: HPF HSF

Total distribution: 26 cells





Mountain Cacique
Cacique Montano

Cacicus leucorhamphus

Altitudinal range:

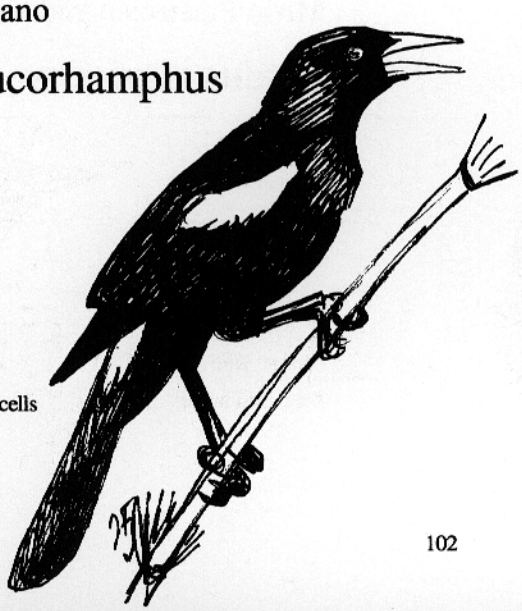
NW: Not found

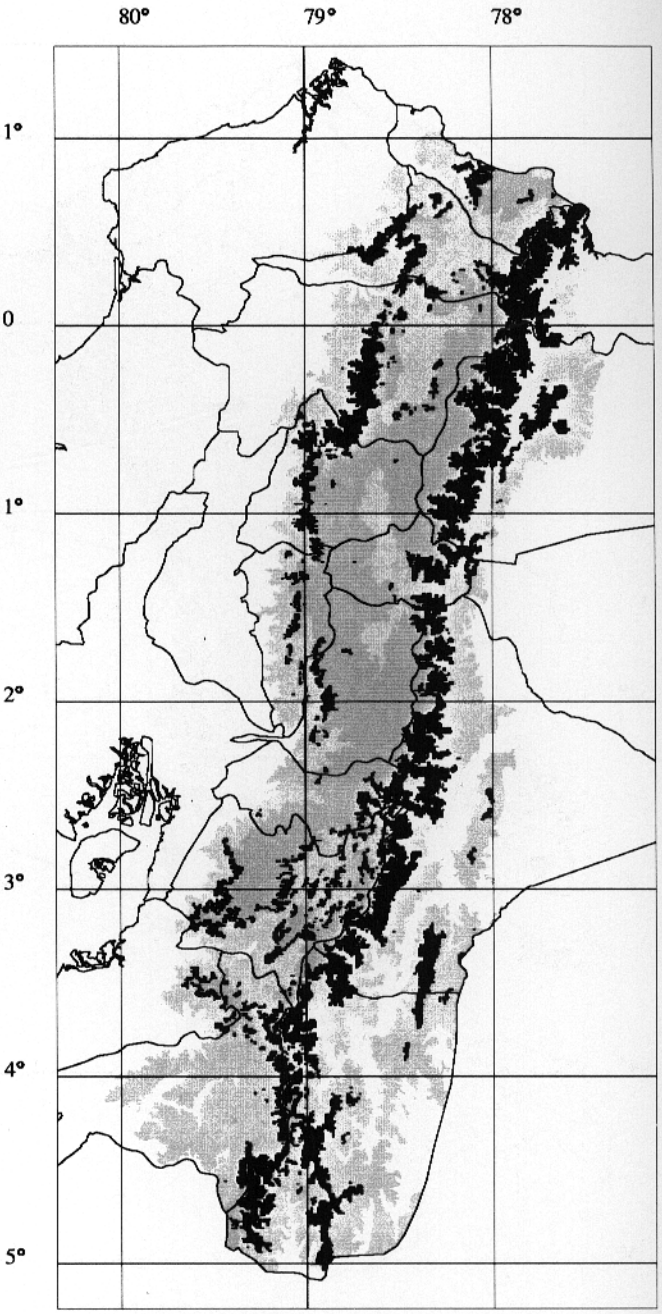
NE: 2000 –3150

S: 2200 –3000

Habitat: HPF HSF HS

Total distribution: 60 cells





Spectacled Whitestart
Candelita de Anteojos

Myioborus melanocephalus

Altitudinal range:

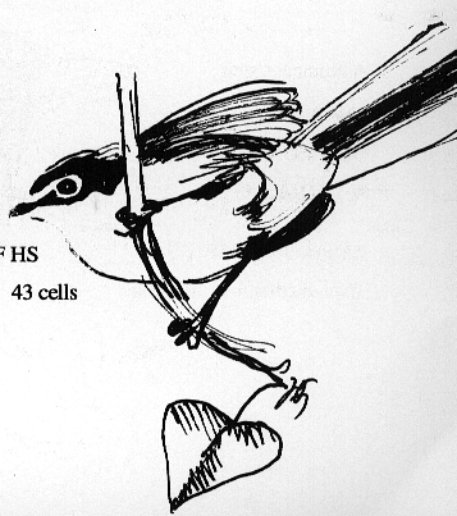
NW: 2250 –3900

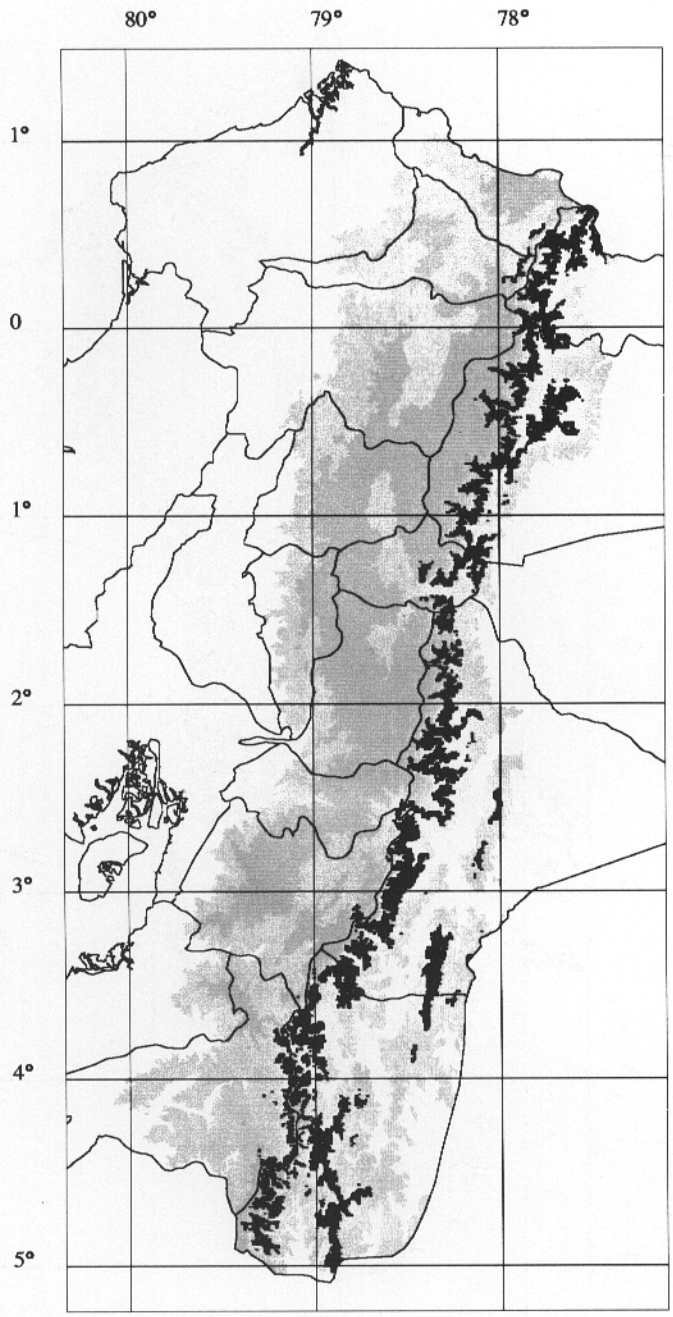
NE: 2250 –3800

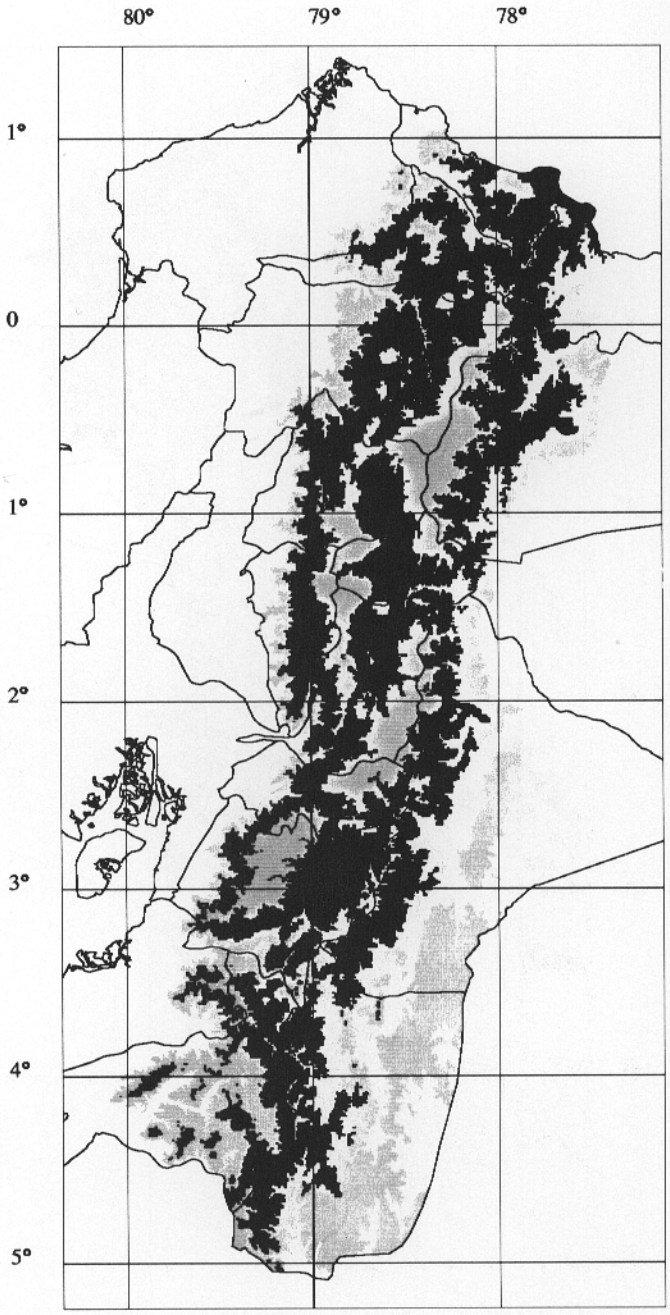
S: 2200 –3400

Habitat: HPF HSF HS

Total distribution: 43 cells







Citrine Warbler
Reinita Citrina

Basileuterus luteoviridis

Altitudinal range:

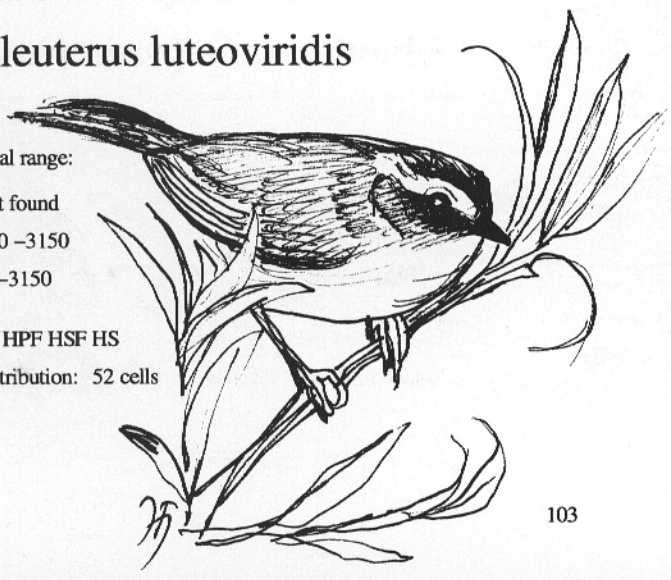
NW: Not found

NE: 2200 –3150

S: 2200 –3150

Habitat: HPF HSF HS

Total distribution: 52 cells



Black-crested Warbler
Reinita Crestinegra

Basileuterus nigrocristatus

Altitudinal range:

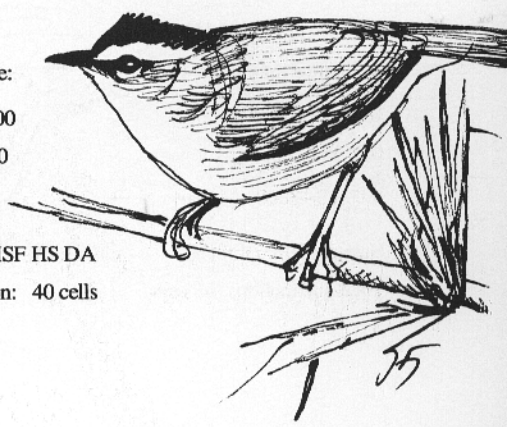
NW: 2000 –3800

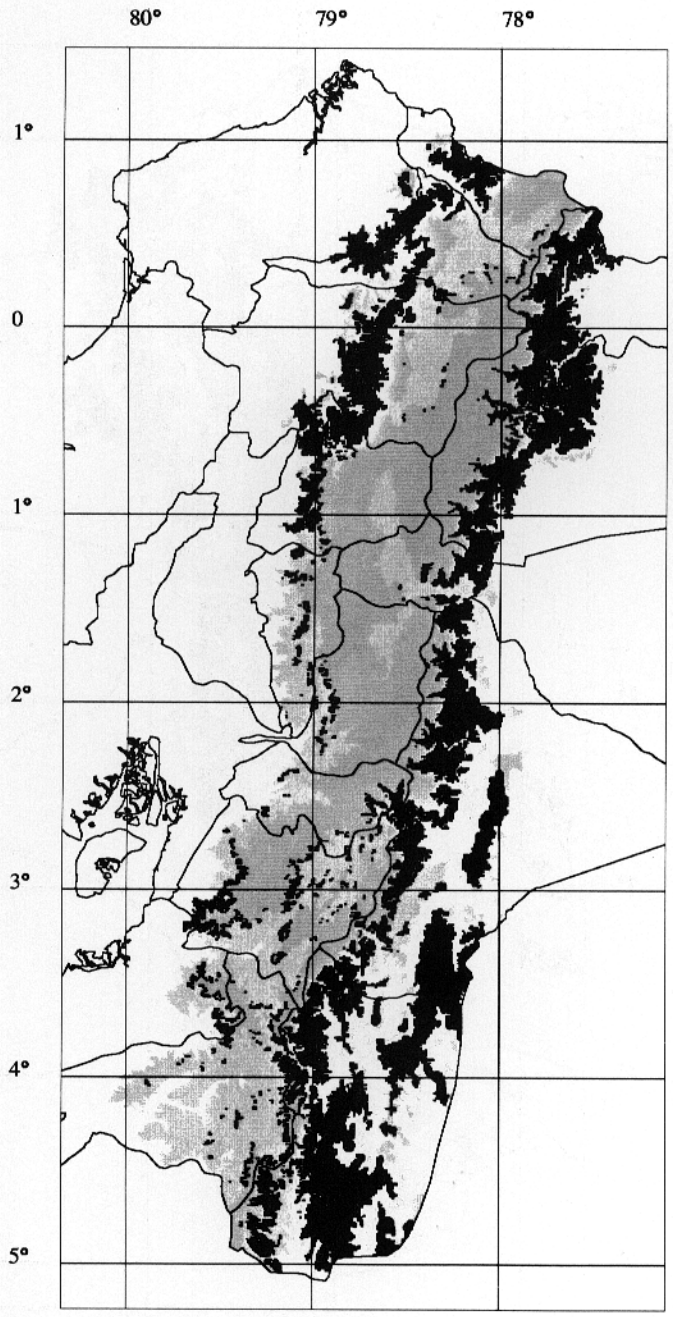
NE: 2000 –3900

S: 2000 –3700

Habitat: HPF HSF HS DA

Total distribution: 40 cells





Russet-crowned Warbler
Reinita Coronirrojiza

Basileuterus coronatus

Altitudinal range:

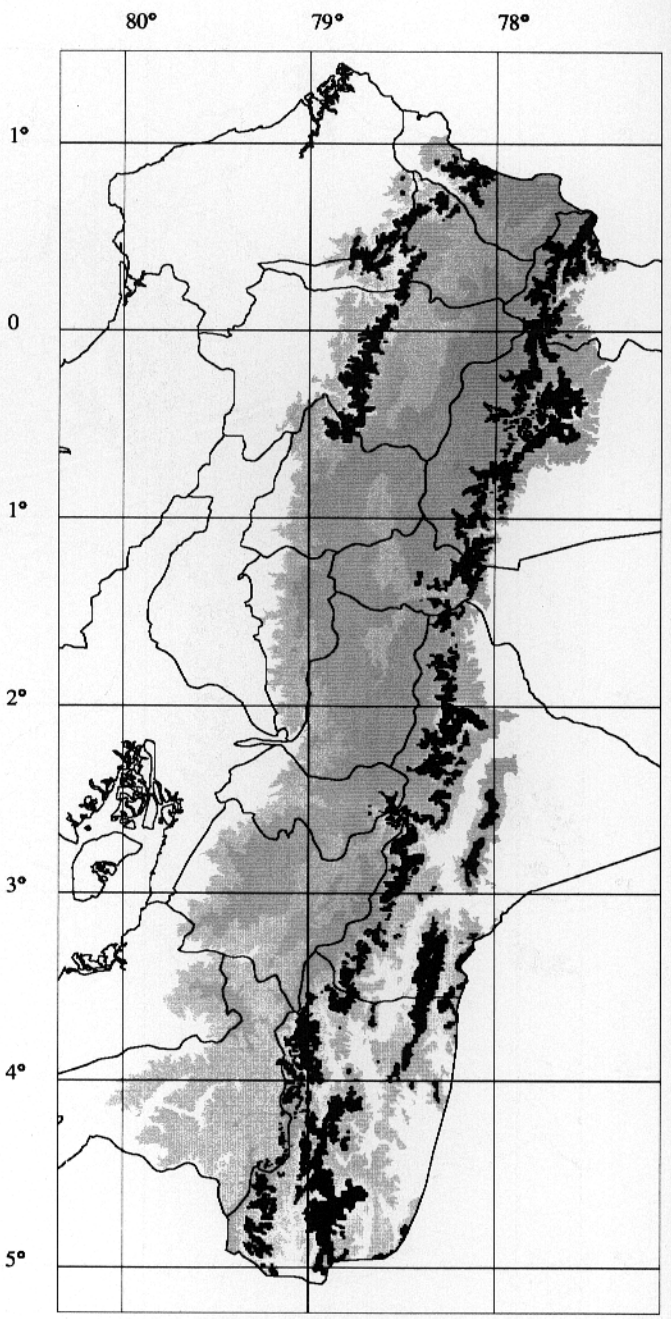
NW: 1500 –3200

NE: 1500 –3000

S: 1500 –2950

Habitat: HPF HSF HS

Total distribution: 61 cells



Chestnut-breasted Chlorophonia
Clorofonia Pechicastaña

Chlorophonia pyrrhophrys

Altitudinal range:

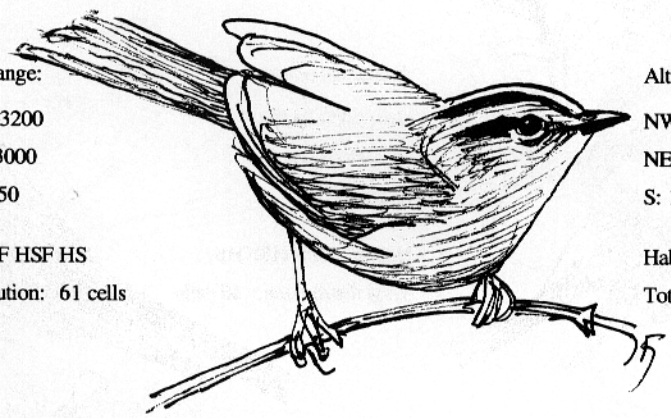
NW: 1900 –2750

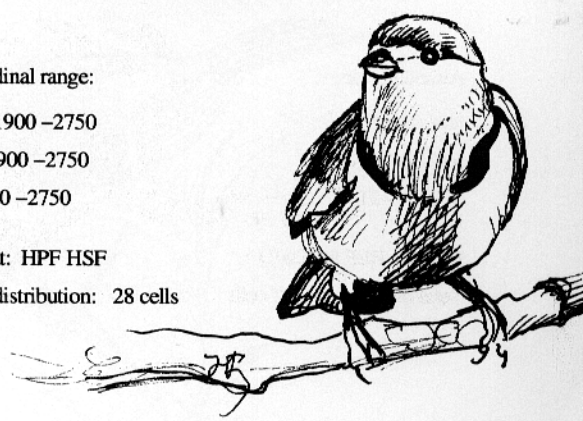
NE: 1900 –2750

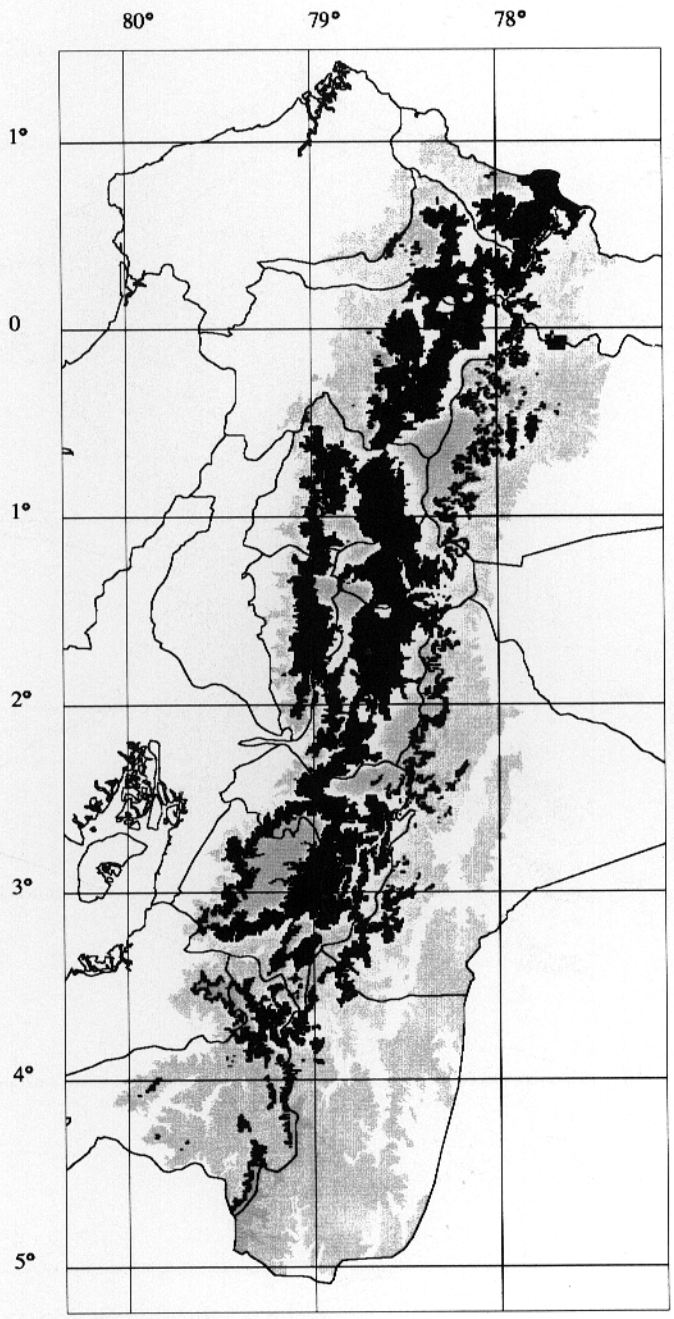
S: 1900 –2750

Habitat: HPF HSF

Total distribution: 28 cells







Cinereous Conebill
Picocono Cinéreo

Conirostrum cinereum

Altitudinal range:

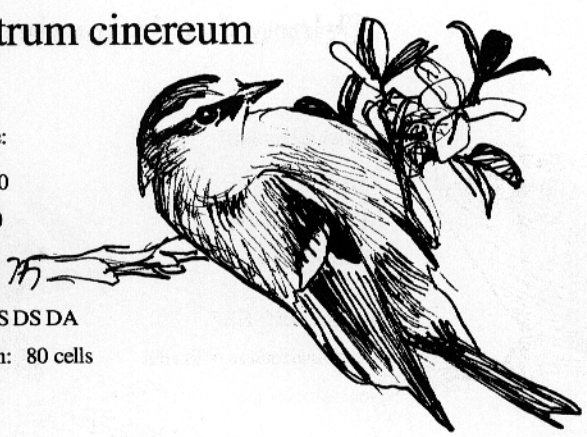
NW: 2300 –4000

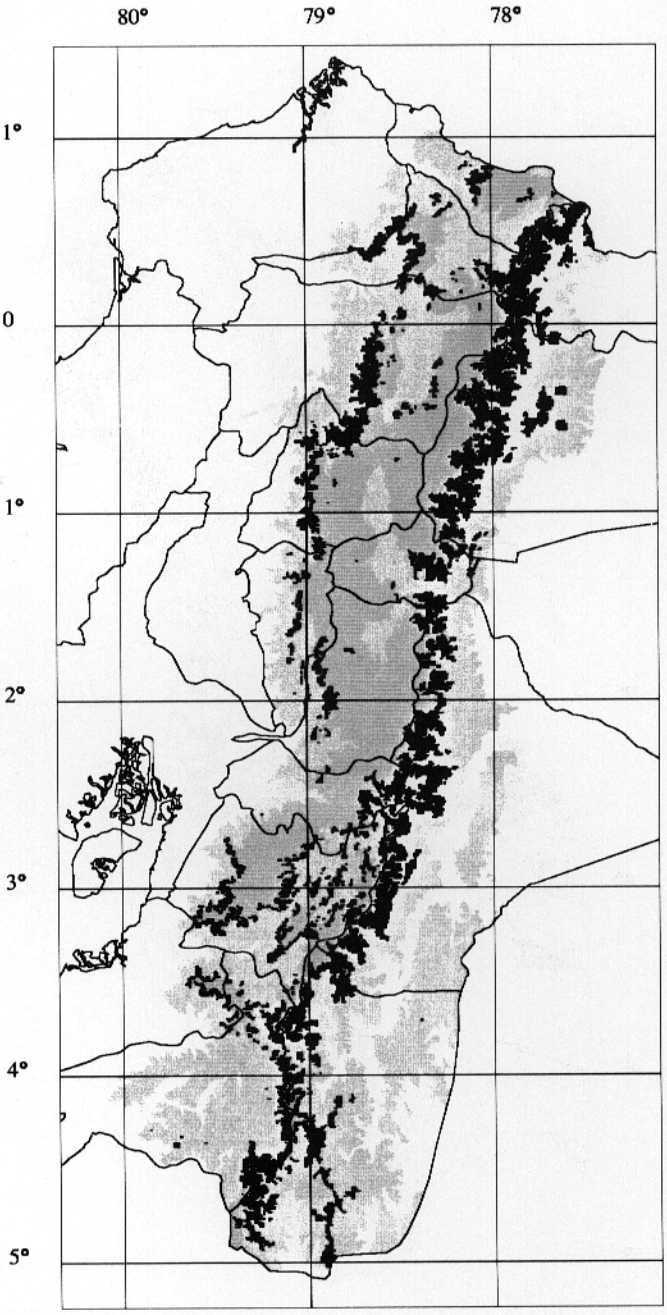
NE: 2300 –4000

S: 2500 –3100

Habitat: HSF HS DS DA

Total distribution: 80 cells





Blue-backed Conebill
Picocono Dorsiazul

Conirostrum sitticolor

Altitudinal range:

