

Montserrat



Montserrat General Information

- Location: mountains in the canton of Coronado, San Jose, Costa Rica.
- More than 50% of the area is Braulio Carrillo National Park.
- Population: 70 people (12 families)
- Economics: mainly agricultural
- Threats: People want to develop tourism in the area to take economic advantage of the cloud forest. The local people are afraid of losing their land and of the destruction of the cloud forest if they don't plan ahead and learn more about the area and the ecosystem.

Challenges

- Monserrat is located at a very high elevation and is very remote. The roads are in poor condition making access to Monserrat and within it difficult. This effects many aspects of the residents of Monserrat
 1. The children have trouble getting to the two schools of the area when it rains. The distances between their homes and the schools can also be very challenging causing some children to not attend school. In La Escuela de Monserrat there are currently only 5 students.
 2. There is also a problem with trash as the trash is collected by the city of San Jose and because Monserrat is so remote, trash can often build up. This refuse ends up in the streets and eventually is spread throughout the area by wind and rain. This is also troublesome because this trash can end up in the water supply.

Challenges

- There are many areas of Monserrat affected by deforestation for farming. The response to this deforestation has been to replant. The problem is that monocultures are being planted, in particular the Alder tree has become popular for use as biomass. There has not been enough attention paid to planting local species of trees to regrow the cloud forest.
- Another problem in Monserrat is the hunting and poaching of local species of animals. The government of Costa Rica provides a period in the year where hunting of certain birds is illegal. Many people disregard these laws and hunt throughout the year and although exporting is illegal, many animals are smuggled out of the country or sold within the country.

Potential of Monserrat

- Monserrat is rich in biodiversity. The high mountain environment holds some animals and plants that can grow nowhere else. The cloud forest is very unique to both biologist and tourist.
- There are many farms in Monserrat that could improve economically and environmentally.
- Within the two schools there is already a lot of ambition on the part of the children to learn more about the cloud forest and how to protect and use it.



What we did in Monserrat

We visited the area and worked in the trails that the local people are making for visitors.

Our teacher taught them and us about natural history of the cloud forest.

We got to practice some Spanish.



Working...



We collected some plants in order to identify them.

We visited the school to interact with the kids and give them some material to learn about the cloud forest.



Proposal



- The people of Monserrat have to become the protectors of the Cloud Forest. If