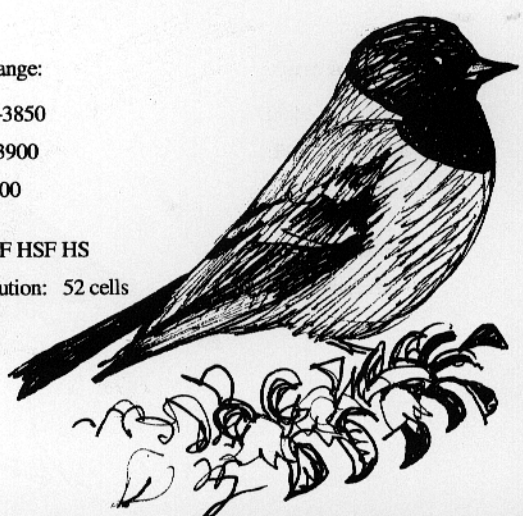
NW: 2450 –3850

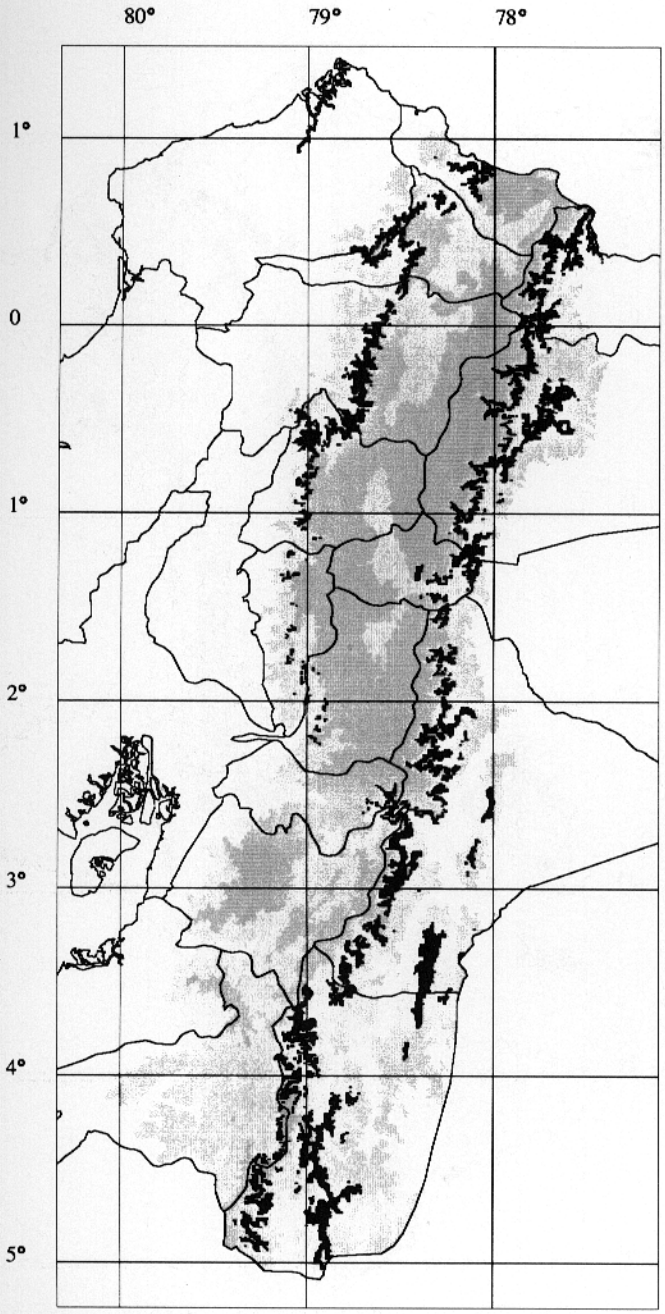
NE: 2450 –3900

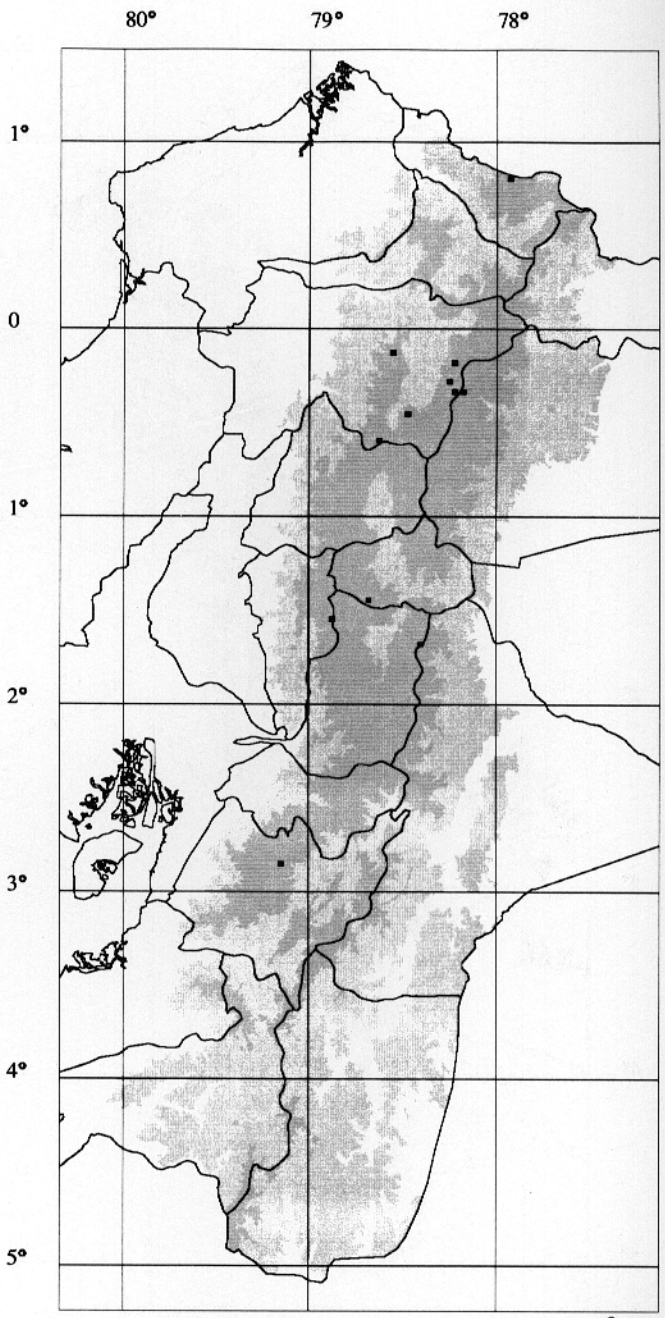
S: 2400 –3400

Habitat: HPF HSF HS

Total distribution: 52 cells







Capped Conebill
Picocono Coronado

Conirostrum albifrons

Altitudinal range:

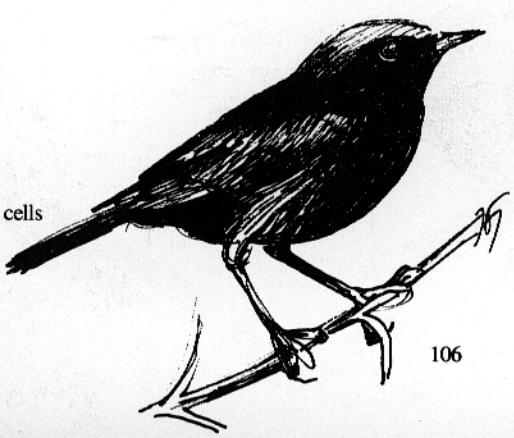
NW: 2200 –2800

NE: 2200 –2800

S: 2200 –2800

Habitat: HPF HSF

Total distribution: 44 cells



Giant Conebill
Picocono gigante

Oreomanes fraseri

Altitudinal range:

NW: 3200 –4200

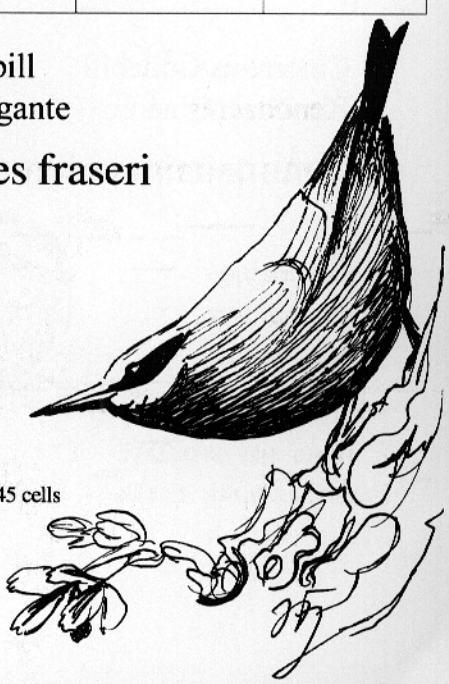
NE: 3200 –4200

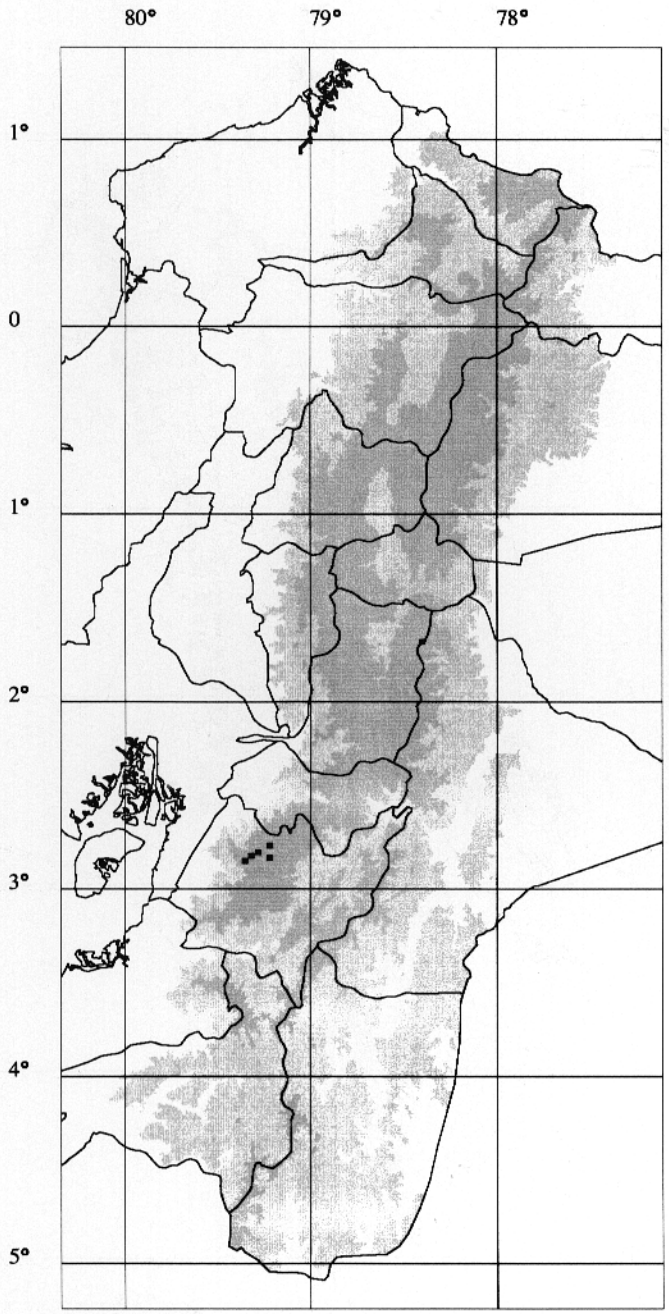
S: Not found

Habitat: HS

Total distribution: 45 cells

Near –threatened





Tit-like Dacnis
Xenodacnis

Xenodacnis parina

Altitudinal range:

NW: 3750 –4100

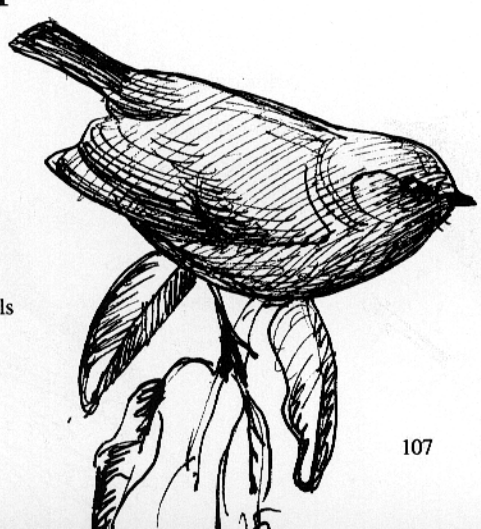
NE: 3800 –4000

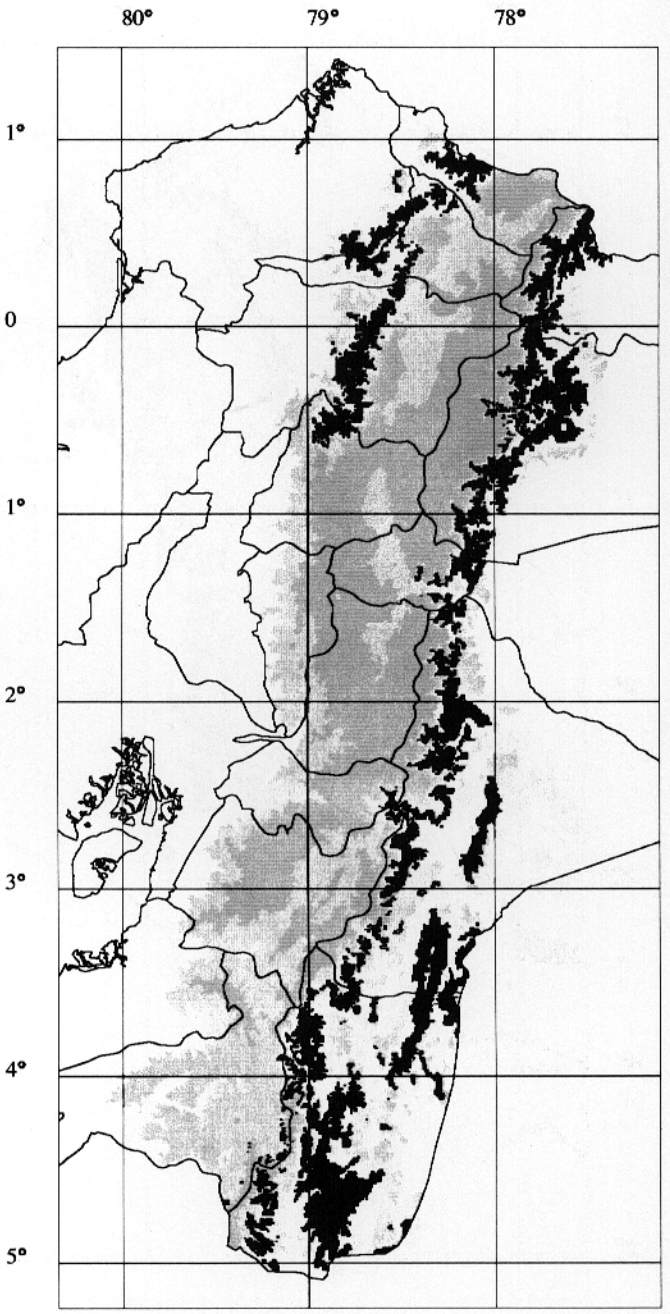
S: Not found

Habitat: HS

Total distribution: 22 cells

Near –threatened





Bluish Flowerpiercer
Pinchaflor Azulado

Diglossa caerulescens

Altitudinal range:

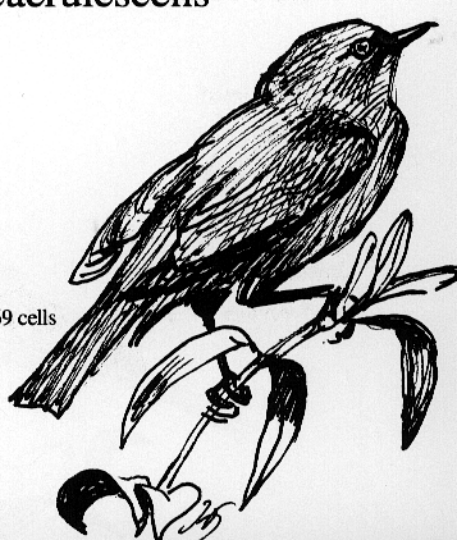
NW: 1700 –2700

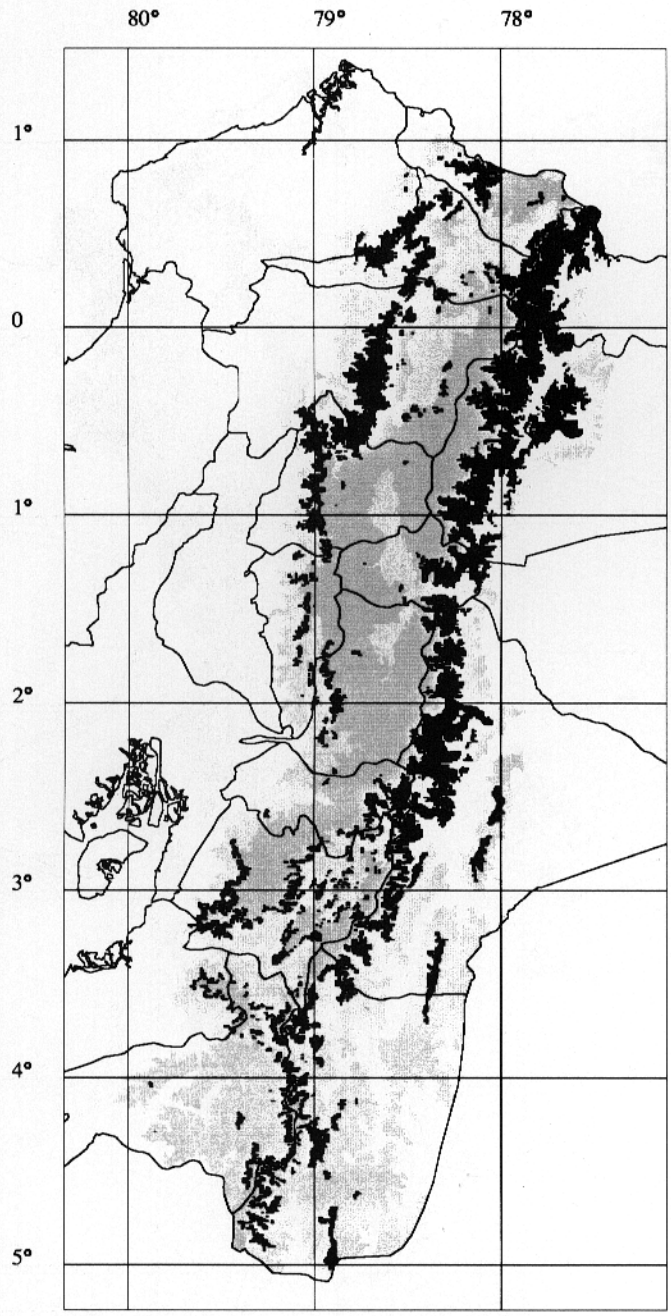
NE: 1700 –2700

S: 1700 –2700

Habitat: HPF HSF

Total distribution: 69 cells





Masked Flowerpiercer
Pinchaflor Enmascarado

Diglossa cyanea

Altitudinal range:

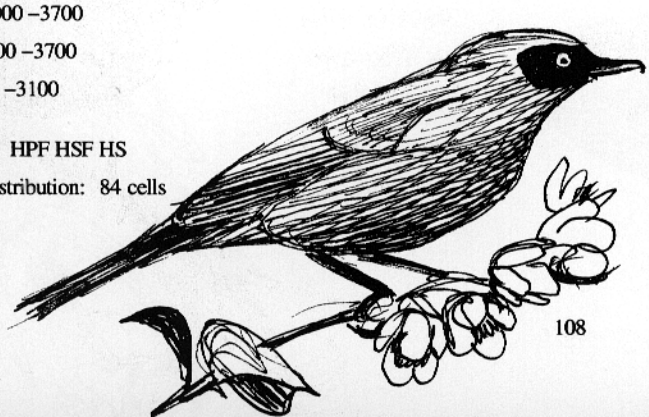
NW: 2000 –3700

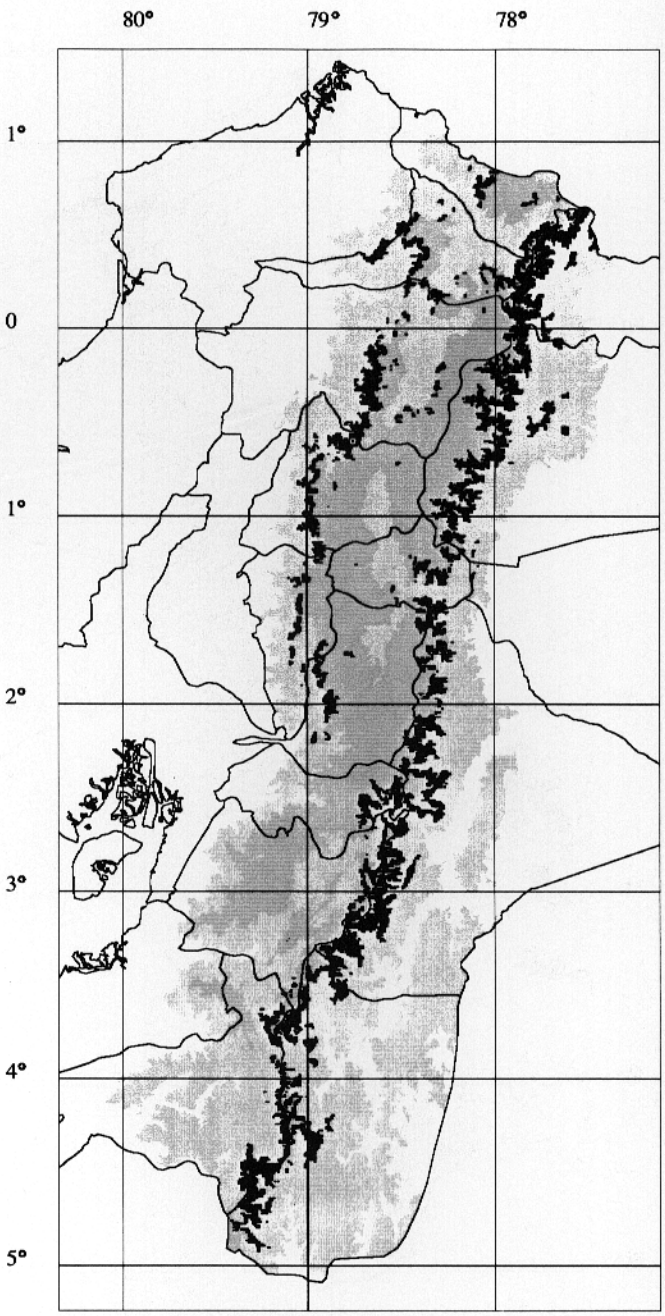
NE: 2000 –3700

S: 2450 –3100

Habitat: HPF HSF HS

Total distribution: 84 cells





Glossy Flowerpiercer
Pinchaflor Satinado

Diglossa lafresnayi

Altitudinal range:

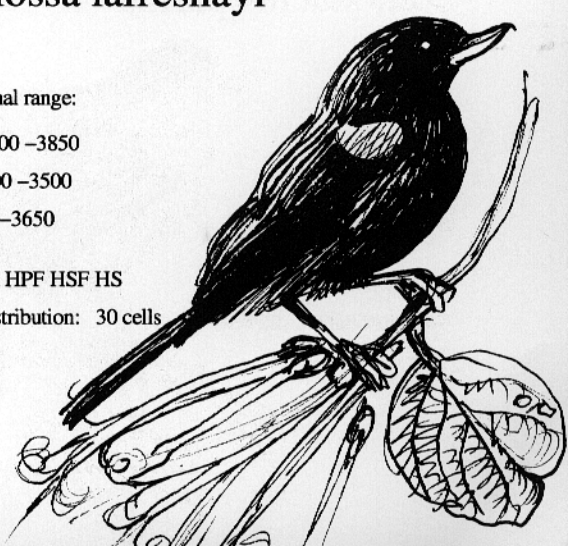
NW: 2700 –3850

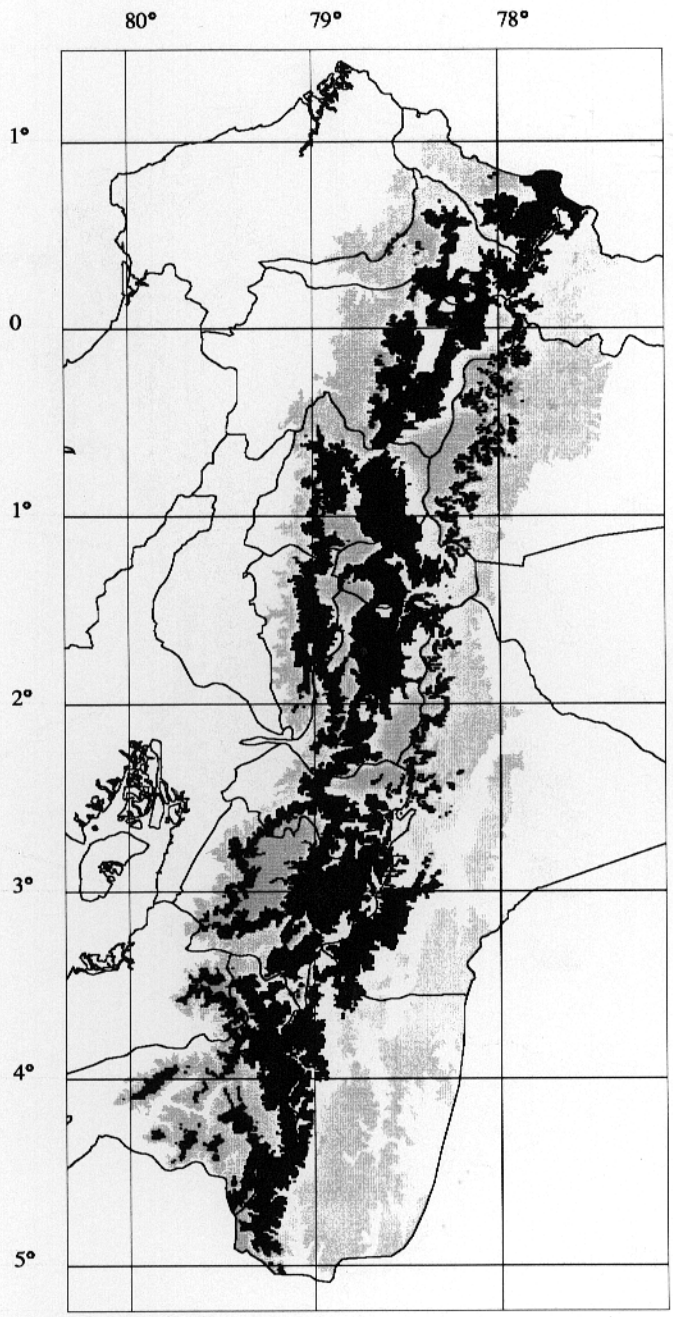
NE: 2700 –3500

S: 2600 –3650

Habitat: HPF HSF HS

Total distribution: 30 cells



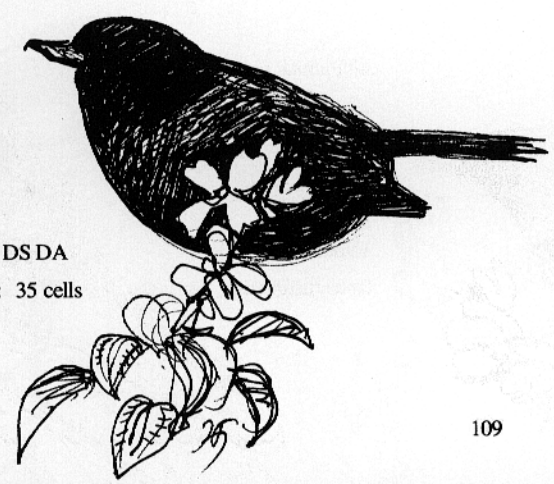


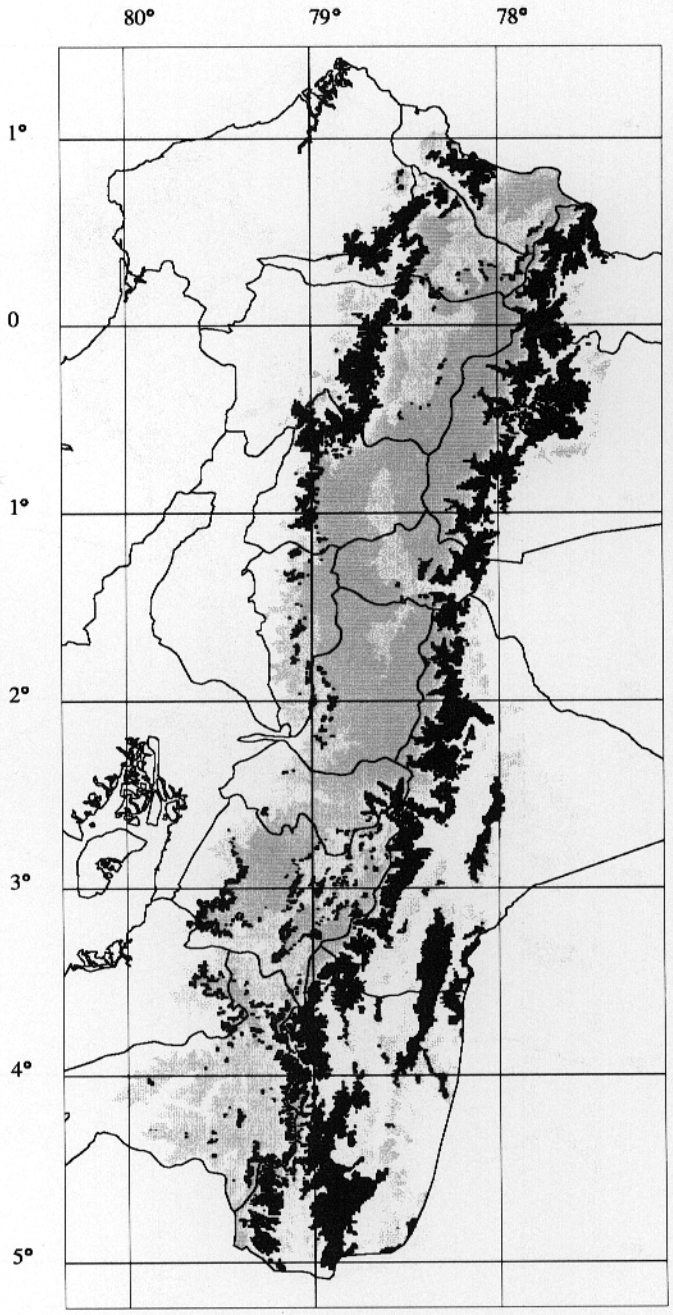
Black Flowerpiercer
Pinchaflor Negro

Diglossa humeralis

Altitudinal range:
NW: 2500 –4000
NE: 2500 –4000
S: 2000 –3650

Habitat: HSF HS DS DA
Total distribution: 35 cells



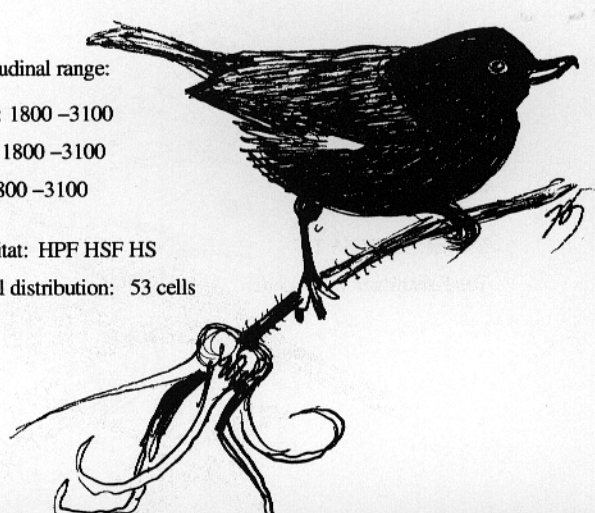


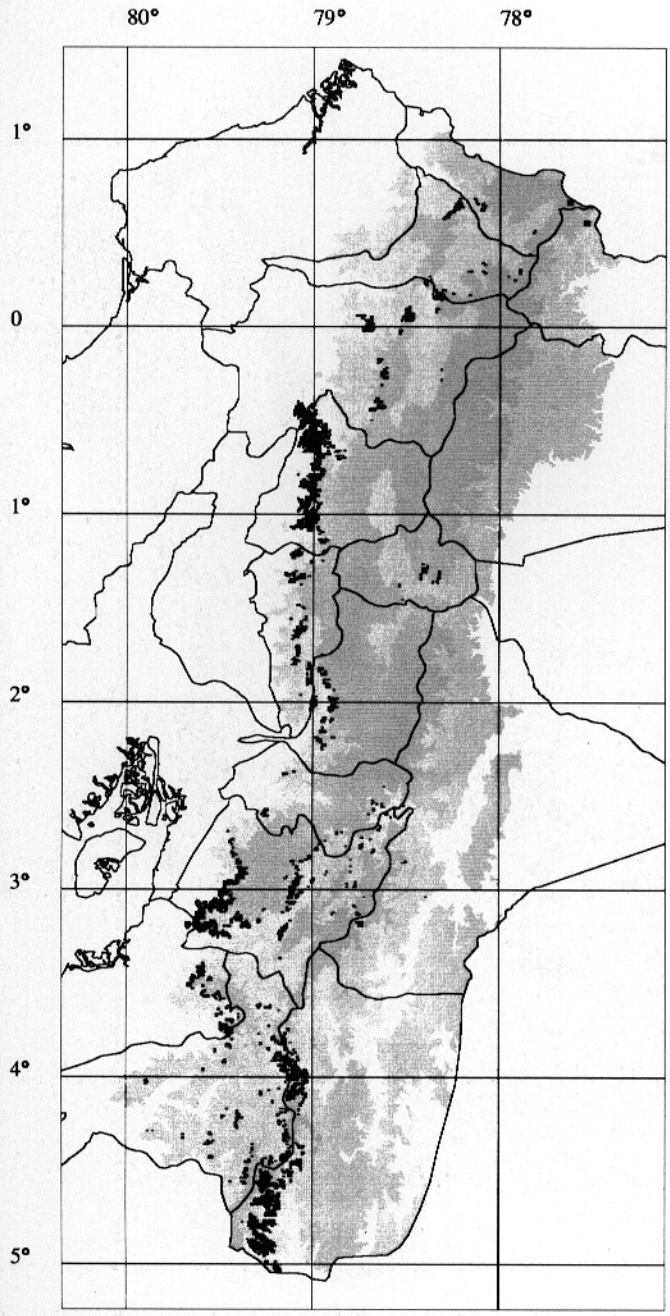
White-sided Flowerpiercer
Pinchaflor Flanquiblanco

Diglossa albilatera

Altitudinal range:
NW: 1800 –3100
NE: 1800 –3100
S: 1800 –3100

Habitat: HPF HSF HS
Total distribution: 53 cells



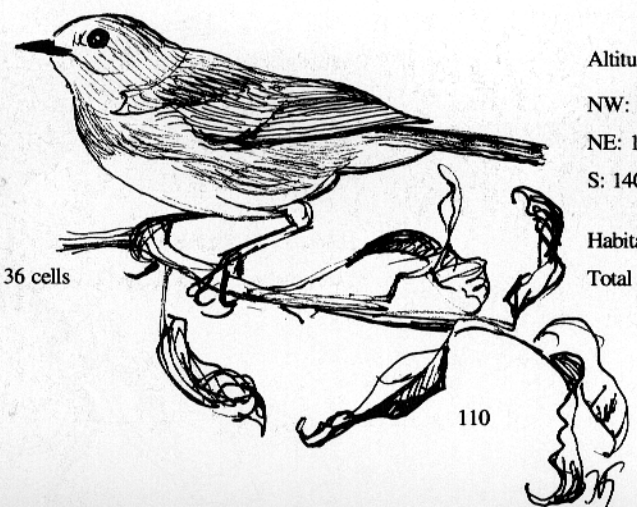


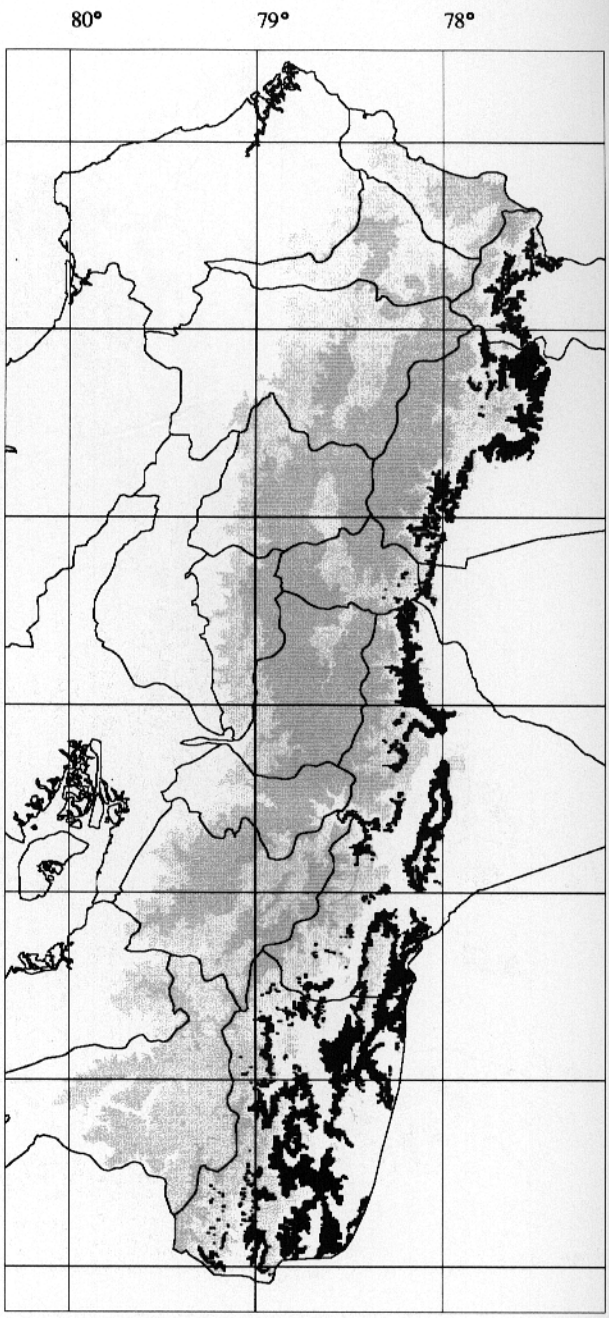
Rufous-chested Tanager
Tangara Pechicanela

Thlypopsis ornata

Altitudinal range:
NW: 1800 –3150
NE: 2600 –2800
S: 1800 –2750

Habitat: HSF HS
Total distribution: 36 cells



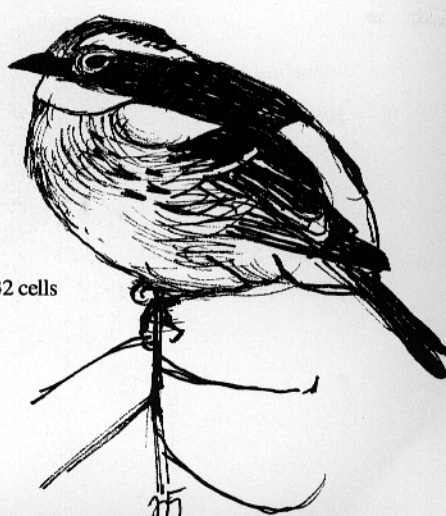


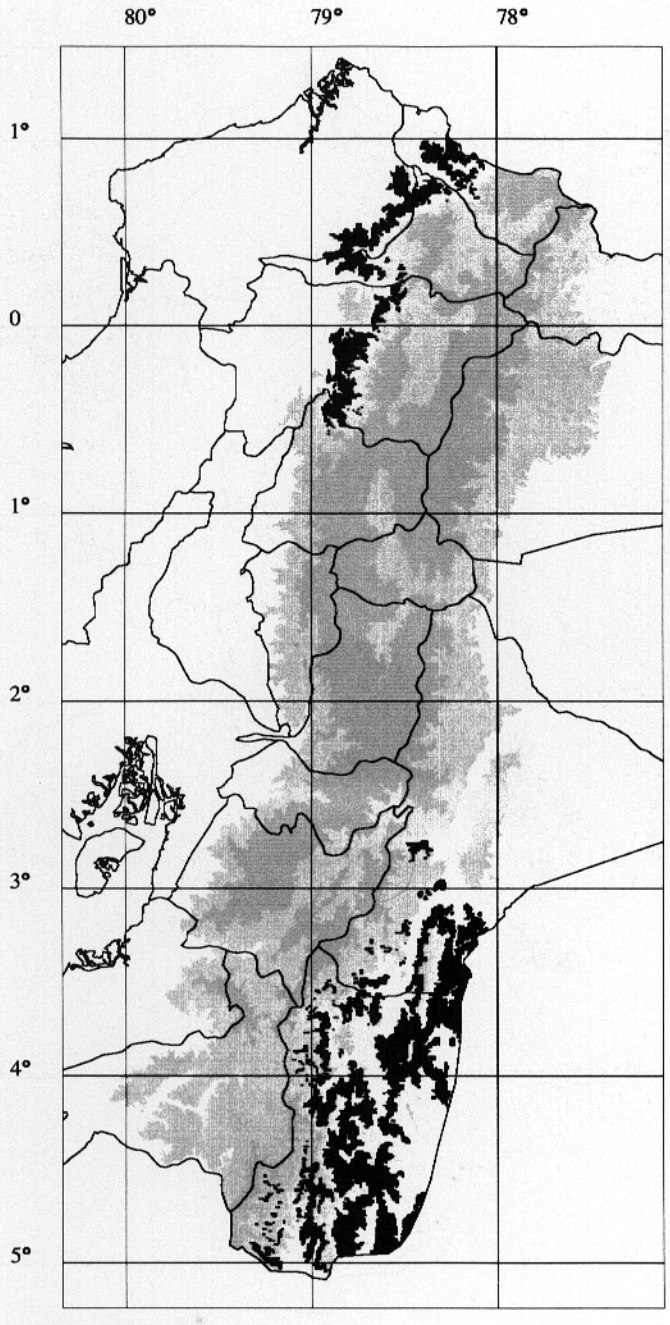
Blue-browed Tanager
Tangara Cejiazul

Tangara cyanotis

Altitudinal range:
NW: Not found
NE: 1400 –1900
S: 1400 –1900

Habitat: HPF
Total distribution: 32 cells





Metallic-green Tanager
Tangara Verdimetálica

Tangara labradorides

Altitudinal range:

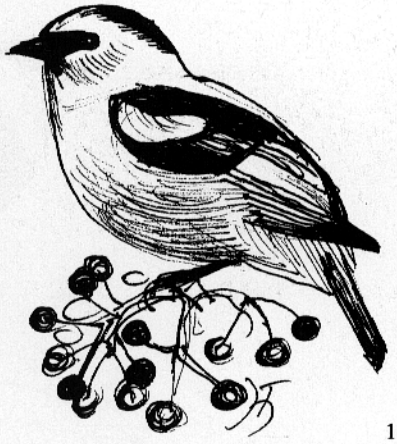
NW: 1300 –2000

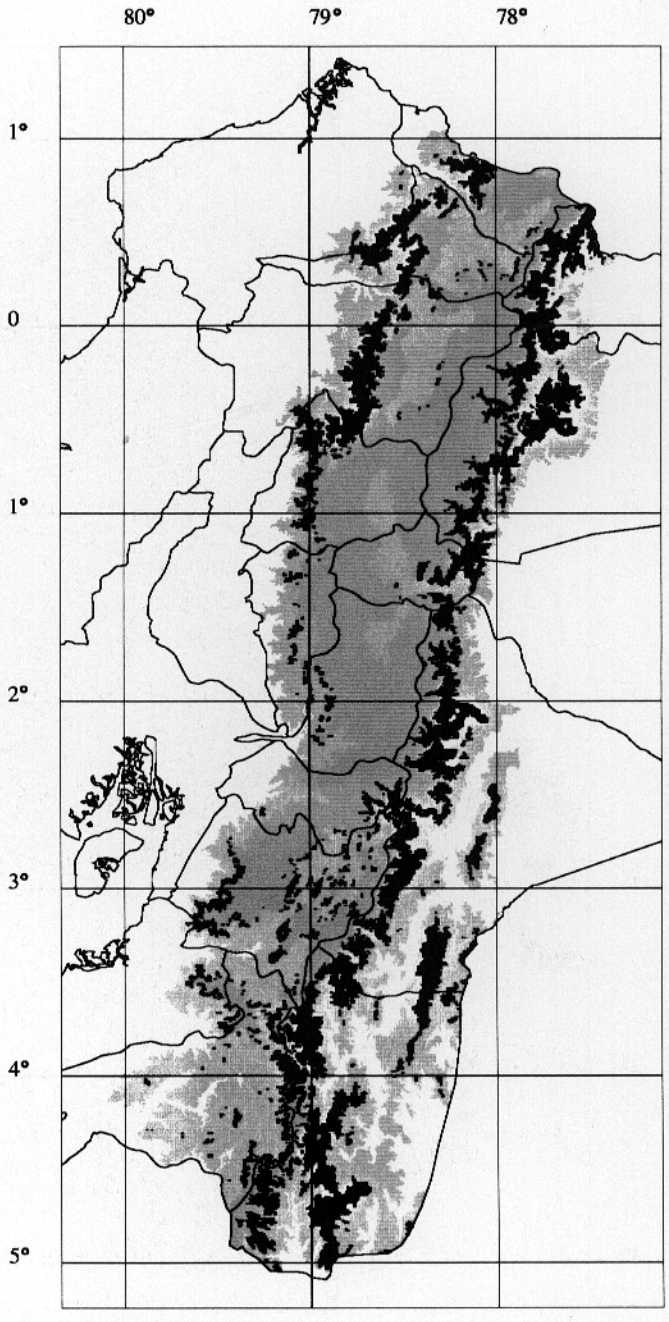
NE: Not found

S: 1300 –2000

Habitat: HPF

Total distribution: 28 cells





Blue-and-black Tanager
Tangara Azulinegra

Tangara vassorii

Altitudinal range:

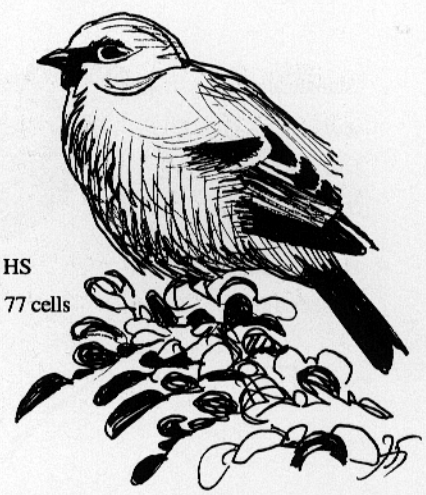
NW: 2000 –3100

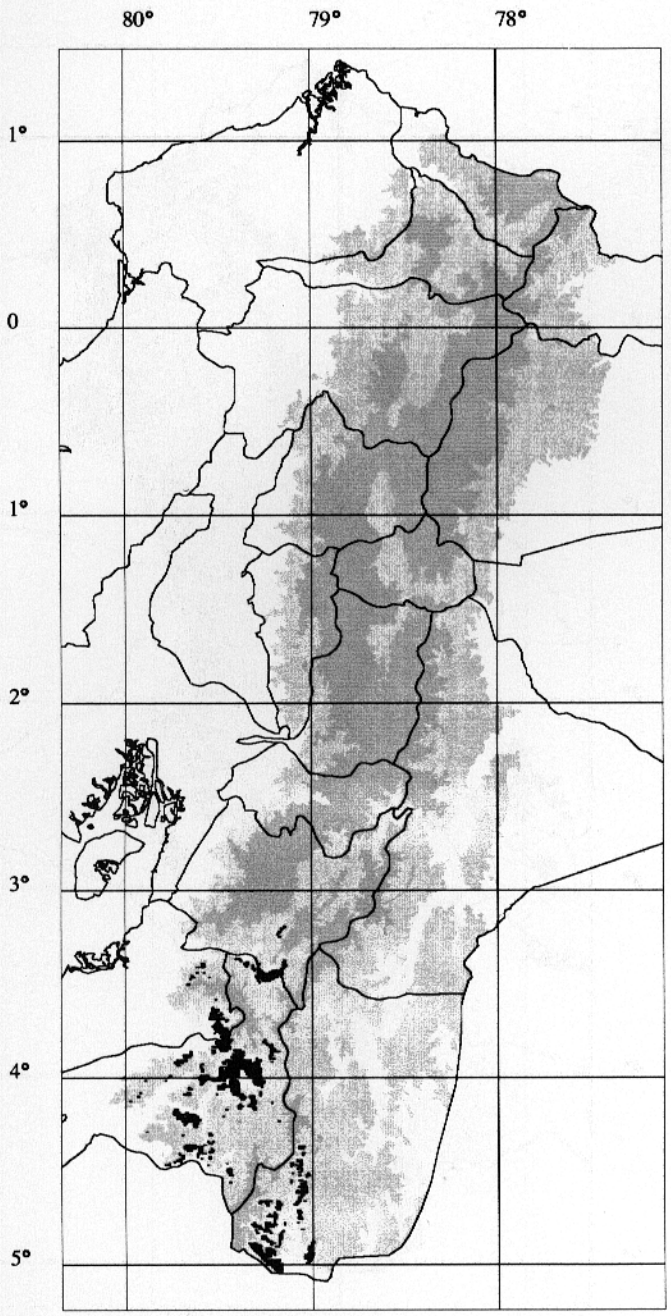
NE: 2000 –3200

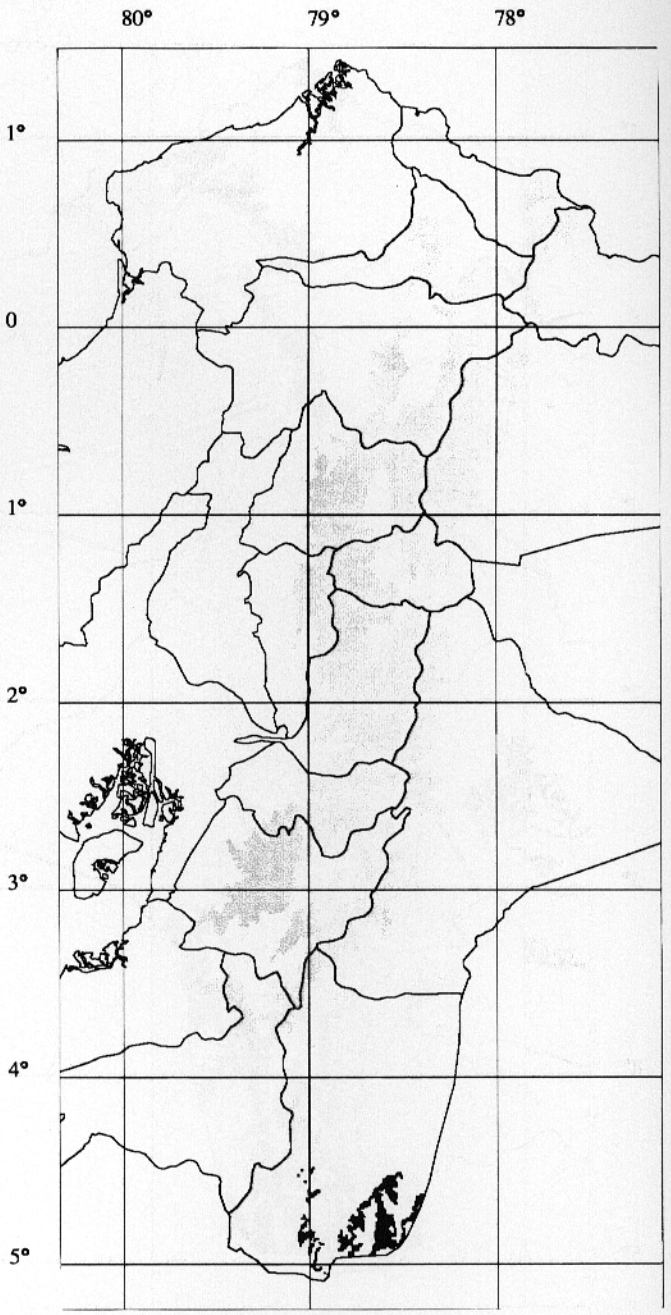
S: 2000 –3000

Habitat: HPF HSF HS

Total distribution: 77 cells







Silvery Tanager
Tangara Goliverde

Tangara viridicollis

Altitudinal range:

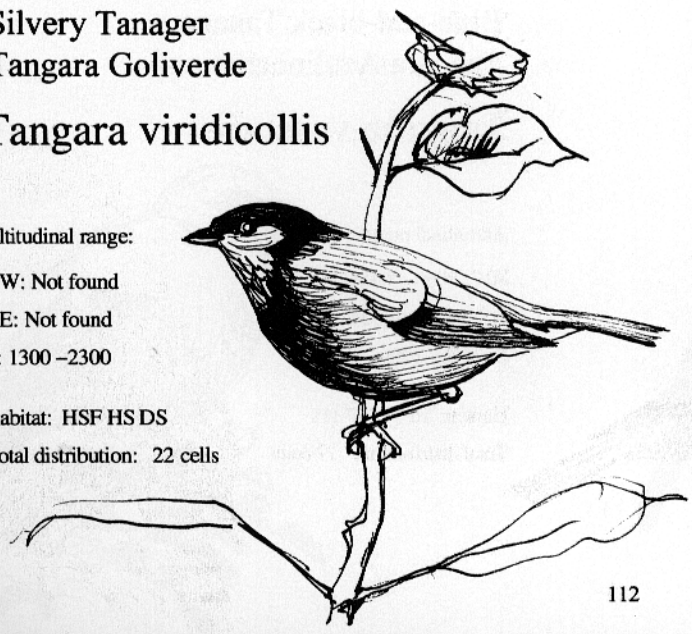
NW: Not found

NE: Not found

S: 1300 –2300

Habitat: HSF HS DS

Total distribution: 22 cells



Green-throated Tanager
Tangara Dorsipaja

Tangara argyrophenges

Altitudinal range:

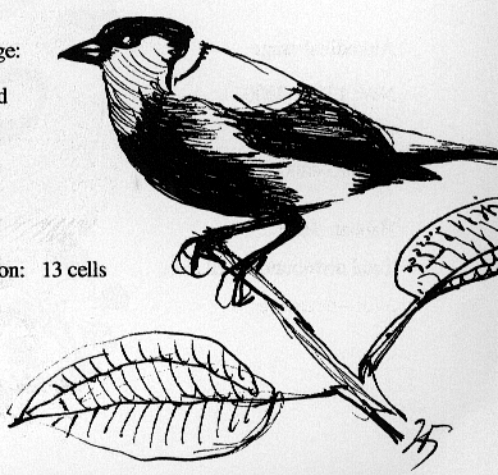
NW: Not found

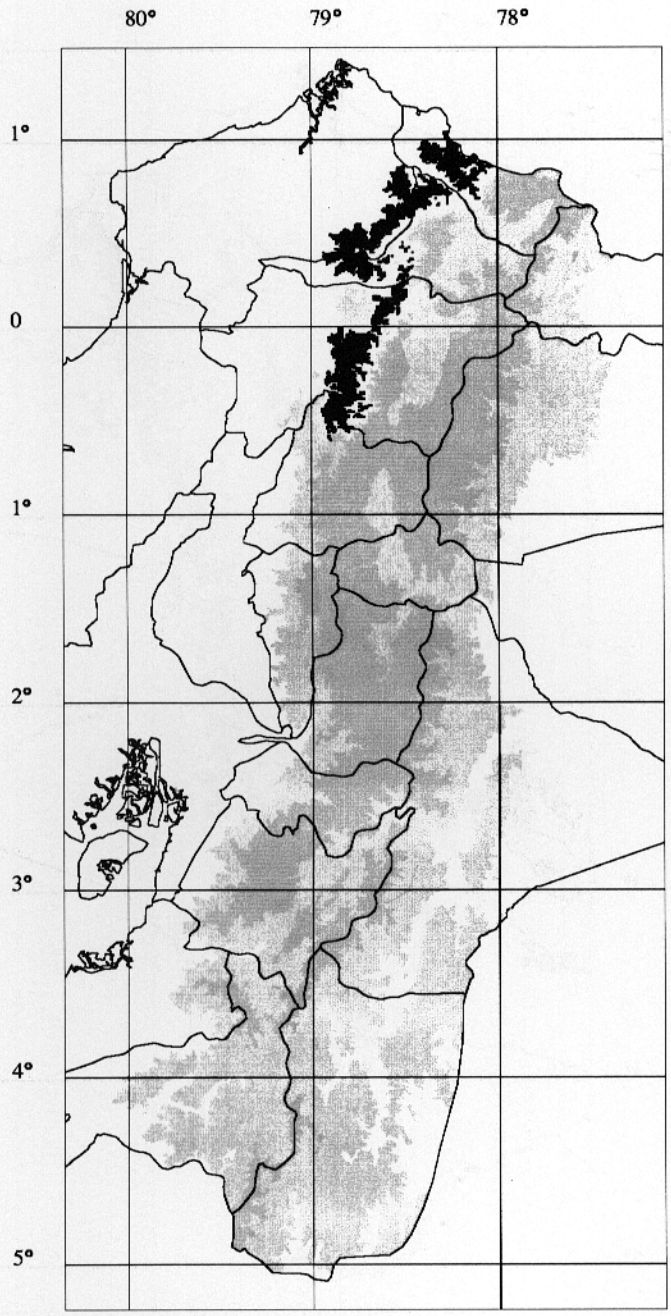
NE: Not found

S: 1350 –1600

Habitat: HPF

Total distribution: 13 cells





Purplish-mantled Tanager
Tangara Dorsipurpúrea

Iridosornis porphyrocephala

Altitudinal range:

NW: 1200 –2300

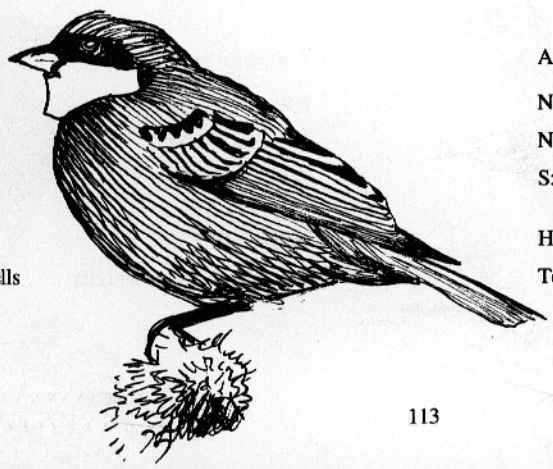
NE: Not found

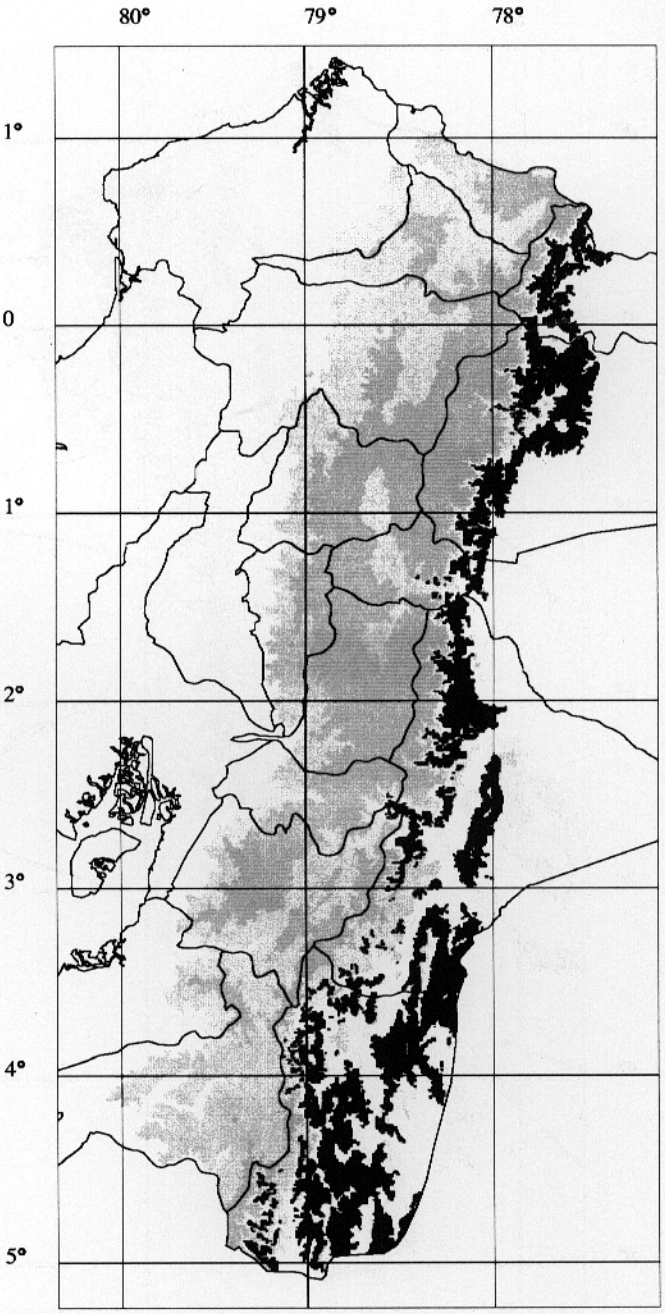
S: Not found

Habitat: HPF

Total distribution: 10 cells

Near –threatened





Yellow-throated Tanager
Tangara Goliamarilla

Iridosornis analis

Altitudinal range:

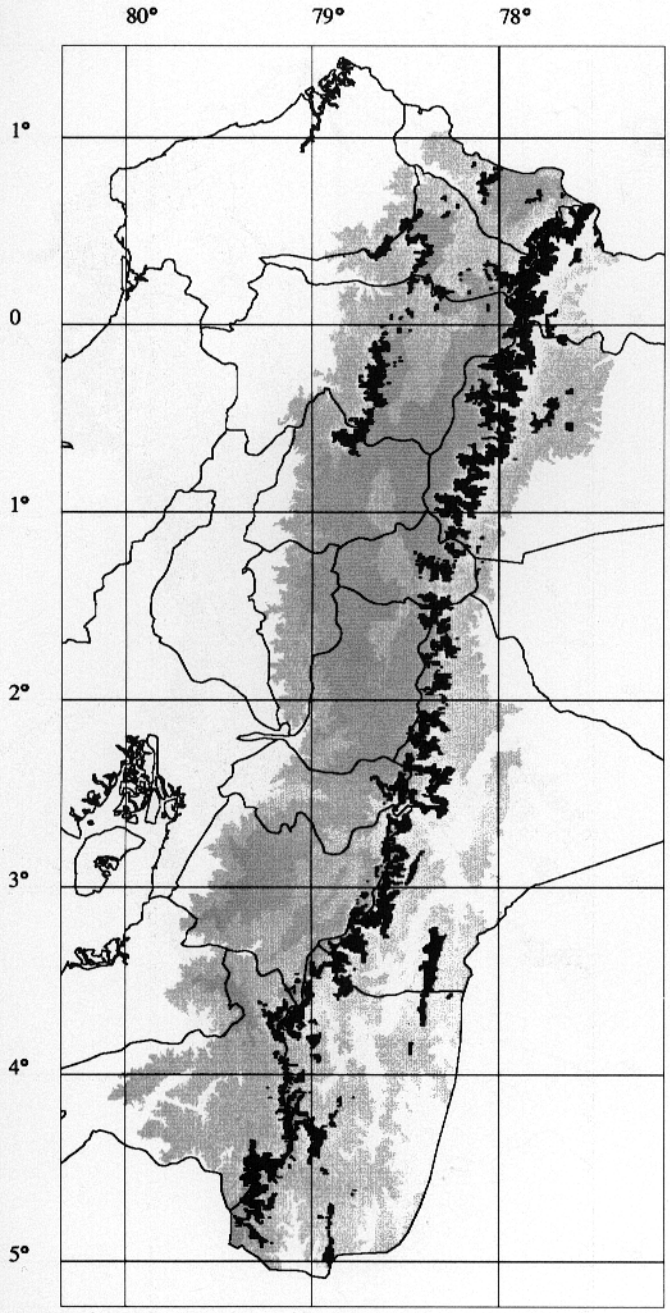
NW: Not found

NE: 1400 –2300

S: 1400 –2300

Habitat: HPF

Total distribution: 27 cells



Golden-crowned Tanager
Tangara Coronidorada

Iridosornis rufivertex

Altitudinal range:

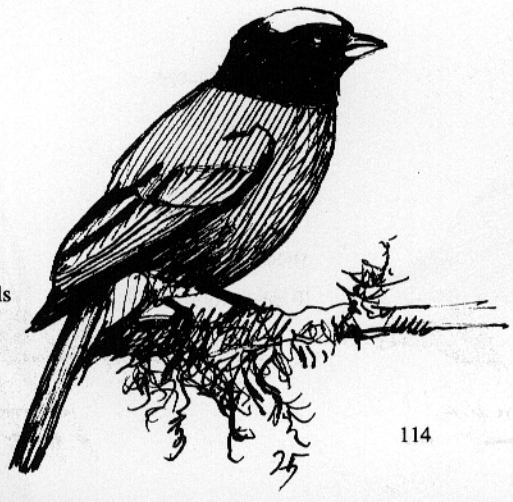
NW: 2700 –3600

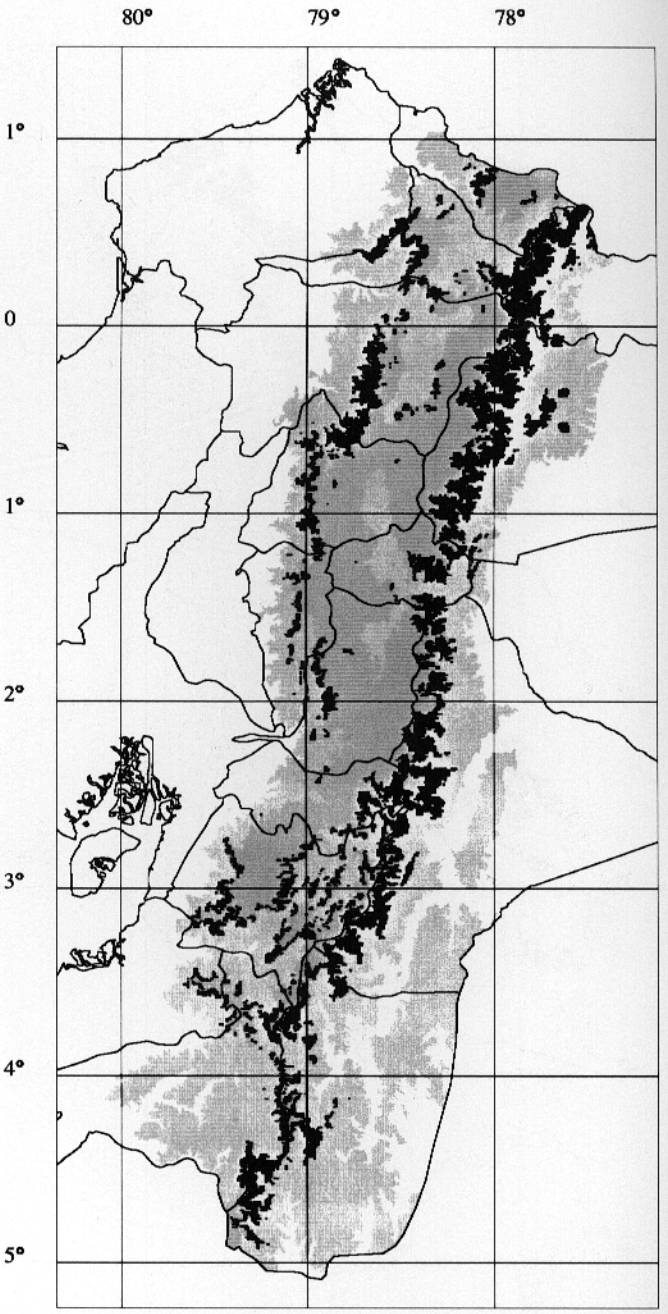
NE: 2700 –3600

S: 2600 –3400

Habitat: HPF HS

Total distribution: 30 cells





Scarlet-bellied Mountain-tanager
Tangara-montana Ventriflama

Anisognathus igniventris

Altitudinal range:

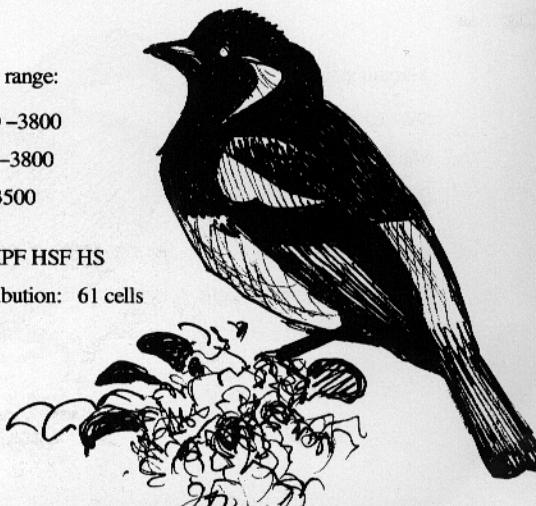
NW: 2500 –3800

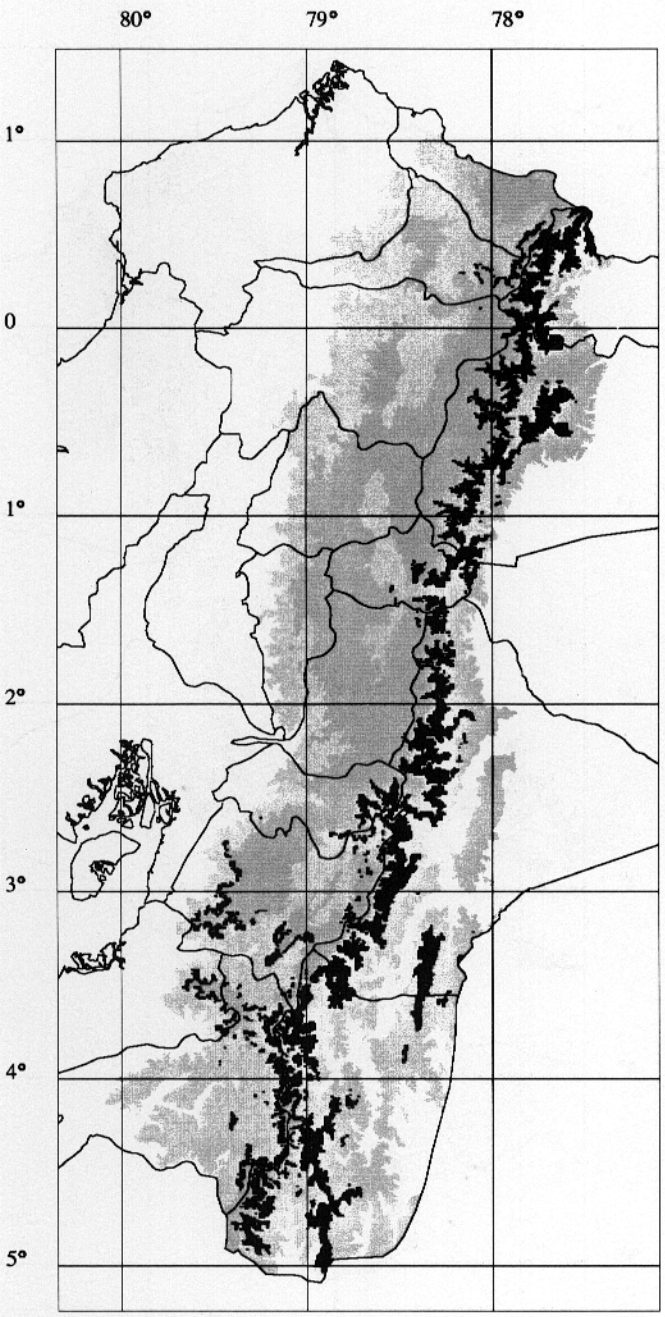
NE: 2500 –3800

S: 2600 –3500

Habitat: HPF HSF HS

Total distribution: 61 cells





Lacrimose Mountain-tanager
Tangara-montana Lacrimosa

Anisognathus lacrymosus

Altitudinal range:

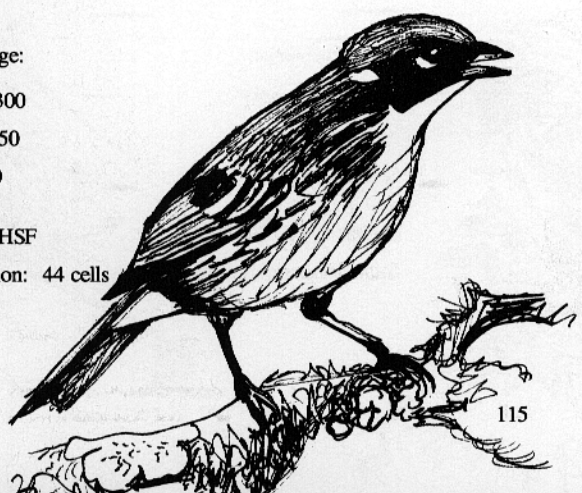
NW: 2500 –3300

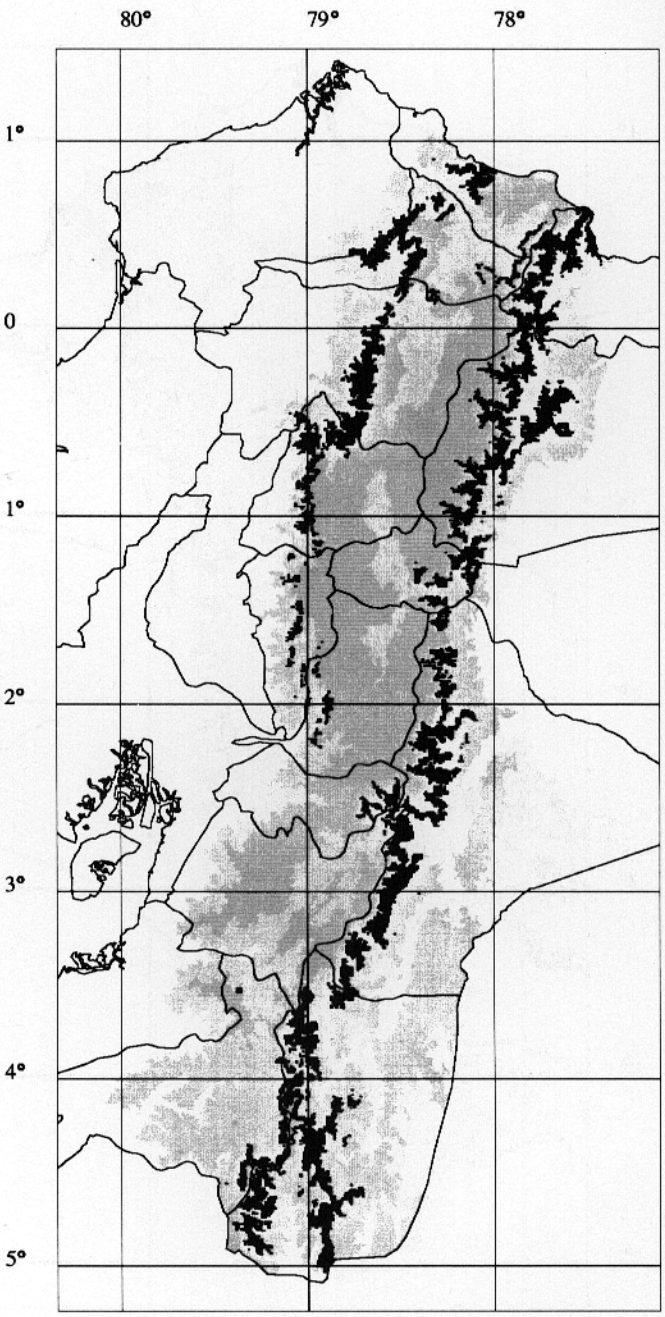
NE: 2200 –3250

S: 2200 –3150

Habitat: HPF HSF

Total distribution: 44 cells





Hooded Mountain-tanager
Tangara-montana Encapuchada

Buthraupis montana

Altitudinal range:

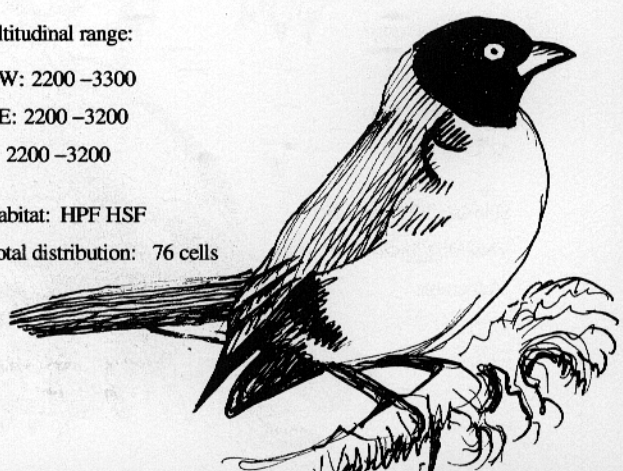
NW: 2200 –3300

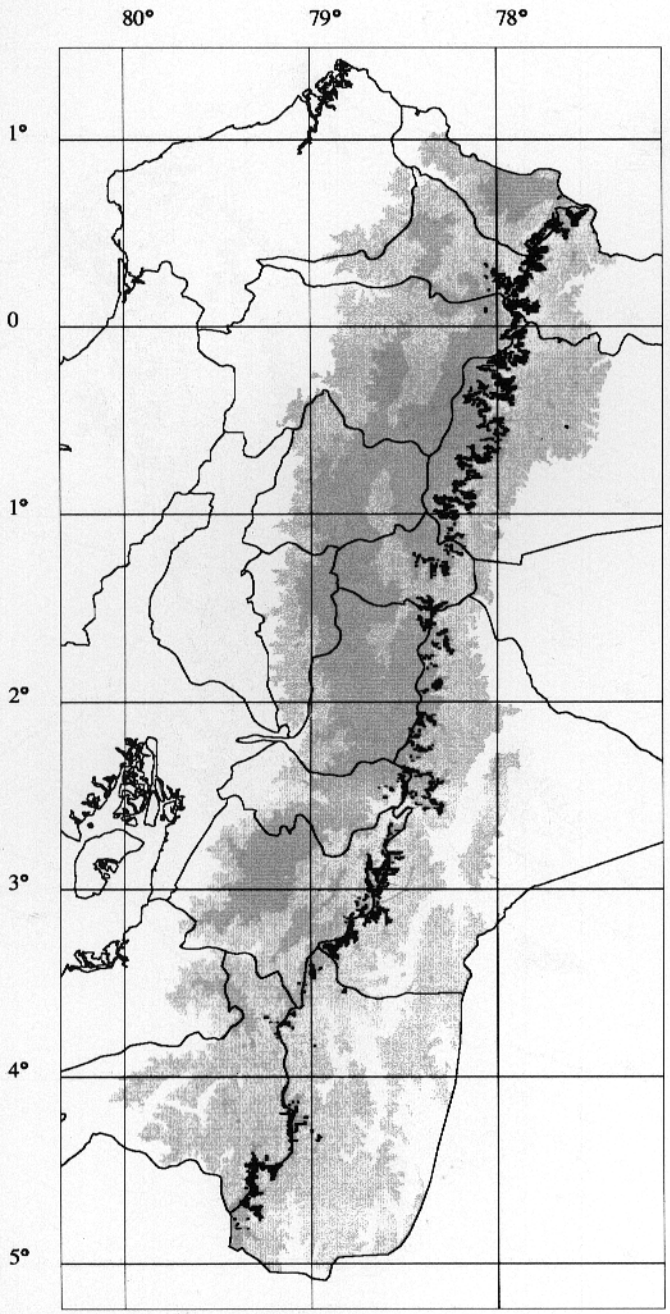
NE: 2200 –3200

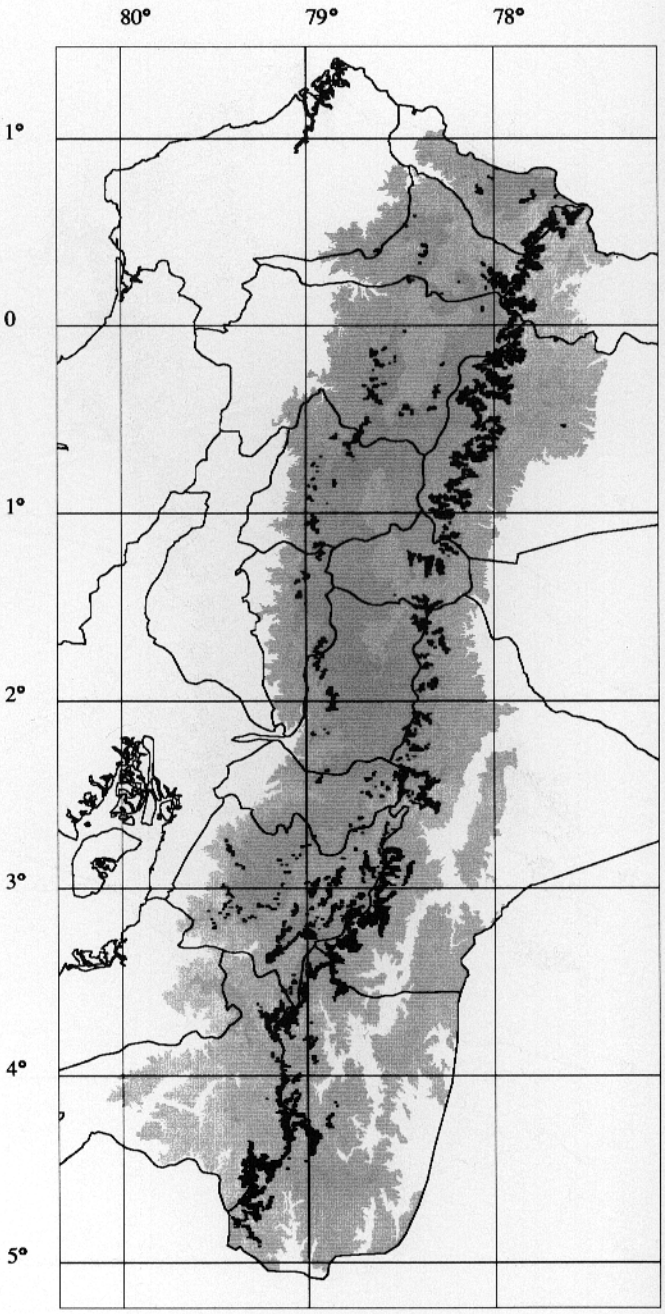
S: 2200 –3200

Habitat: HPF HSF

Total distribution: 76 cells







Masked Mountain-tanager
Tangara-montana Enmascarada

Buthraupis wetmorei

Altitudinal range:

NW: Not found

NE: 3300 –3600

S: 3150 –3600

Habitat: HPF HSF HS

Total distribution: 11 cells

Vulnerable

Black-chested Mountain-tanager
Tangara-montana Pechinegra

Buthraupis eximia

Altitudinal range:

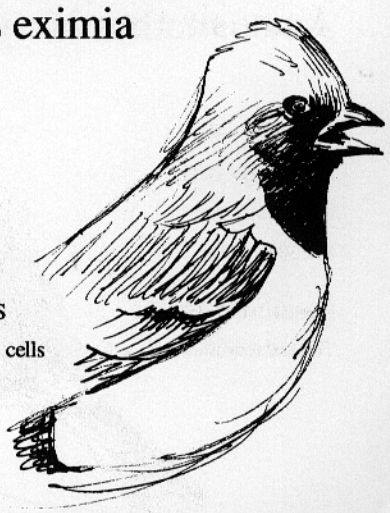
NW: 3300 –3800

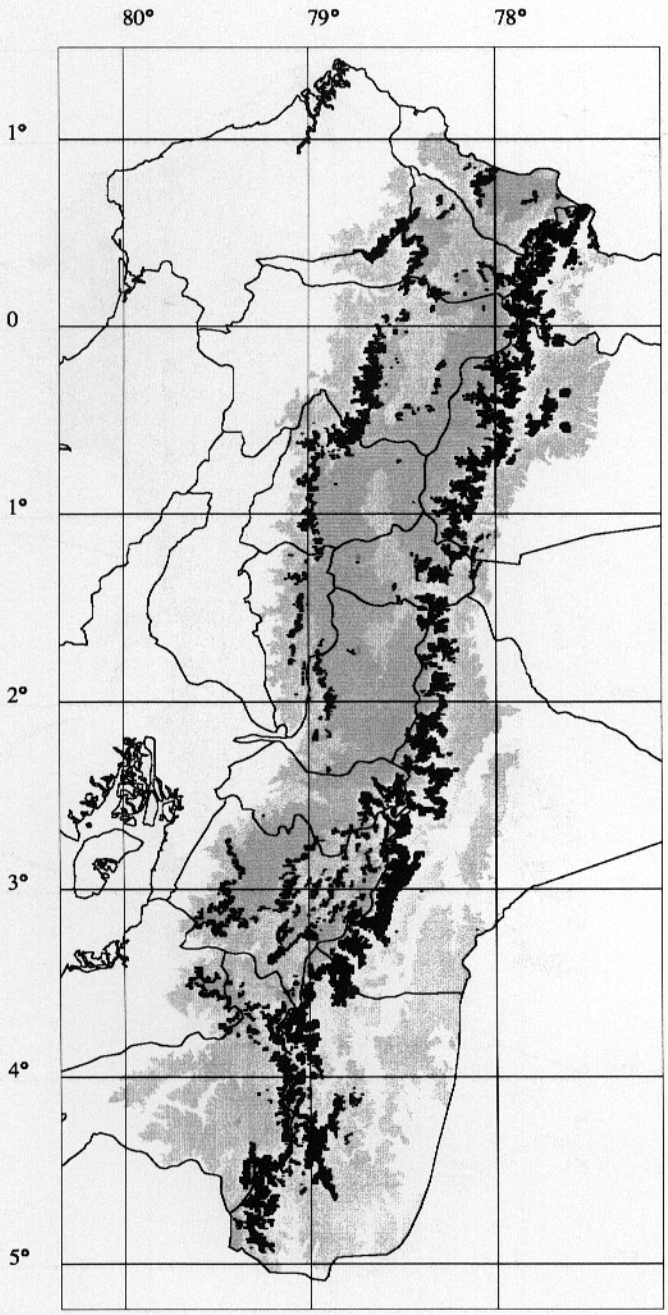
NE: 3300 –3800

S: 2750 –3400

Habitat: HPF HSF HS

Total distribution: 21 cells





Buff-breasted Mountain-tanager

Tangara-montana Pechihabana

Dubusia taeniata

Altitudinal range:

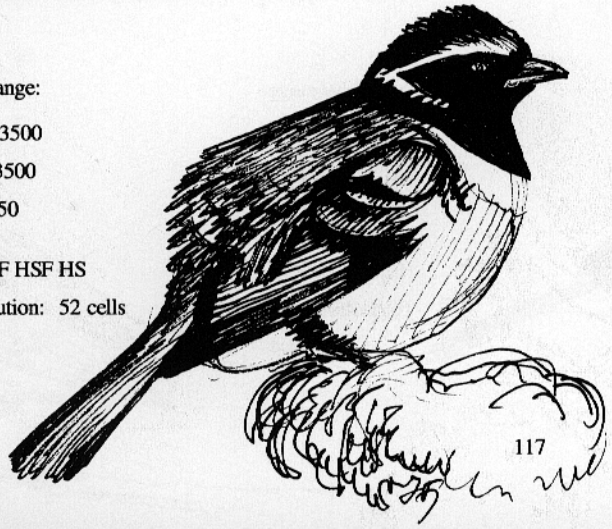
NW: 2500 –3500

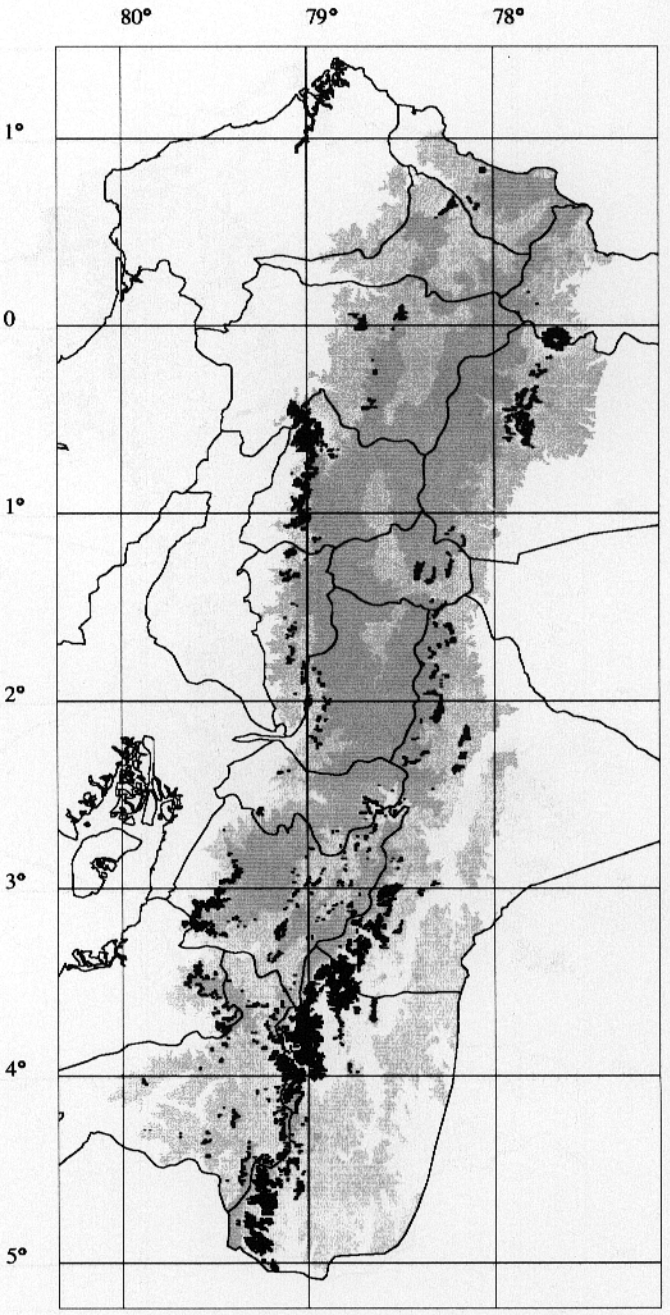
NE: 2500 –3500

S: 2200 –3350

Habitat: HPF HSF HS

Total distribution: 52 cells





Blue-capped Tanager

Tangara Gorriazul

Thraupis cyanocephala

Altitudinal range:

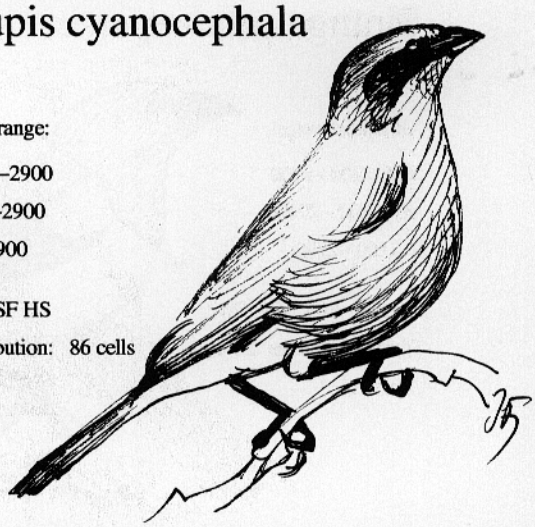
NW: 1800 –2900

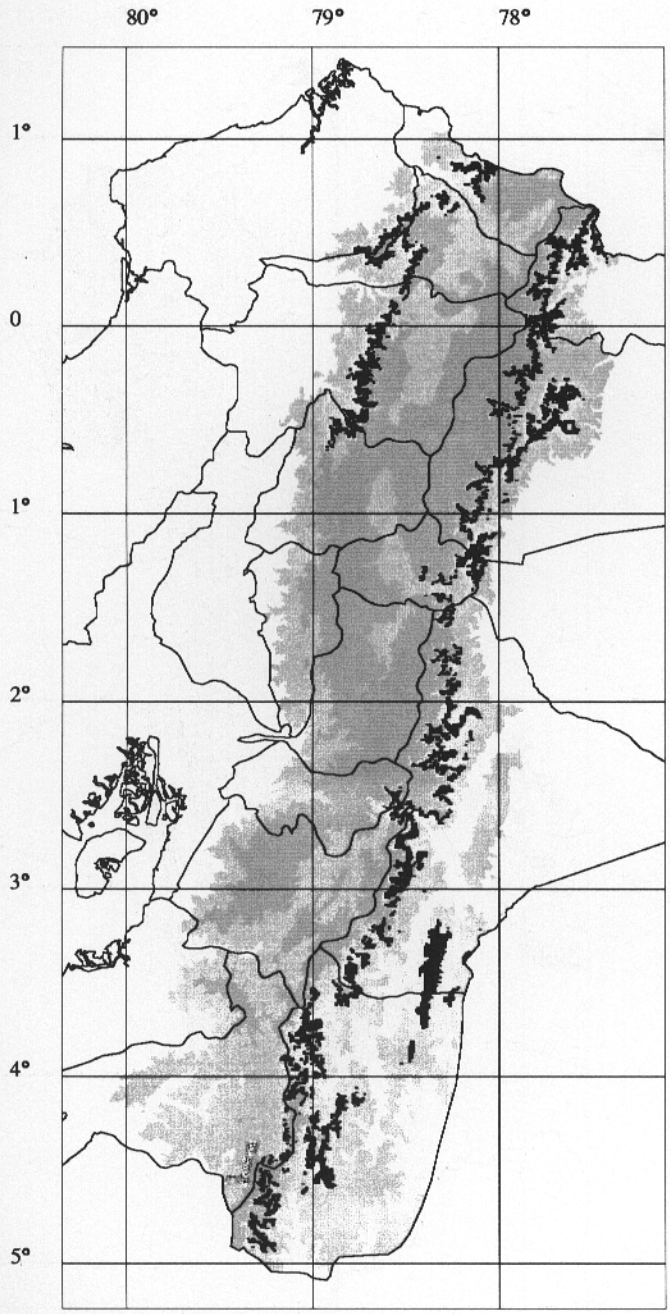
NE: 1800 –2900

S: 1800 –2900

Habitat: HSF HS

Total distribution: 86 cells





Red-hooded Tanager
Piranga Capuchirroja

Piranga rubriceps

Altitudinal range:

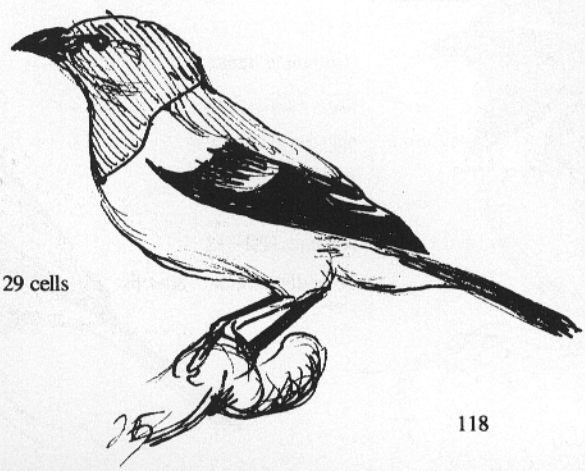
NW: 2200 –2700

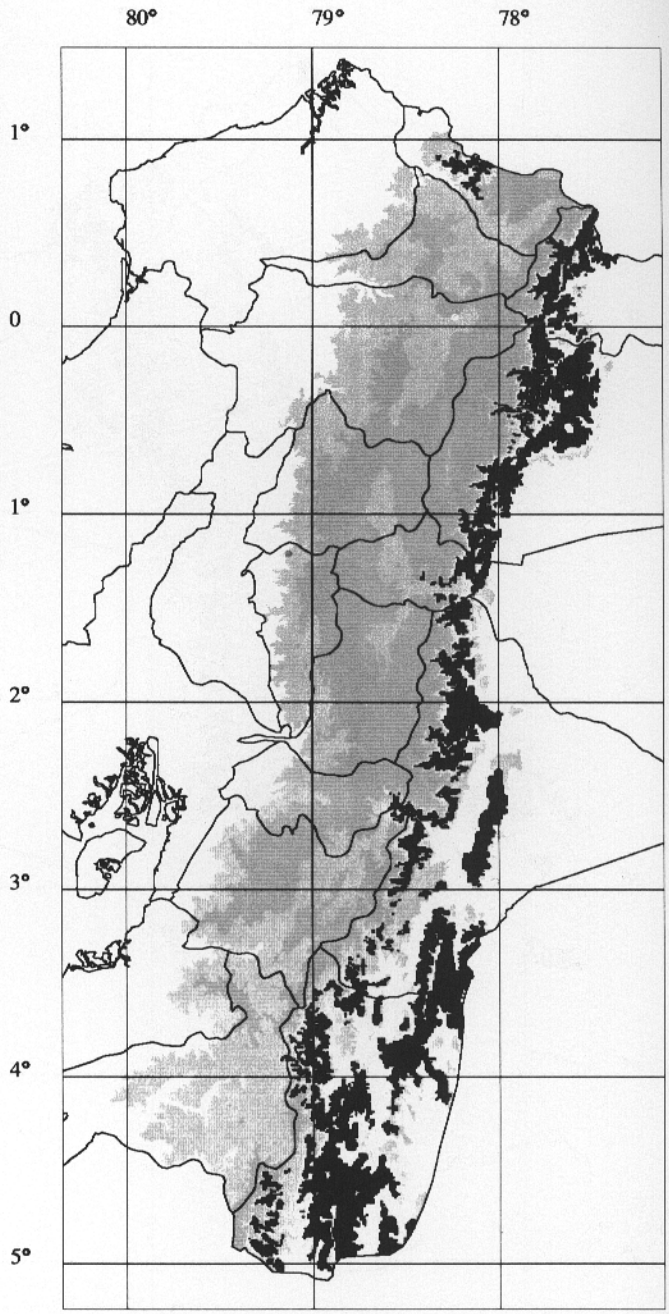
NE: 2200 –2700

S: 2200 –2700

Habitat: HPF

Total distribution: 29 cells





Rufous-crested Tanager
Tangara Crestirrufa

Creurgops verticalis

Altitudinal range:

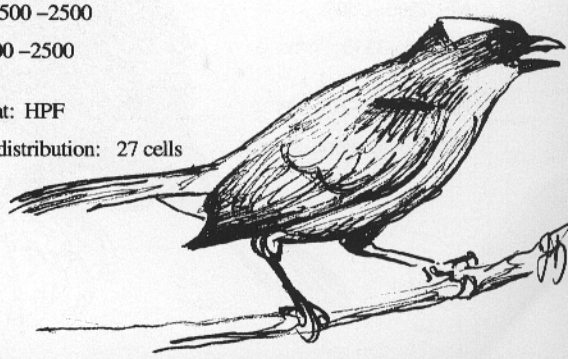
NW: 1900 –2350

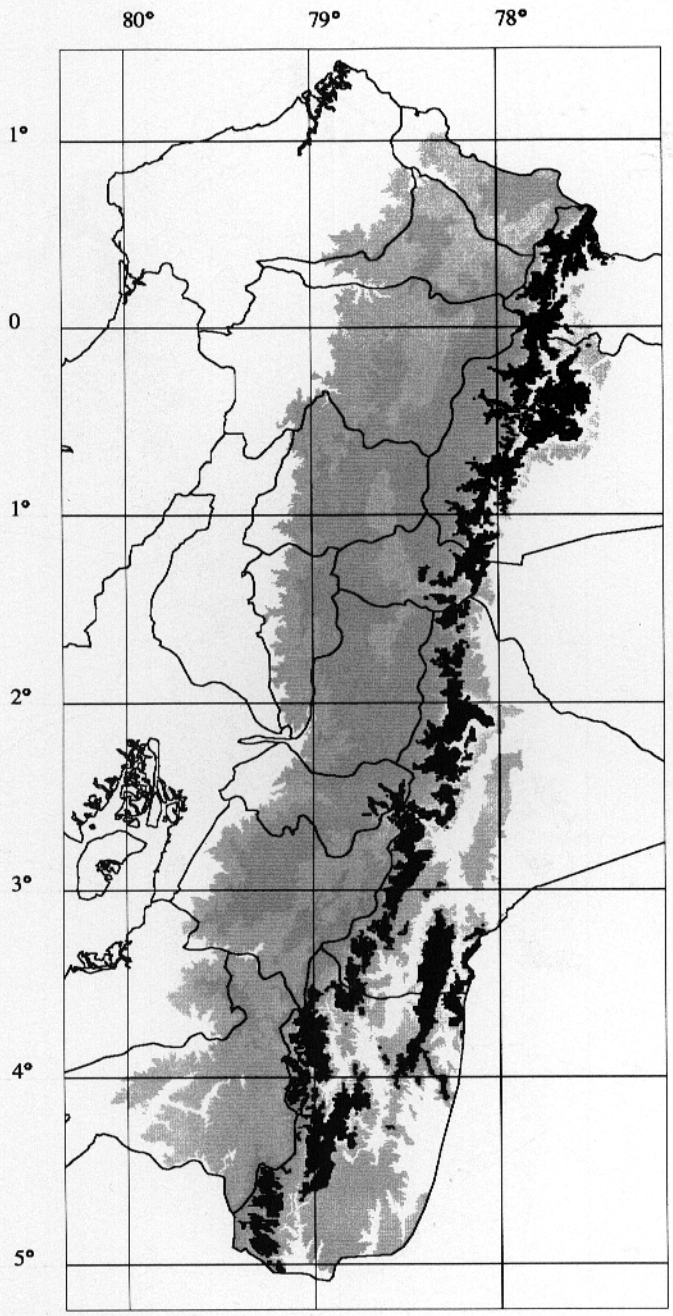
NE: 1500 –2500

S: 1500 –2500

Habitat: HPF

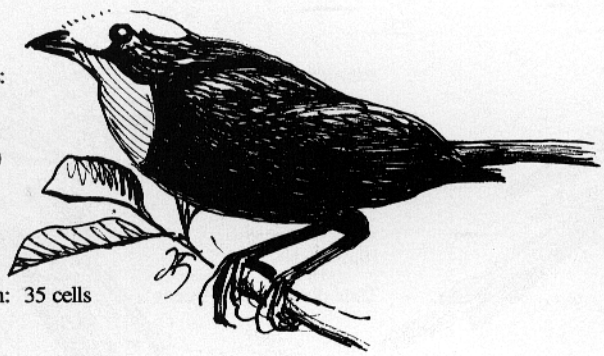
Total distribution: 27 cells





White-capped Tanager
Tangara Caretiblanca

Sericossypha albocristata



Altitudinal range:

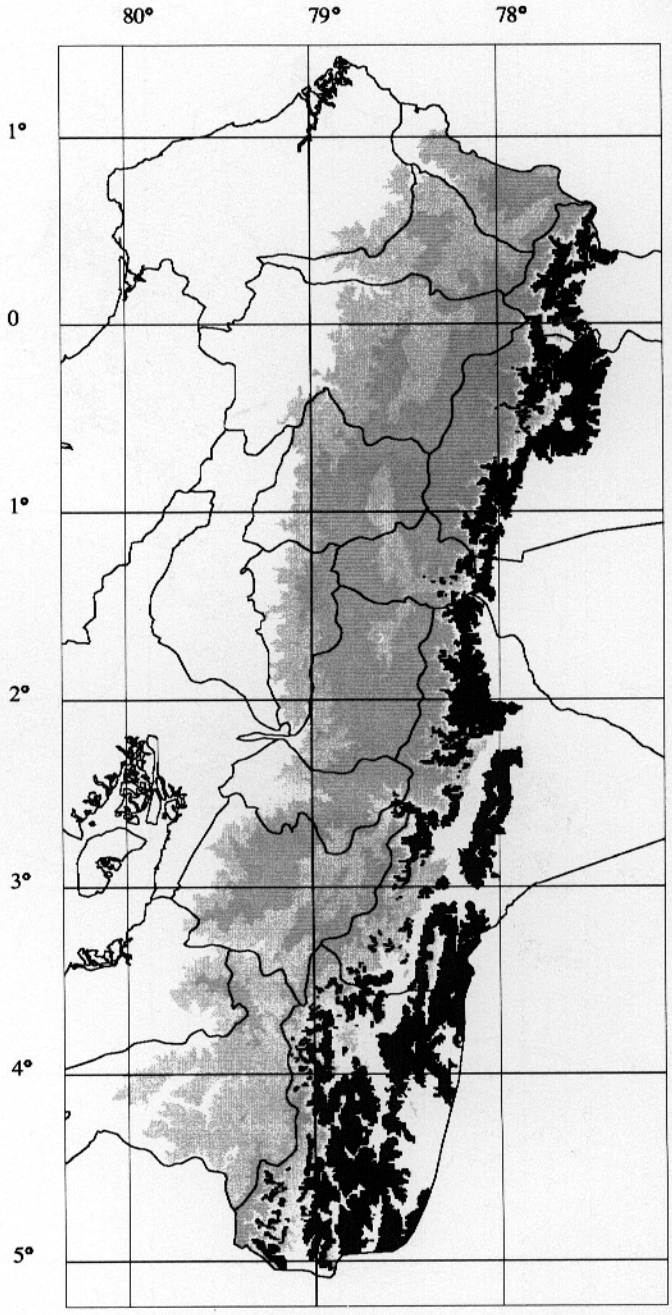
NW: Not found

NE: 1800 –3000

S: 1800 –3000

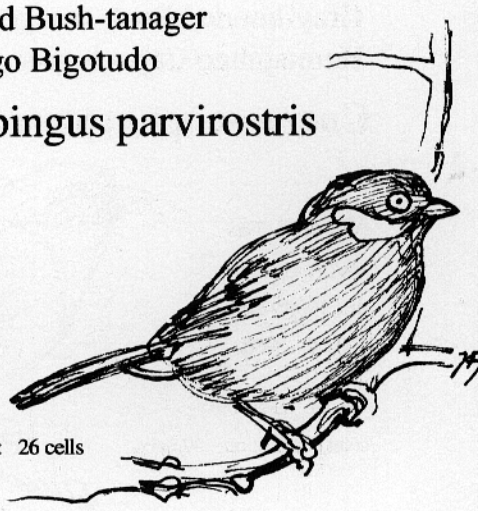
Habitat: HPF

Total distribution: 35 cells



Short-billed Bush-tanager
Clorospingo Bigotudo

Chlorospingus parvirostris



Altitudinal range:

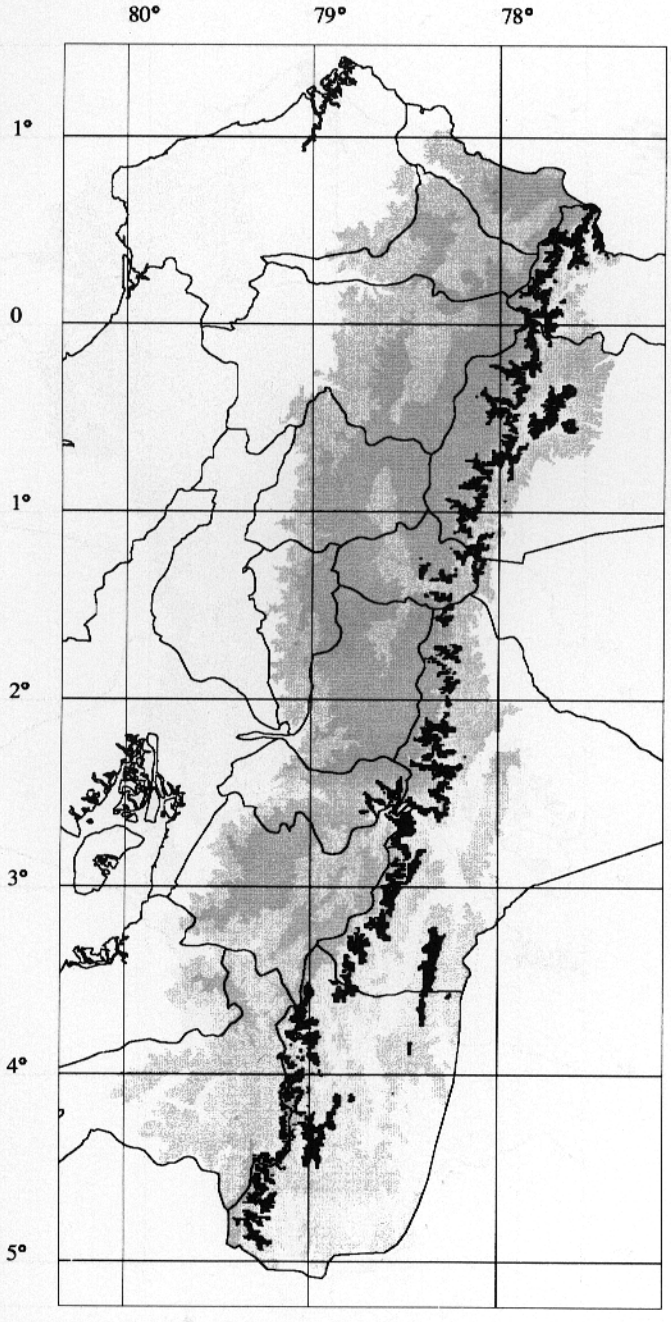
NW: Not found

NE: 1200 –2250

S: 1200 –2250

Habitat: HPF

Total distribution: 26 cells



Gray-hooded Bush-tanager
Hemispingo Capuchigrís

Cnemoscopus rubrirostris

Altitudinal range:

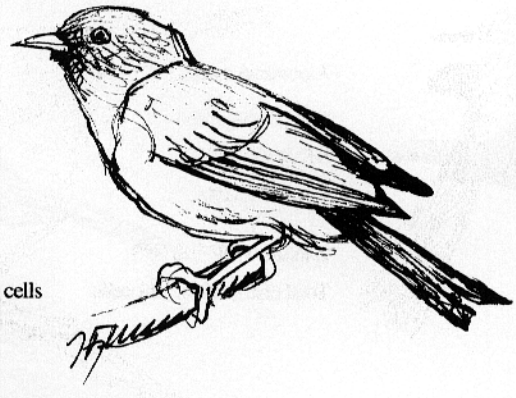
NW: Not found

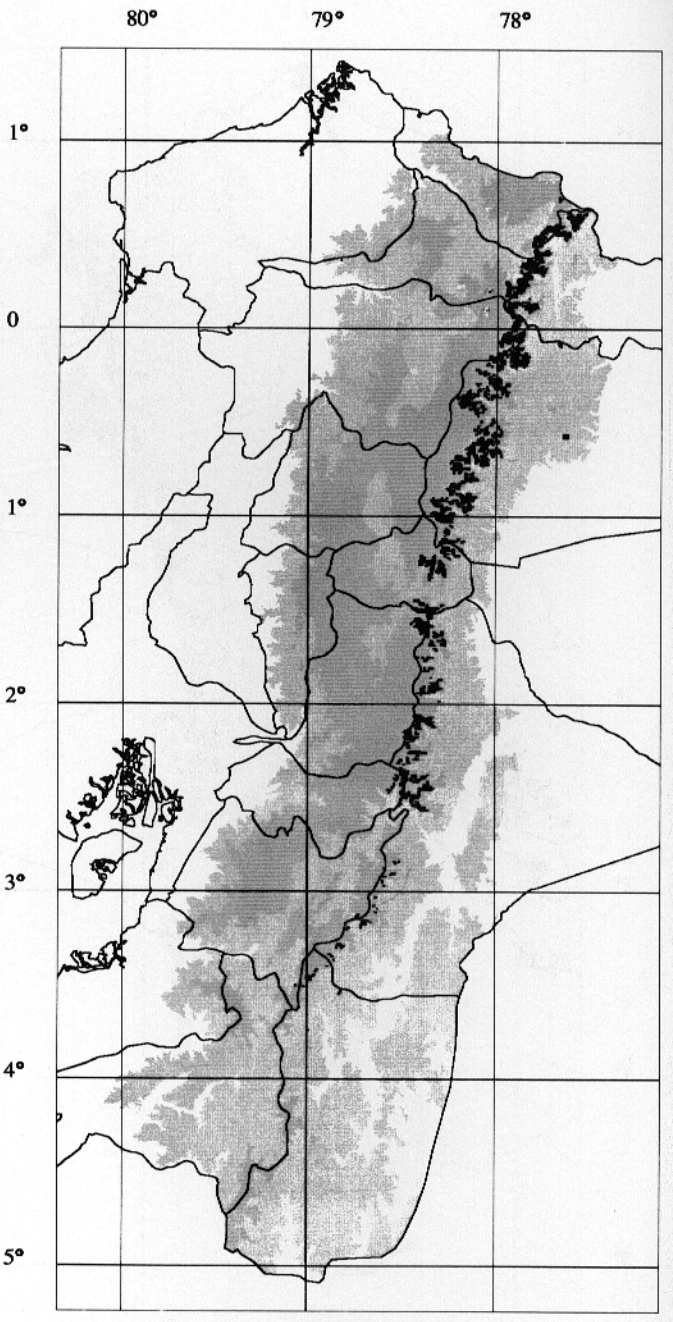
NE: 2300 –3100

S: 2300 –3000

Habitat: HPF HSF

Total distribution: 37 cells





Black-backed Bush-tanager
Quinuera Dorsinegra

Urothraupis stolzmanni

Altitudinal range:

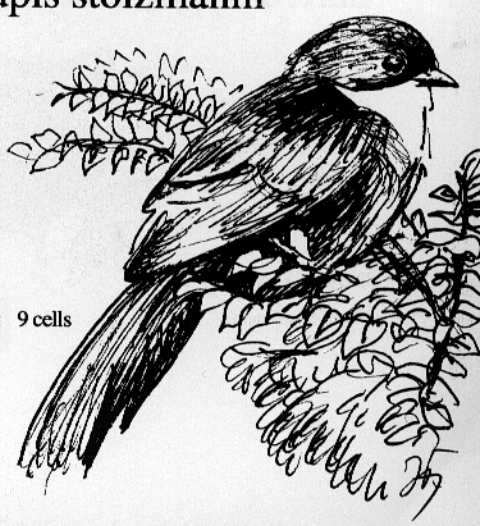
NW: Not found

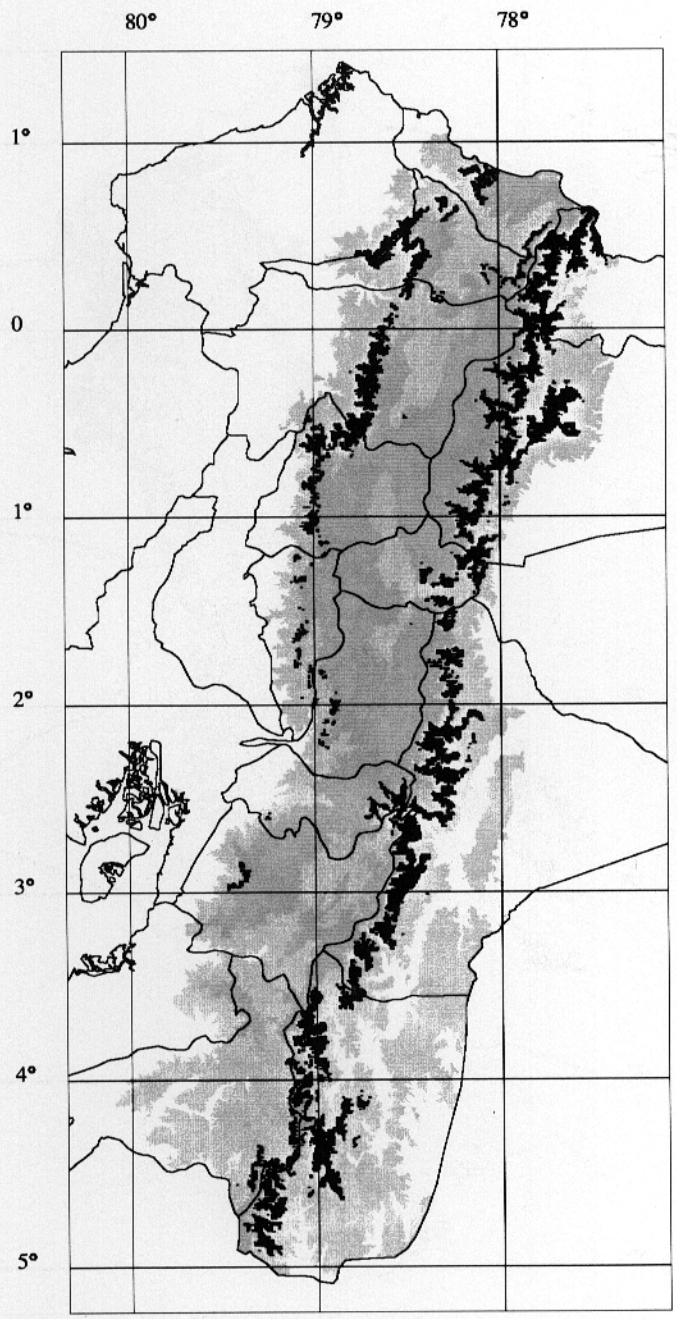
NE: 3200 –4000

S: 3100 –3200

Habitat: HS

Total distribution: 9 cells





Black-capped Hemispingus
Hemispingo Coroninegro

Hemispingus atropileus

Altitudinal range:

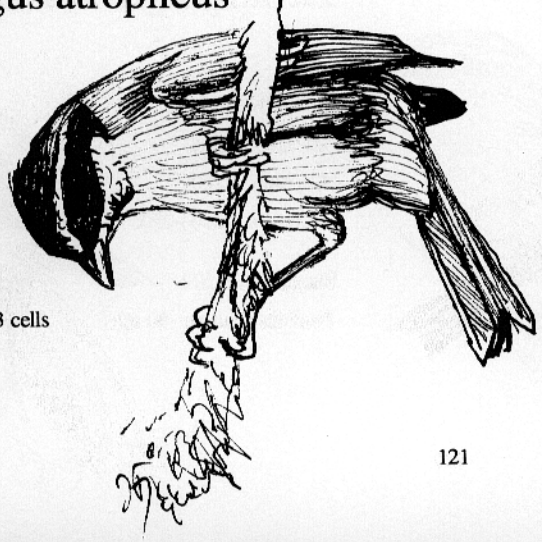
NW: 2250 –3100

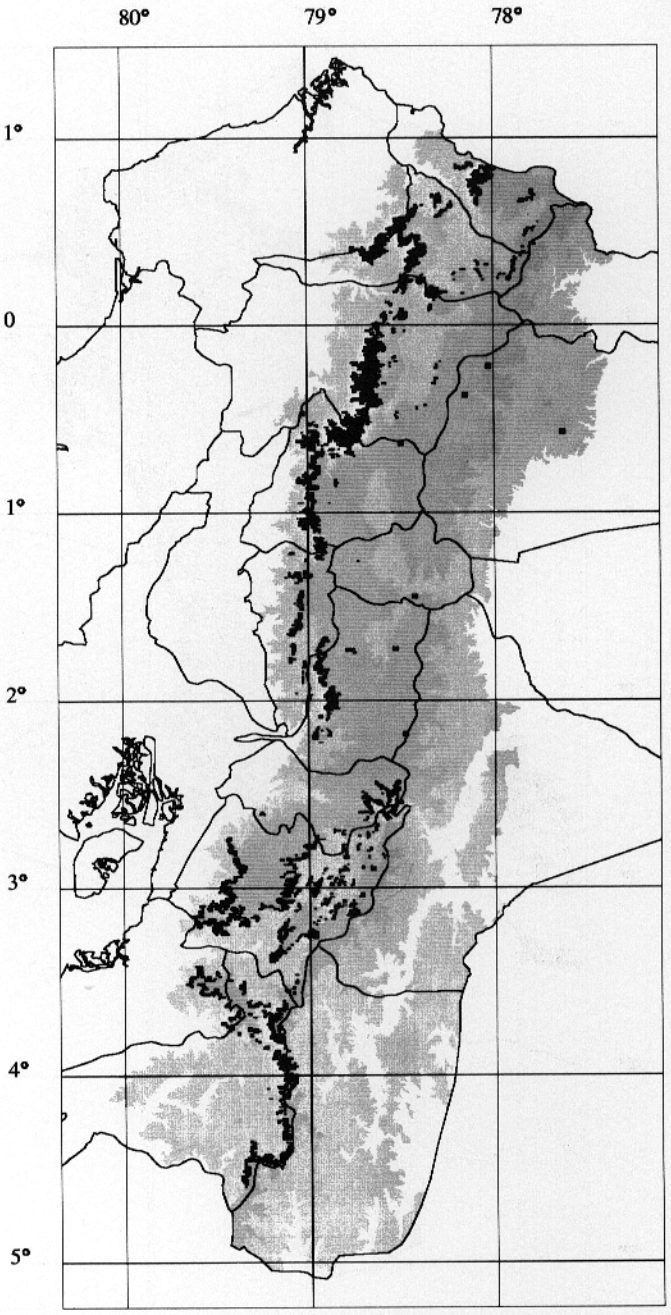
NE: 2200 –3200

S: 2200 –3100

Habitat: HPF HSF

Total distribution: 43 cells





Superciliaried Hemispingus
Hemispingo Cejón

Hemispingus superciliaris

Altitudinal range:

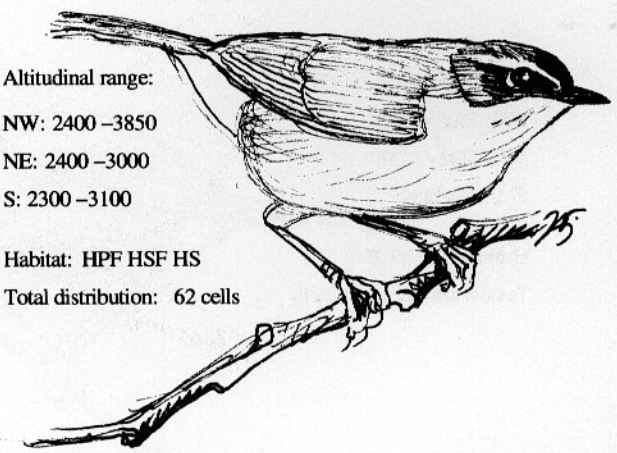
NW: 2400 –3850

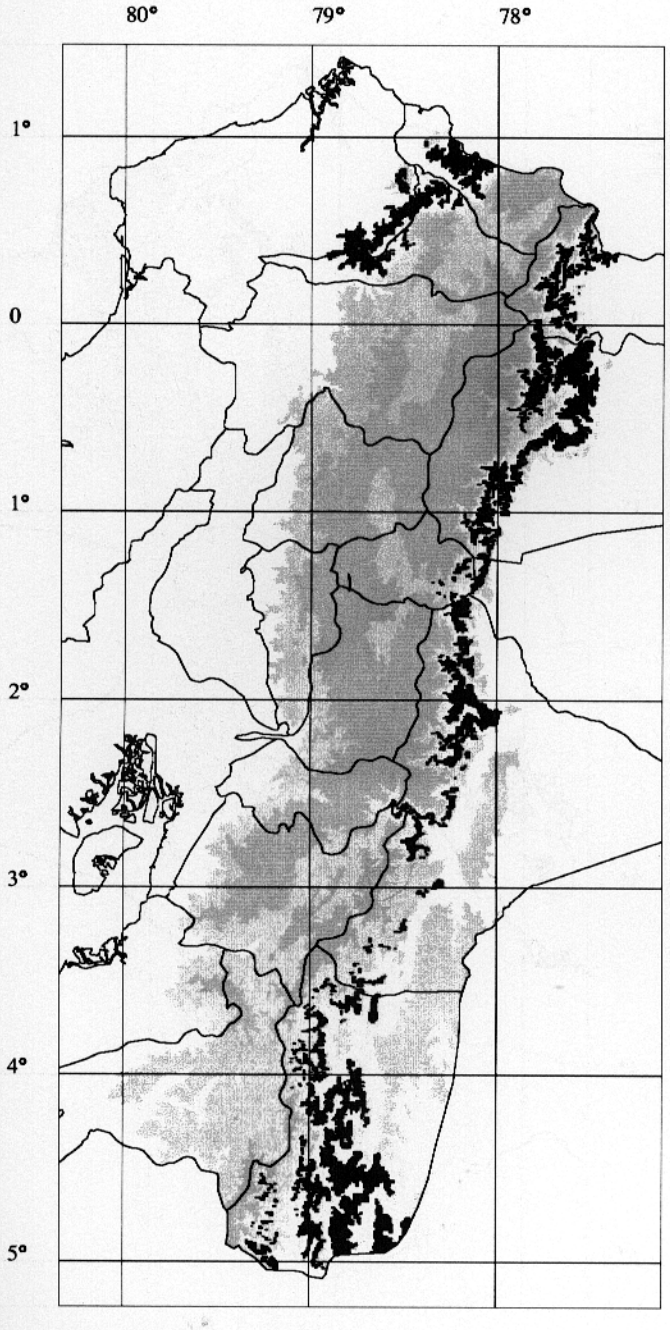
NE: 2400 –3000

S: 2300 –3100

Habitat: HPF HSF HS

Total distribution: 62 cells





Oleaginous Hemispingus
Hemispingo Oleaginoso

Hemispingus frontalis

Altitudinal range:

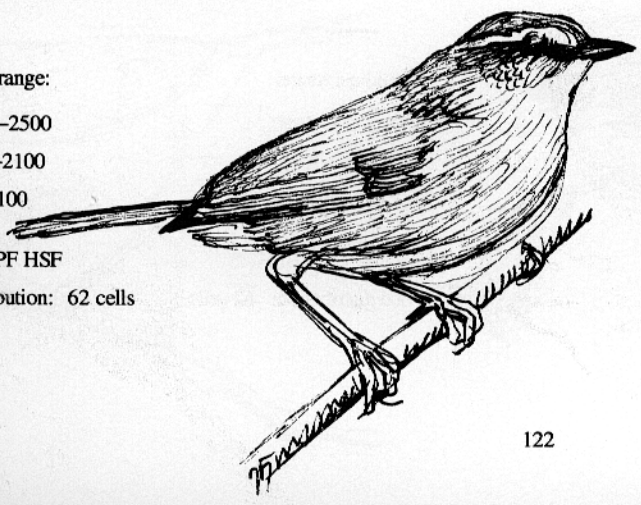
NW: 1500 –2500

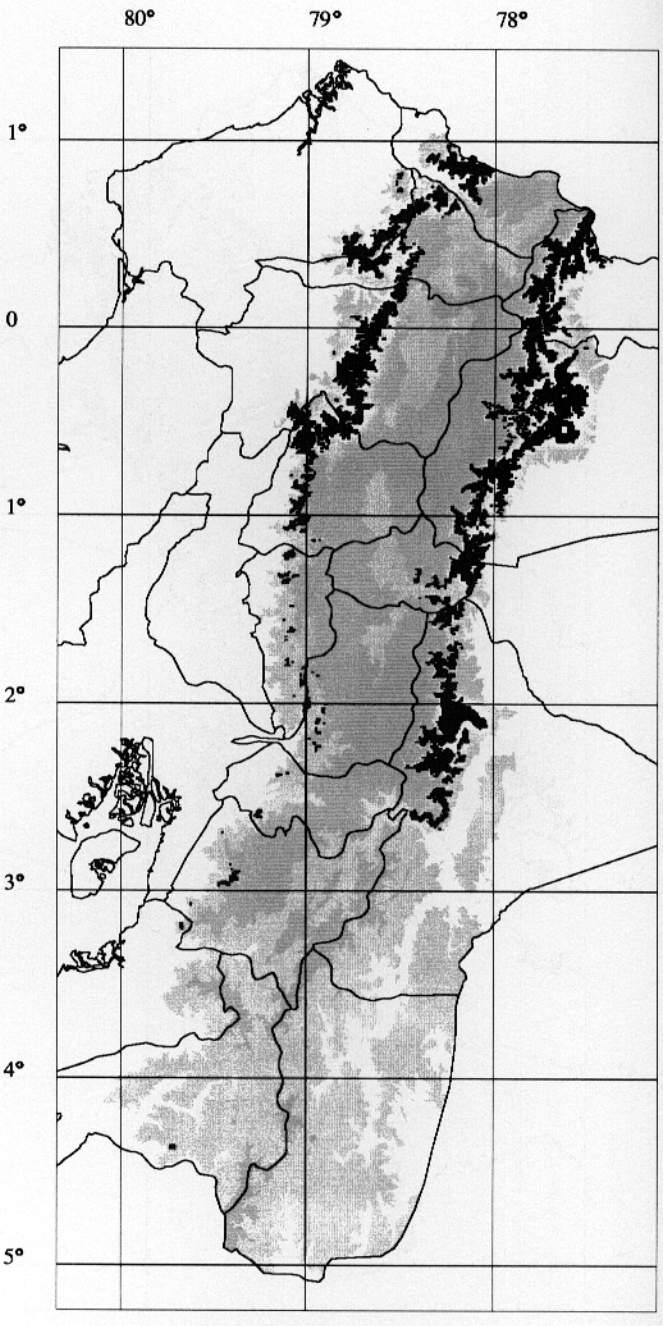
NE: 1500 –2100

S: 1500 –2100

Habitat: HPF HSF

Total distribution: 62 cells





Black-eared Hemispingus
Hemispingo Orejinegro

Hemispingus melanotis

Altitudinal range:

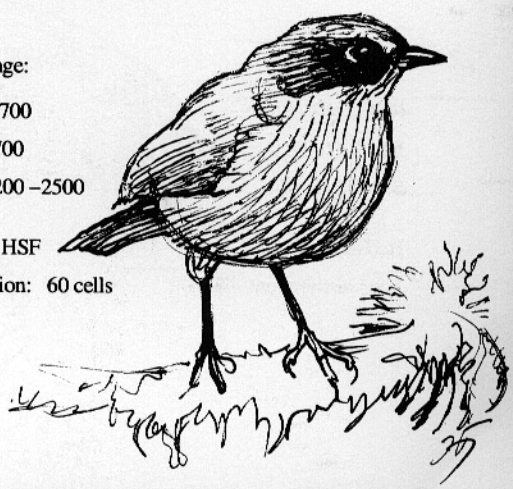
NW: 1800 –2700

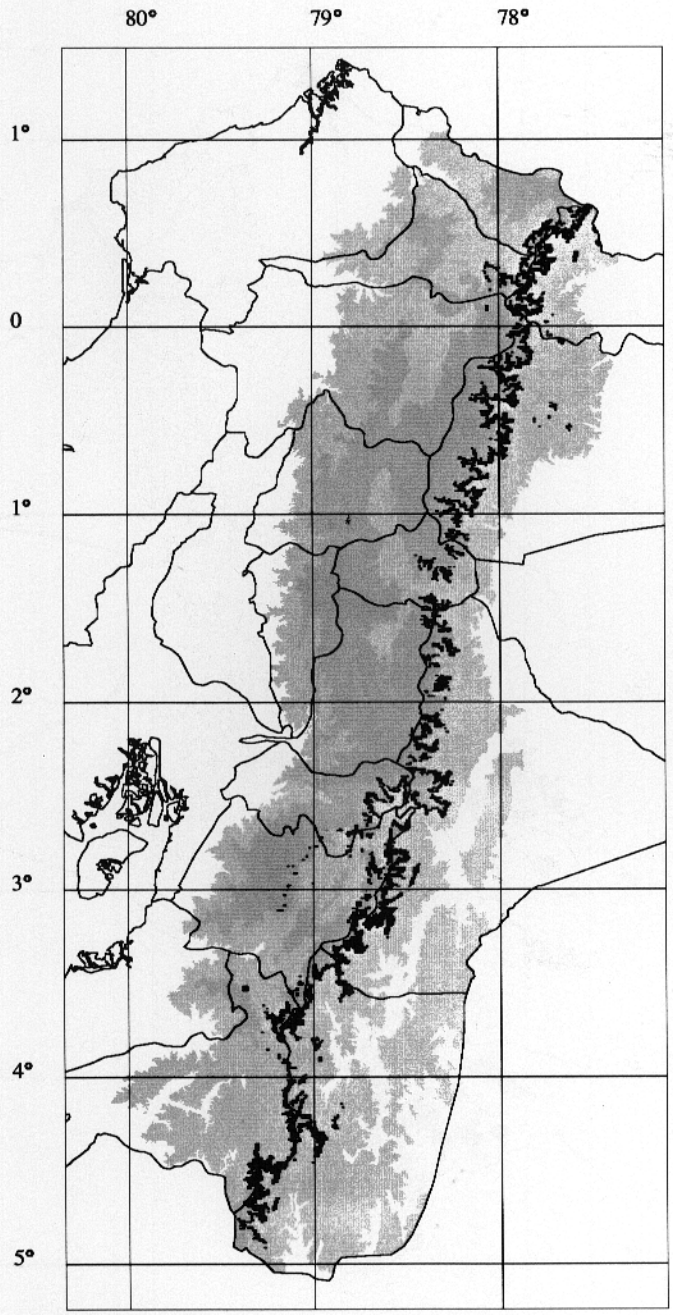
NE: 1800 –2700

S: Limited: 2200 –2500

Habitat: HPF HSF

Total distribution: 60 cells





Black-headed Hemispingus
Hemispingo Cabecinegro

Hemispingus verticalis

Altitudinal range:

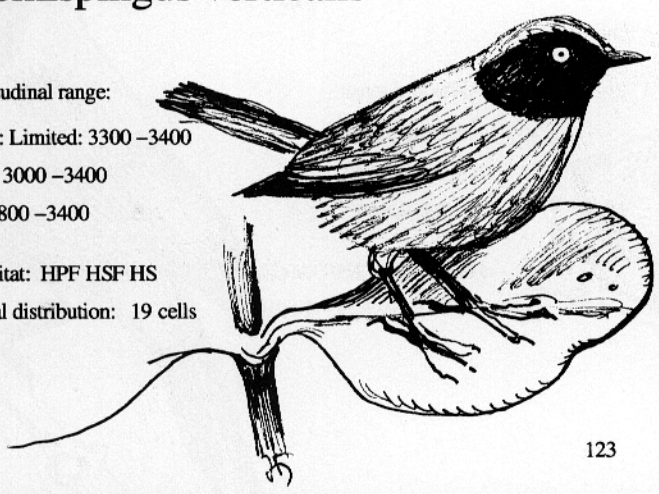
NW: Limited: 3300 –3400

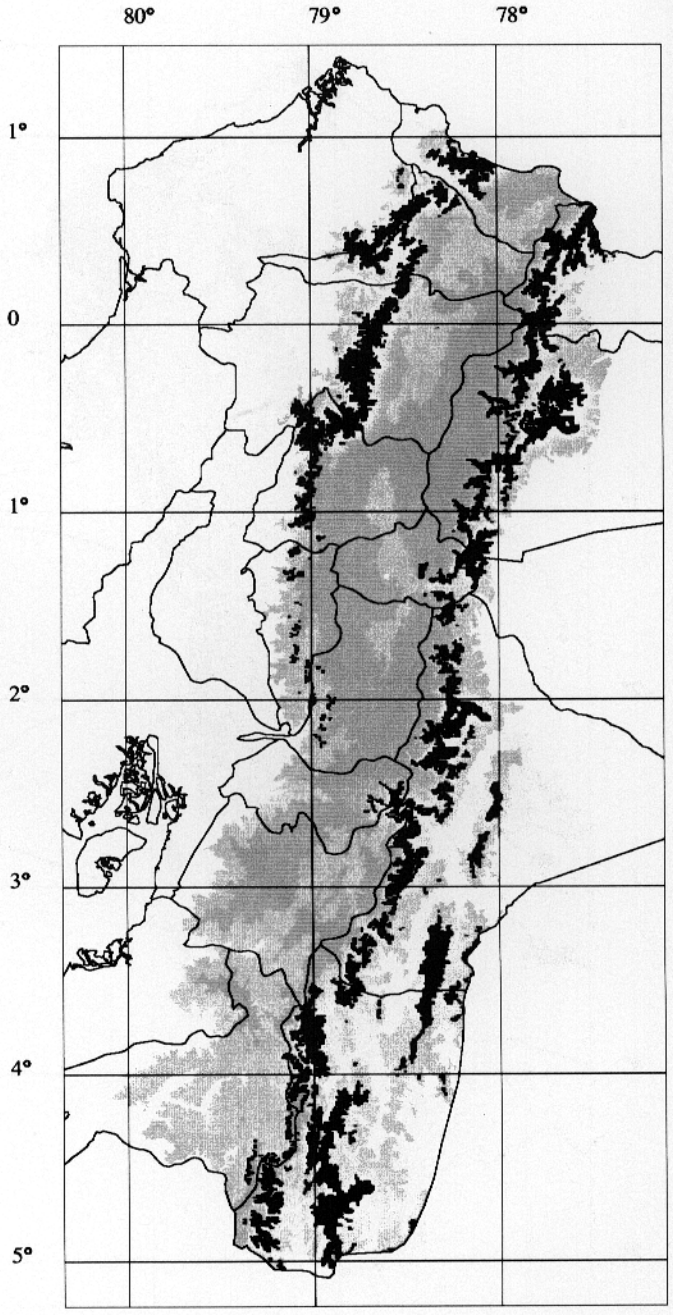
NE: 3000 –3400

S: 2800 –3400

Habitat: HPF HSF HS

Total distribution: 19 cells





Grass-green Tanager
Tangara Verdiesmeralda

Chlorornis riefferii

Altitudinal range:

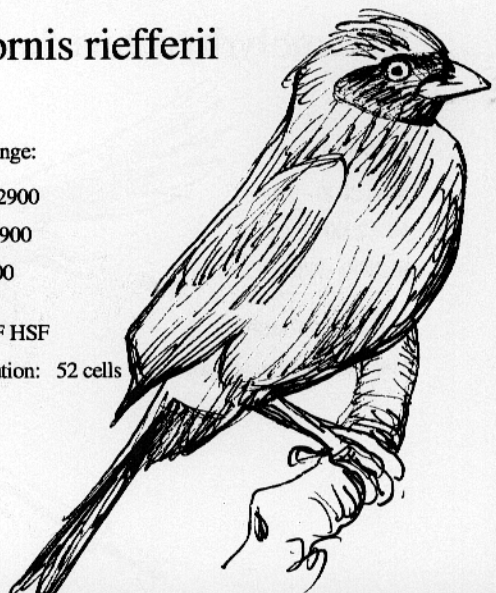
NW: 1800 –2900

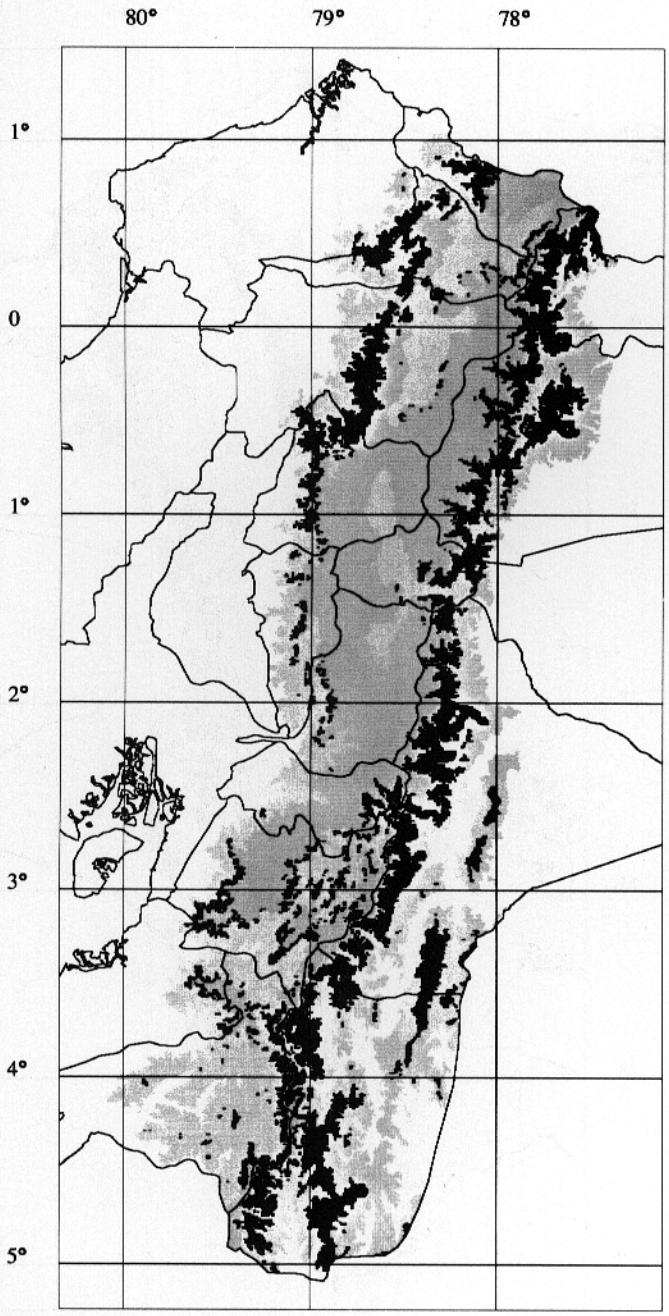
NE: 2000 –2900

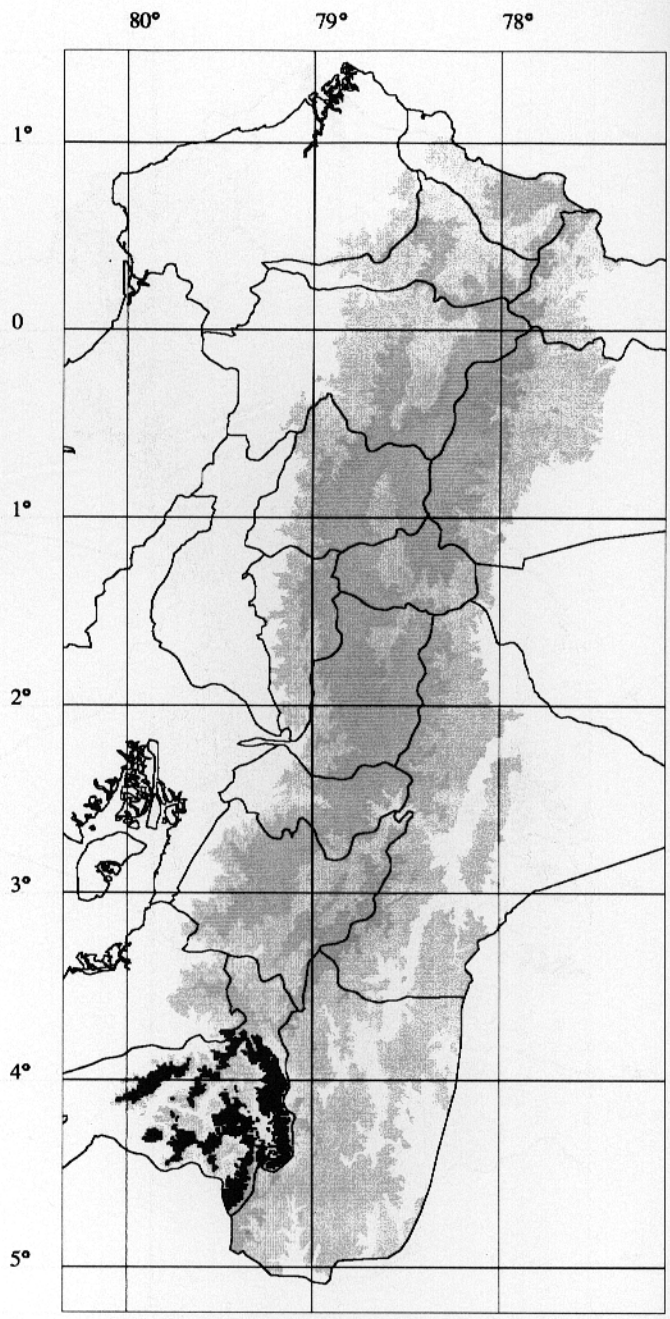
S: 2000 –2900

Habitat: HPF HSF

Total distribution: 52 cells







Plush-capped Finch
Gorradiadema

Catamblyrhynchus diadema

Altitudinal range:

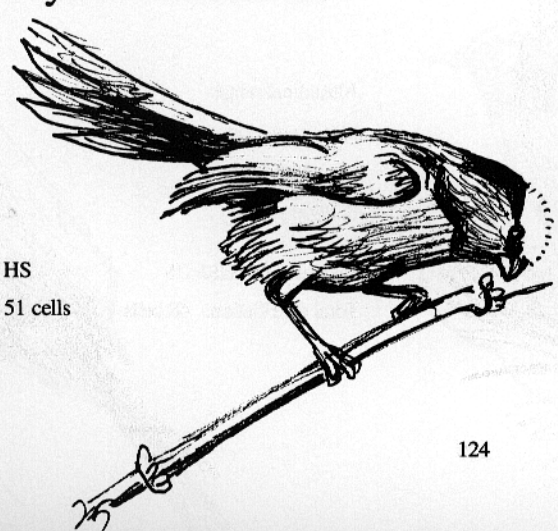
NW: 2000 –3200

NE: 2000 –3200

S: 2000 –3200

Habitat: HPF HSF HS

Total distribution: 51 cells



Black-cowled saltator
Saltador Capuchinegro

Saltator nigriceps

Altitudinal range:

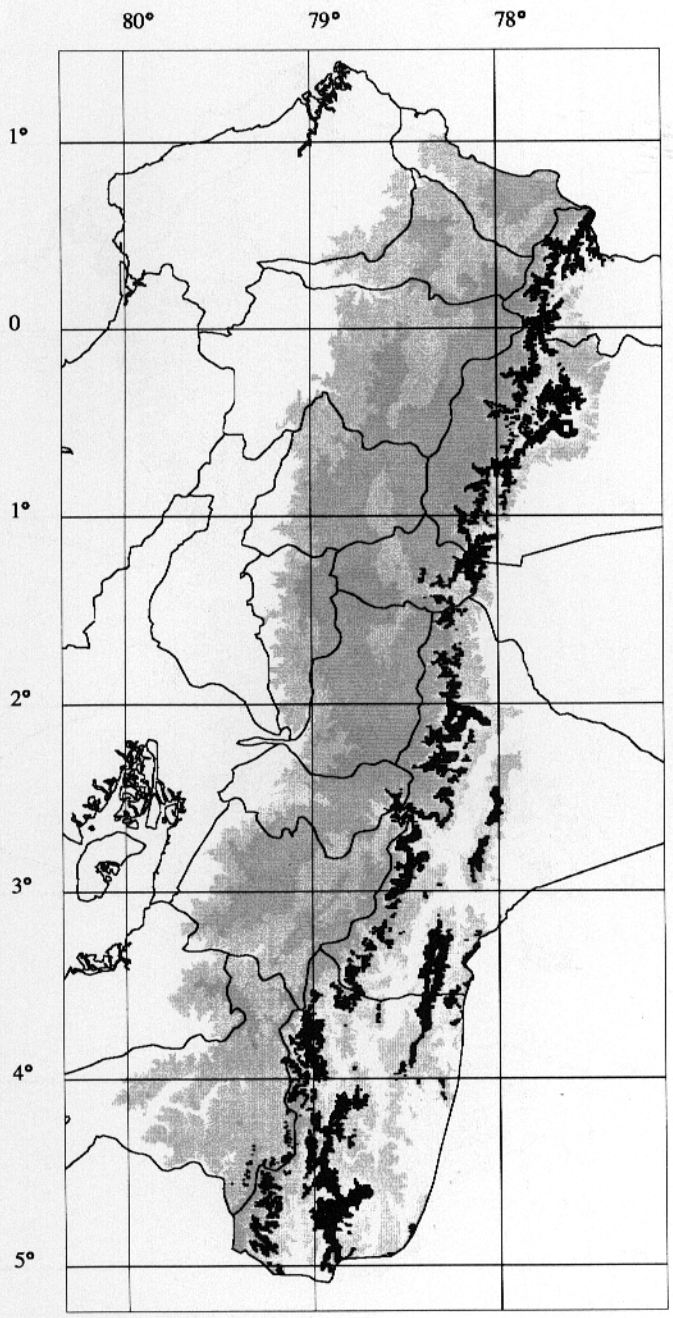
NW: Not found

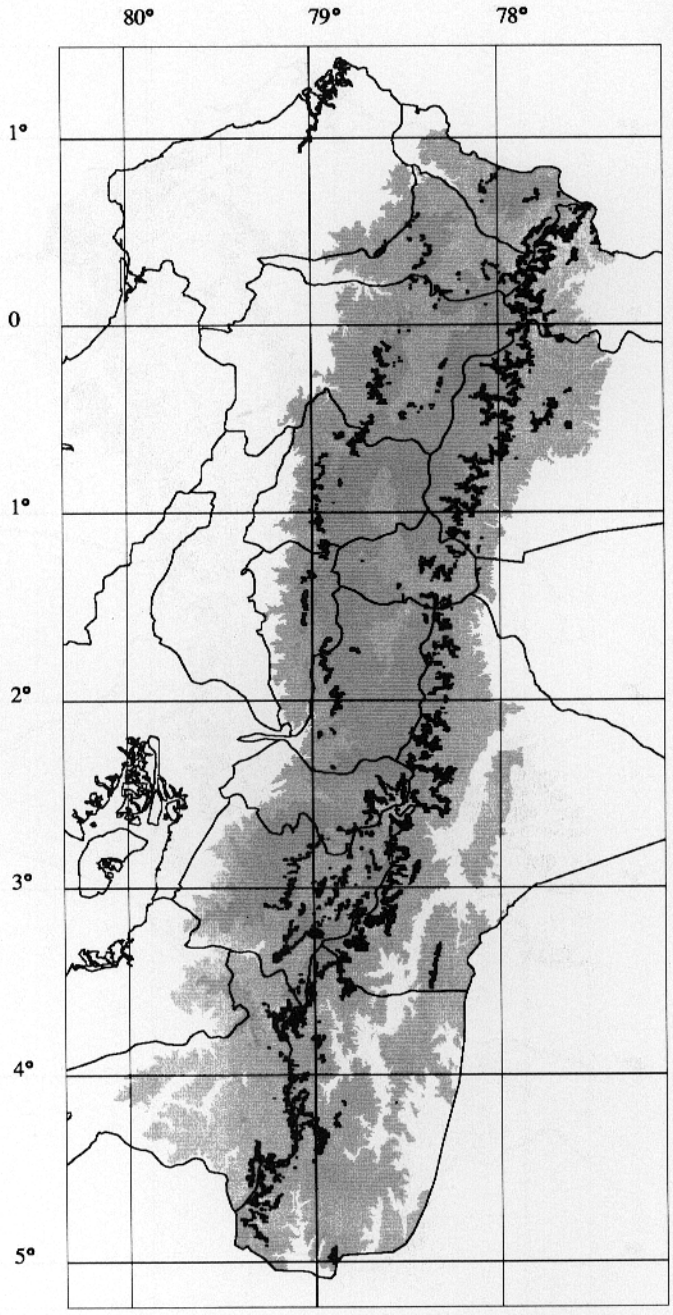
NE: Not found

S: 1700 –2900

Habitat: HSF HS DA

Total distribution: 4 cells





Masked Saltator
Saltador Enmascarado

Saltator cinctus

Altitudinal range:

NW: Not found

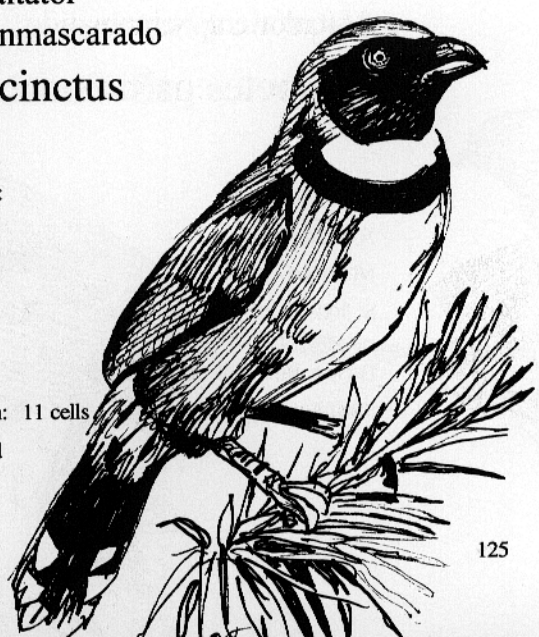
NE: 2000 –2700

S: 2000 –2700

Habitat: HPF

Total distribution: 11 cells

Near –threatened



Paramo Seedeater
Semillero Paramero

Catamenia homochroa

Altitudinal range:

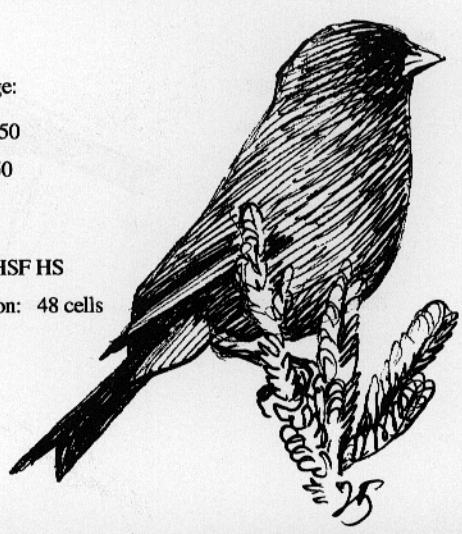
NW: 3100 –3750

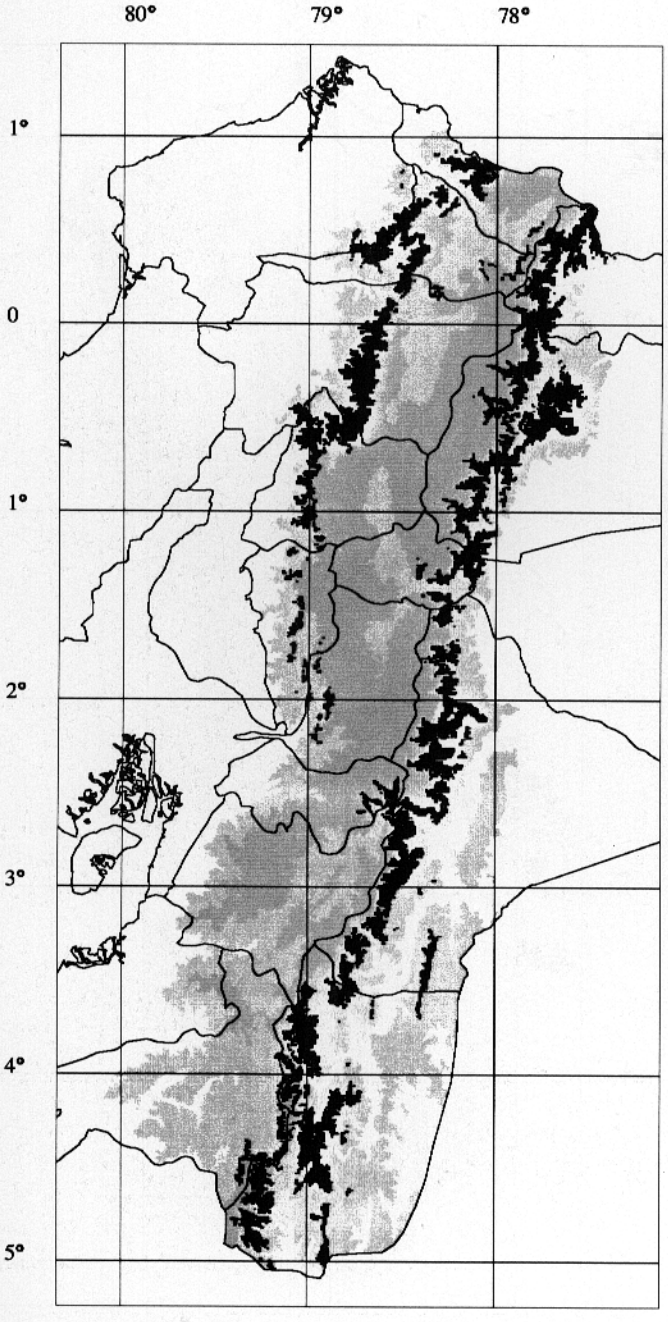
NE: 2800 –3350

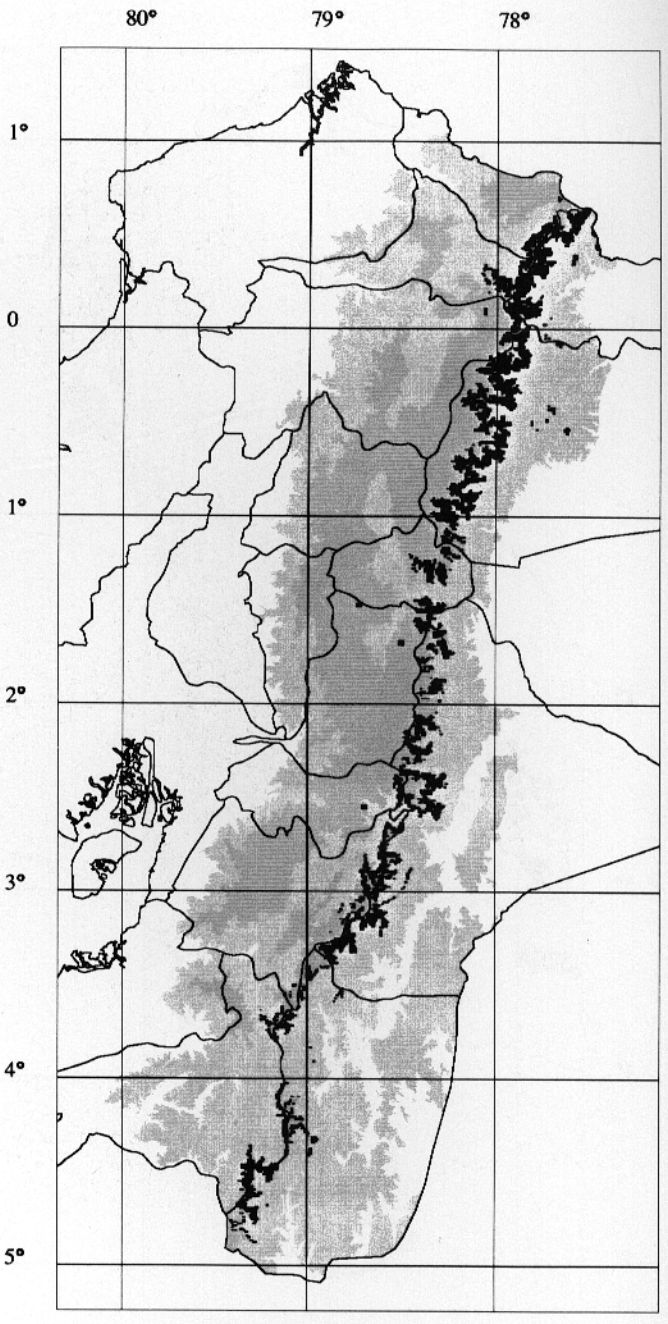
S: 2700 –3200

Habitat: HPF HSF HS

Total distribution: 48 cells







Slaty Finch
Fringilo Plomizo

Haplospiza rustica

Altitudinal range:

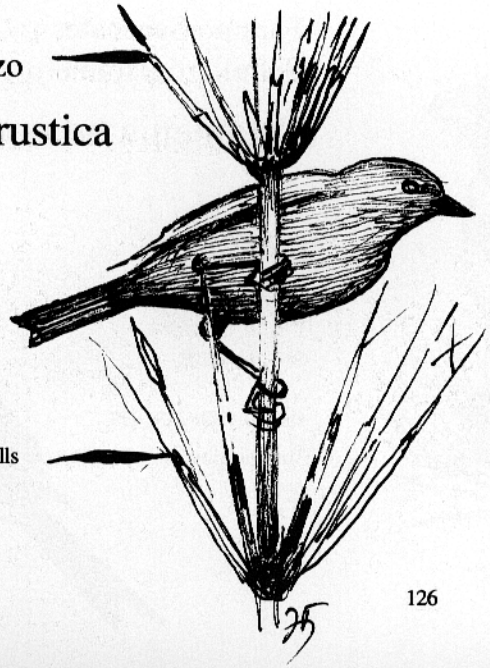
NW: 2000 –3300

NE: 2000 –3100

S: 2000 –3100

Habitat: HPF HSF

Total distribution: 72 cells



Pale-naped Brush-finch
Matorralero Nuquipálido

Atlapetes pallidinucha

Altitudinal range:

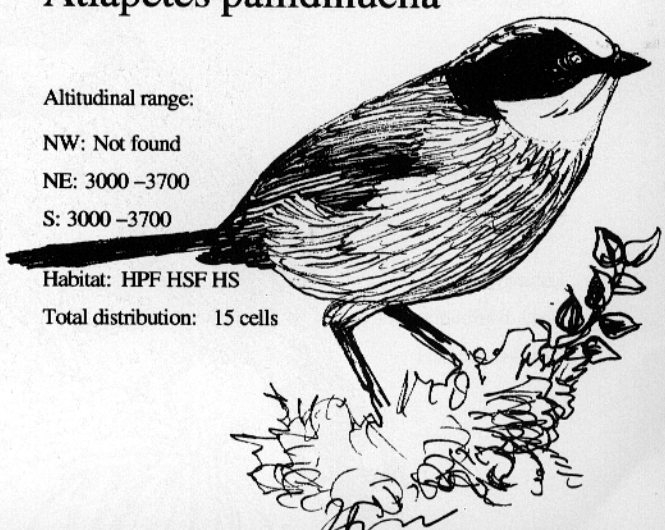
NW: Not found

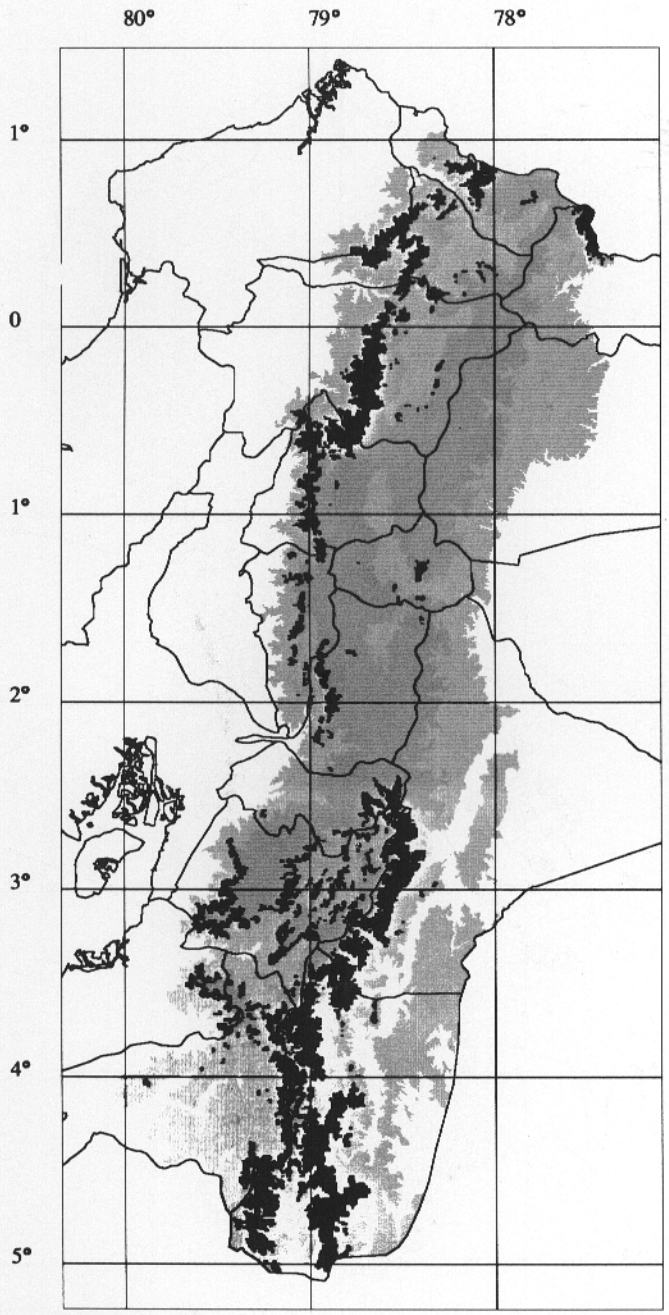
NE: 3000 –3700

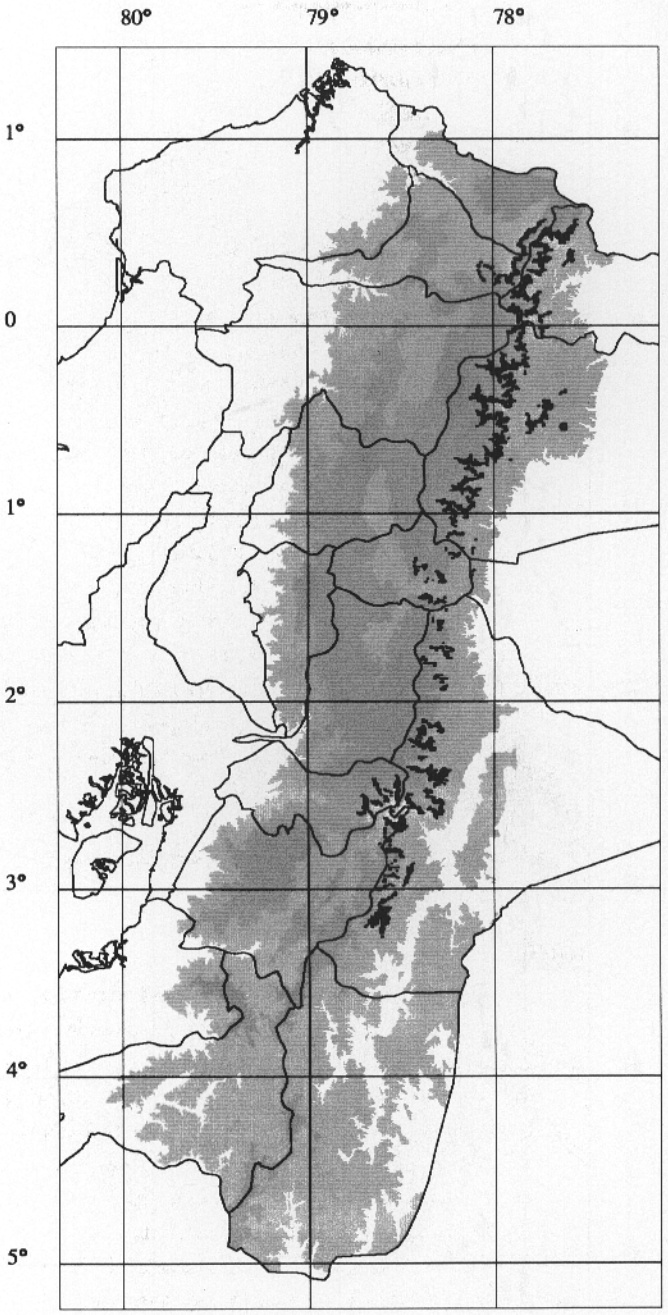
S: 3000 –3700

Habitat: HPF HSF HS

Total distribution: 15 cells







Rufous-naped Brush-finch
Matorralero Nuquirrufo

Atlapetes rufinucha

Altitudinal range:

NW: 2100 –3750

NE: 2000 –3200

S: 1900 –3300

Habitat: HPF HSF HS

Total distribution: 21 cells

Slaty Brush-finch
Matorralero Pizarroso

Atlapetes schistaceus

Altitudinal range:

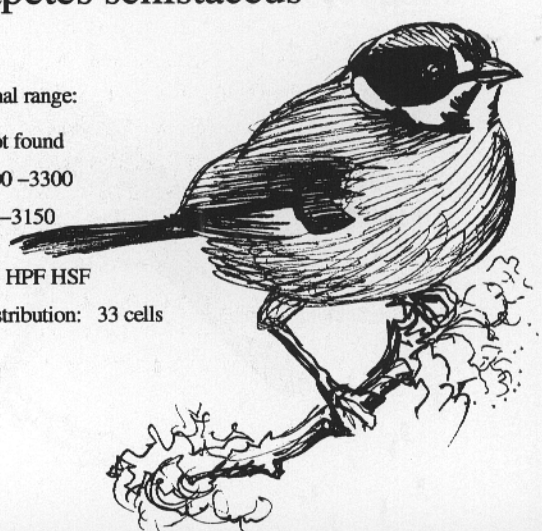
NW: Not found

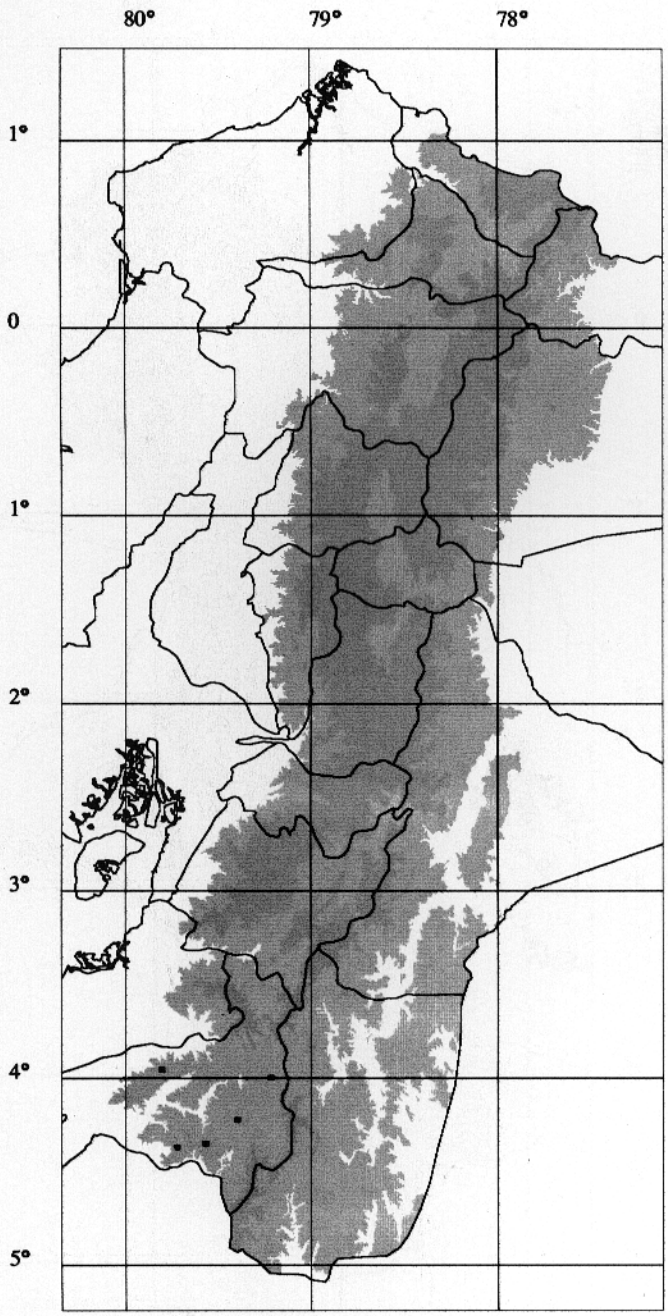
NE: 2800 –3300

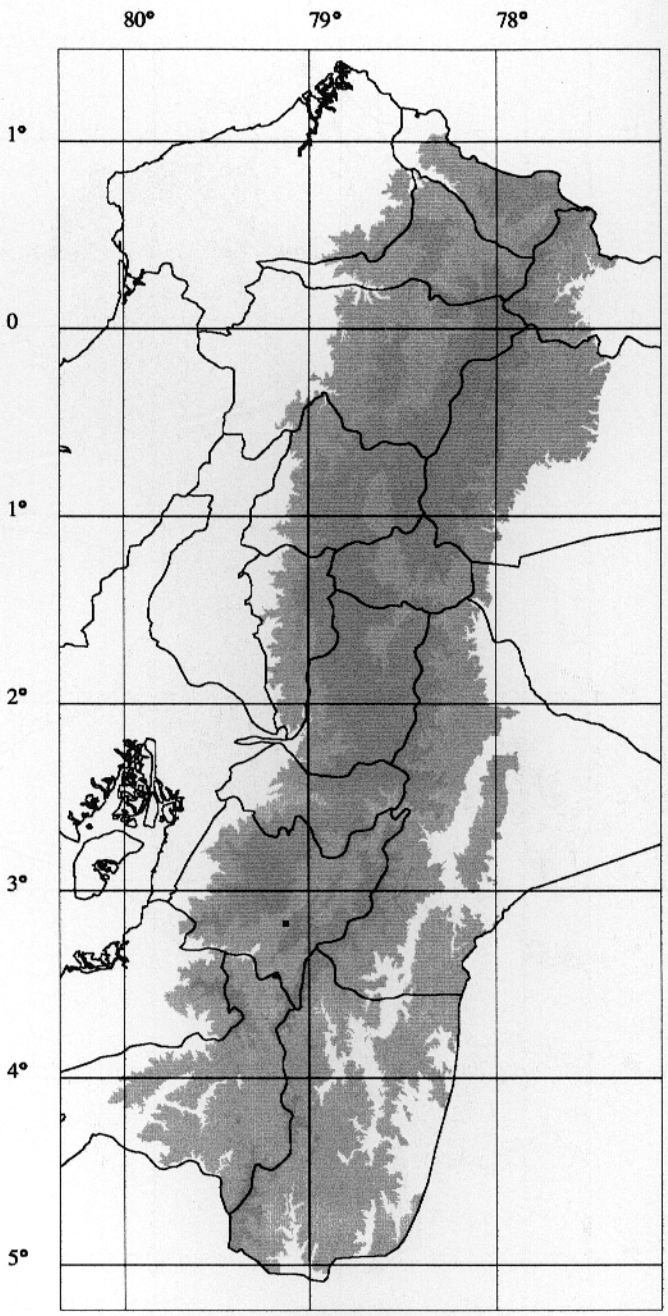
S: 2800 –3150

Habitat: HPF HSF

Total distribution: 33 cells







Bay-crowned Brush-finch
Matorralero Coronibayo

Atlapetes seebohmi

Altitudinal range:

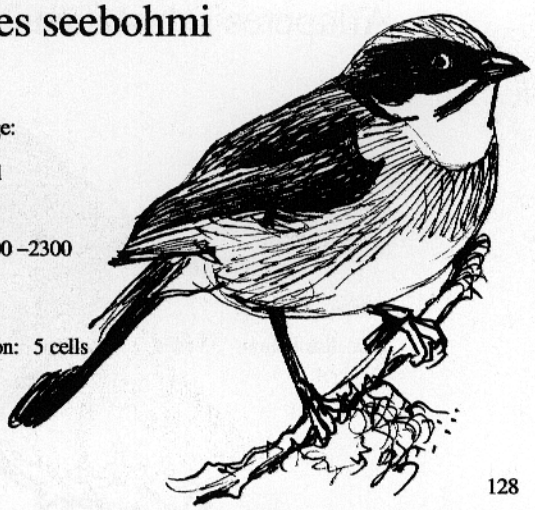
NW: Not found

NE: Not found

S: Limited: 1300 –2300

Habitat: HSF

Total distribution: 5 cells



Pale-headed Brush-finch
Matorralero Cabecipálido

Atlapetes pallidiceps

Altitudinal range:

NW: Not found

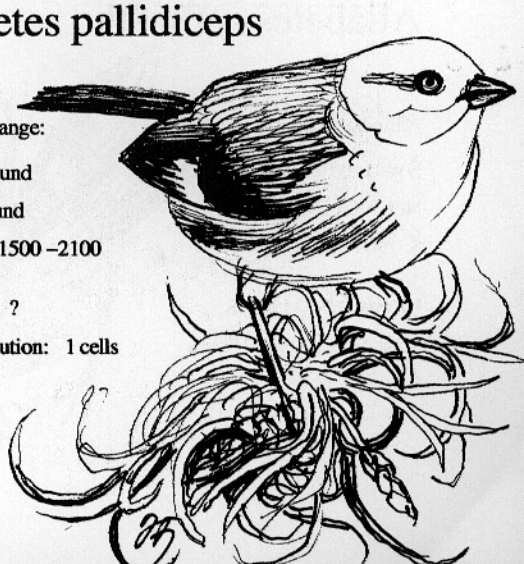
NE: Not found

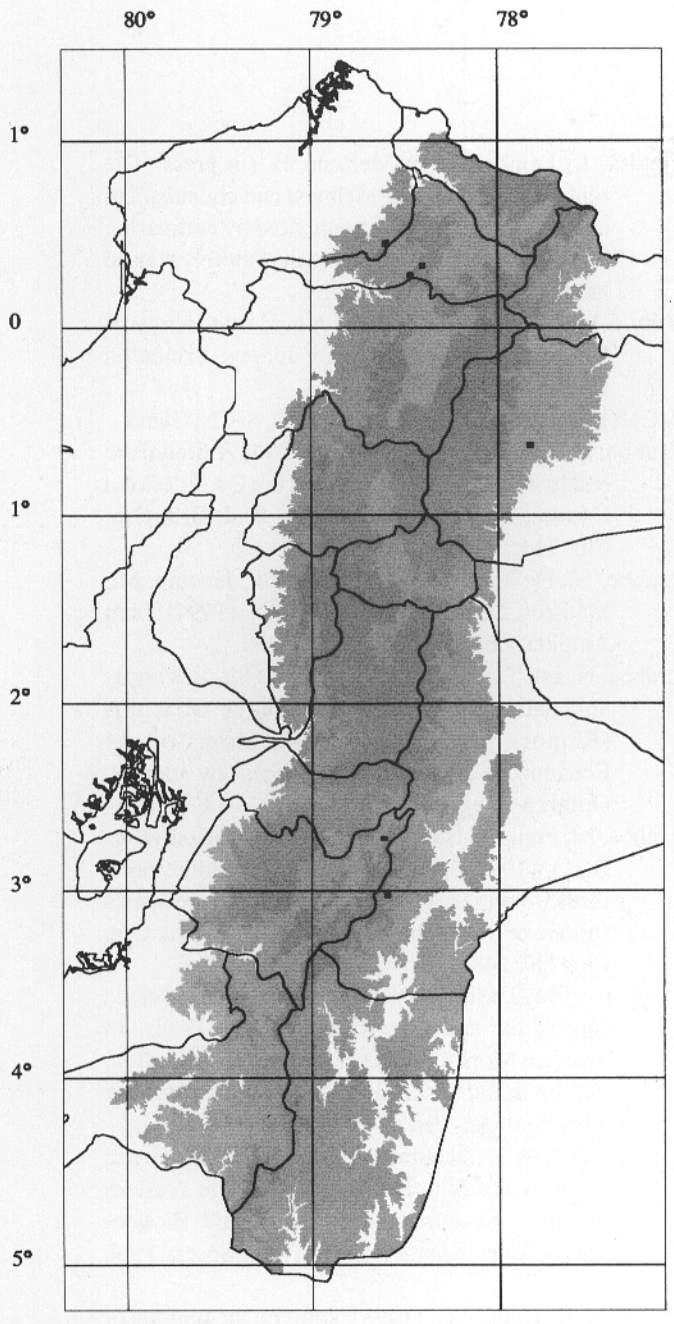
S: Limited: 1500 –2100

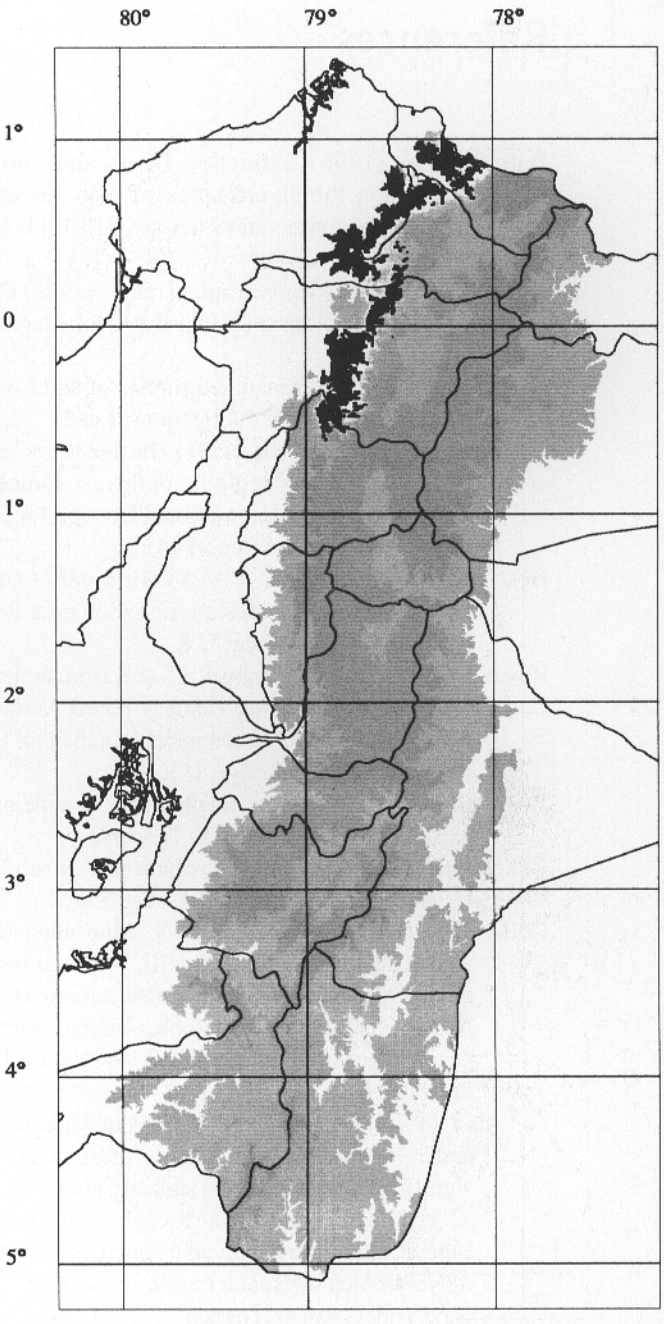
Habitat: ?

Total distribution: 1 cells

Critical







White-rimmed Brush-finch
Matorralero de Anteojos

Atlapetes leucopis

Altitudinal range:

NW: Limited: 2900 –3100

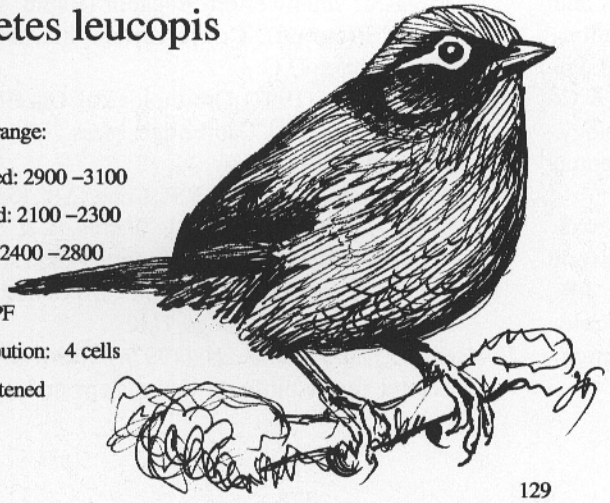
NE: Limited: 2100 –2300

S: Limited: 2400 –2800

Habitat: HPF

Total distribution: 4 cells

Near –threatened



Tanager-finch
Pinzón Tangara

Oreothraupis arremonops

Altitudinal range:

NW: 1300 –2300

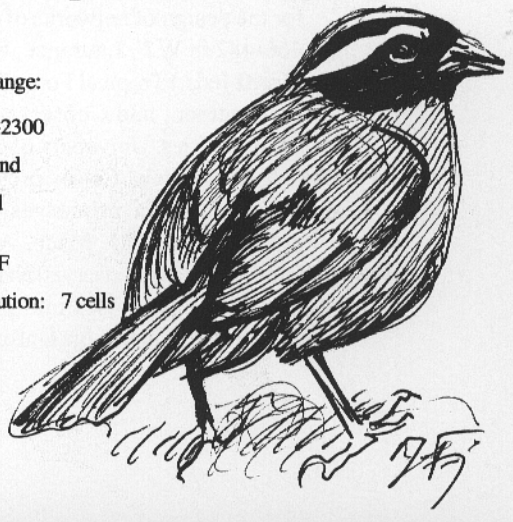
NE: Not found

S: Not found

Habitat: HPF

Total distribution: 7 cells

Vulnerable



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Appendix I

Potential species distribution range per habitat type and in total. (HPF = Humid Primary Rain Forest; HSF = Humid Secondary Rain Forest; HS = Humid Scrub; DA = Disturbed Areas; DS = Dry Scrub). All figures are in square kilometers.

Species	HPF	HSF	HS	DA	DS	Total
Accipiter collaris	12292					12292
Accipiter ventralis	15800	4883		23133		43816
Acropternis orthonyx	7690	3122				10812
Aglaeactis cupripennis			3156	5126		8282
Aglaiocercus kingi	13703	2438				16141
Amazona mercenaria	28594					28594
Ampelion rubrocristatus		2698	4792			7490
Ampelion rufaxilla	1177					1177
Anairetes nigrocristatus			?	?	?	?
Anairetes parulus			3712	14264		17976
Andigena hypoglauca	4378	1967				6345
Andigena laminirostris	2675	888				3563
Andigena nigrirostris	12266					12266
Anisognathus igniventris	4882	2539	4658			12079
Anisognathus lacrymosus	6091	4491				10582
Atlapetes leucopis	?					?
Atlapetes pallidiceps						?
Atlapetes pallidinucha	1650	816	2337			4803
Atlapetes rufinucha	4491	3733	2630			10854
Atlapetes schistaceus	1748	366				2114
Atlapetes seebohmi		?				?
Aulacorhynchus prasinus	13431	2260				15691
Basileuterus coronatus	18493	4698	2384			25575
Basileuterus luteoviridis	5739	2095	1106			8940
Basileuterus nigrocristatus	9811	4403	5413	21983		41610
Boissonneaua flavescens	3249					3249
Boissonneaua matthewsii	7124	2070	999			10193
Bolborhynchus lineola	9835	3572				13407
Buteo albigula	7365	2878				10243
Buteo leucorrhous	10536	3525				14061
Buthraupis eximia	948	1276	2827			5051
Buthraupis montana	7206	3157				10363
Buthraupis wetmorei	591	437	1526			2554
Cacicus leucorhamphus	6433	2116	1513			10062
Campephilus pollens	16697					16697
Campylopterus falcatus	?					?
Campylorhamphus pucherani	4698	2055				6753
Catamblyrhynchus diadema	10539	3850	2946			17335
Catamenia homochroa	2348	1371	2016			5735
Catharus fuscater	21853	5092				26945
Chalcostigma herrani			2331			2331
Chalcostigma ruficeps	925	505				1430
Chalcostigma stanleyi			507			507
Chamaeza mollissima	9166	1590				10756
Chlorophonia pyrrhophrys	9074	1924				10998
Chloropipo flavicapilla	2392					2392
Chloropipo unicolor	4362					4362
Chlorornis riefferii	9646	3005				12651

Species	HPF	HSF	HS	DA	DS	Total
Chlorospingus parvirostris	17233					17233
Ciccaba albitarsus	10624	3784				14408
Cinnycerthia peruana	14981	2479				17460
Cinnycerthia unirufa	4511	2174	3180			9865
Cnemoscopus rubrirostris	4038	1689				5727
Coeligena coeligena	13159	1676				14835
Coeligena iris	200	1140	1509			2849
Coeligena lutetiae	3379	1832				5211
Coeligena torquata	8310	2677				10987
Colibri delphinae	12530	1196				13726
Colibri thalassinus		4019	1045			5064
Columba fasciata		16489		20816		37305
Conirostrum albifrons	5847	2009				7856
Conirostrum cinereum		2079	4593	17379	62	24113
Conirostrum sitticolor	5530	3043	4847			13420
Creurgops verticalis	14482					14482
Cyanolyca armillata	746	27				773
Cyanolyca pulchra	2324					2324
Cyanolyca turcosa	11347	4060	2670	3093		21170
Cypseloides cherriei	?					?
Dendrocincla tyrannina	10680	2678				13358
Diglossa albilatera	13440	4136	2487			20063
Diglossa caerulescens	12333	2293				14626
Diglossa cyanea	9564	3014	4364			16942
Diglossa humeralis		3721	5164	18502	262	27649
Diglossa lafresnayi	3511	2198	2670			8379
Doliornis remseni			?			?
Drymophila caudata	17085	2755	598			20438
Dubusia taeniata	5132	3138	3727			11997
Dysithamnus occidentalis	3424					3424
Elaenia albiceps			2989	18398		21387
Elaenia obscura		?				?
Ensifera ensifera	4777	2593	1994	11684		21048
Eriocnemis alinae	?					?
Eriocnemis derbyi	?	?	?			?
Eriocnemis luciani	752	713	981	9531		11977
Eriocnemis mosquera	1490	249	1332			3071
Eriocnemis nigrivestis	241					241
Eriocnemis vestitus	2373	1092	701			4166
Gallinago imperialis	3146					3146
Geotrygon frenata	23287	5601				28888
Glaucidium jardinii	4960	2490	4493			11943
Glaucidium parkeri	8353					8353
Grallaria alleni	3493					3493
Grallaria flavotincta	2262					2262
Grallaria gigantea	3725					3725
Grallaria hypoleuca	13149					13149
Grallaria nuchalis	8984	3152				12136
Grallaria quitensis	851	510	2452	15485		19298
Grallaria ruficapilla		5420	2061	16784		24265
Grallaria rufula	7712	3682	5035			16429
Grallaria squamigera	2033	2320	1089			5442
Grallaricula lineifrons	1630	414				2044
Grallaricula nana	6401	2074				8475

Species	HPF	HSF	HS	DA	DS	Total
Grallaricula peruviana	3148					3148
Hapalopsittaca pyrrhops	135	1395	1309			2839
Hapaloptila castanea	7331					7331
Haplophaedia aureliae	13582					13582
Haplophaedia lugens	1150					1150
Haplospiza rustica	8725	3524				12249
Heliangelus amethysticollis	4266					4266
Heliangelus exortis	3809	240	493			4542
Heliangelus micraster	966	1461	389			2816
Heliangelus viola	175	661	1554			2390
Hellmayrea gularis	3495	2221	4133			9849
Hemispingus atropileus	6419	2856				9275
Hemispingus frontalis	7686	1079				8765
Hemispingus melanotis	6788	1109				7897
Hemispingus superciliaris	1450	1196	1737			4383
Hemispingus verticalis	1491	1101	1628			4220
Hemitriccus cinnamomeipectus	952					952
Hemitriccus granadensis	5244					5244
Hemitriccus rufigularis	3383					3383
Henicorhina leucoptera	2545					2545
Iridosornis analis	14835					14835
Iridosornis porphyrocephala	3220					3220
iridosornis rufivertex	5764		2734			8498
Lafresnaya lafresnayi	3447	1523	1205			6175
Lepidocolaptes lacrymiger	18002	4463	2031			24496
Leptasthenura andicola			1760			1760
Leptopogon rufipectus	11091	1770				12861
Leptosittaca branickii	996	1558	1519			4073
Lipaugus fuscocinereus	6671	1944				8615
Lurocalis rufiventris	19202	4837				24039
Malacoptila fulvogularis	14348					14348
Margarornis squamiger	8474	3641	4088			16203
Margarornis stellatus	?					?
Mecocerculus leucophrys	894	961	2938			4793
Mecocerculus minor	8994	1830				10824
Mecocerculus poecilocercus	14981	3091	890			18962
Mecocerculus stictopterus	4598	2079	2550			9227
Metallura atrigularis		49	566			615
Metallura baroni		13	240			253
Metallura odomae		310	5			315
Metallura tyrianthina	6773	3037	3186			12996
Metallura williami		120	1162			1282
Myioborus melanocephalus	7925	3639	4987			16551
Myiophobus flavicans	16707	3395				20102
Myiophobus lintoni	1503	1470				2973
Myiophobus pulcher	5581					5581
Myiophobus roraimae	1947					1947
Myiotheretes fumigatus	10518	3624	2616			16758
Myornis senilis	4569	2645				7214
Nothocercus bonapartei	10393					10393
Nothocercus julius	5493	2593	2466			10552
Notiochelidon flavipes	1007	203				1210
Nyctibius maculosos	7377					7377
Ochthoeca cinnamomeiventris	14208	4085				18293

Species	HPF	HSF	HS	DA	DS	Total
Ochthoeca diadema	8492	3023				11515
Ochthoeca frontalis	1623	926	3137			5686
Ochthoeca fumicolor		1458	4097			5555
Ochthoeca jelskii		121	49			170
Ochthoeca rufipectoralis		2246	2605			4851
Ognorhynchus icterotis	3275	1020				4295
Opisthoprora euryptera	4234	1551				5785
Oreomanes fraseri			?			?
Oreothraupis arremonops	2937					2937
Oroaetus isidori	23288	4818				28106
Otus albogularis	8670	3257	2681			14608
Otus colombianus	1864					1864
Otus ingens	11241					11241
Otus petersoni	6997					6997
Pachyramphus versicolor	17450	3909				21359
Penalope barbata	334	2303				2637
Penelope montagnii	4033	951	1675			6659
Phyllomyias cinereiceps	18416	3554				21970
Phyllomyias nigrocapillus	2406	1884	2121			6411
Phyllomyias plumbeiceps	5637	932				6569
Phyllomyias uropygialis		4177	2322			6499
Phylloscartes ophthalmicus	15580	1623				17203
Phylloscartes poecilotis	8993					8993
Phylloscartes superciliaris	3441					3441
Piculus rivolii	10234	4174	3429	20193		38030
Pionus seniloides	10131	3642				13773
Pionus sordidus	18924	3314				22238
Pipreola arcuata	1709	1365	1340			4414
Pipreola lubomirskii	8180					8180
Piranga rubriceps	5945					5945
Poecilotriccus ruficeps	15984	3233				19217
Premnornis guttuligera	13299					13299
Pseudocolaptes boissonneautii	12657	4450	3352			20459
Pseudotriccus ruficeps	7537	2881				10418
Pterophanes cyanoptera	695	474	733			1902
Pyrrhomyias cinnamomea	24604	5667	2579			32850
Ramphomicron microrhynchum		932	2088			3020
Saltator cinctus	7936					7936
Saltator nigriceps		196	96	2260		2552
Schizoeaca fuliginosa		163	1852			2015
Schizoeaca griseomurina		610	915			1525
Scytalopus canus			2924			2924
Scytalopus micropterus	11397	1242				12639
Scytalopus parkeri	1322	1865				3187
Scytalopus spillmanni	7083	780				7863
Scytalopus unicolor	9331	2469	1453	12530		25783
Scytalopus vicinior	3118					3118
Semnornis ramphastinus	3829					3829
Sericossypha albocristata	11371					11371
Siptornis striaticollis	7082					7082
Synallaxis unirufa	8333	2452	1036			11821
Syndactyla rufosuperciliata	1754					1754
Tangara argyrophenges	783					783

Species	HPF	HSF	HS	DA	DS	Total
Tangara cyanotis	9386					9386
Tangara labradorides	9170					9170
Tangara vassorii	9757	3413	2114			15284
Tangara viridicollis		478	129		676	1283
Thlypopsis ornata		1886	960			2846
Thraupis cyanocephala		3536	1637			5173
Thripadectes flammulatus	7647	2930	1336			11913
Thripadectes holostictus	8935	2297				11232
Thryothorus euophrys	9970	3621				13591
Trogon personatus	19914	8235				28149
Turdus fulviventris	12323	1954				14277
Turdus fuscater		4093	5330	19519		28942
Turdus nigriceps	?	?				?
Turdus serranus	13901	3765	1804			19470
Uromyias agilis	2737	1049	2181			5967
Uropsalis segmentata	6158	2632				8790
Urosticte ruficrissa	16467					16467
Urothraupis stolzmanni			1984			1984
Veniliornis dignus	14981					14981
Veniliornis nigriceps	4988	2405	3537			10930
Xenodacnis parina			?			?

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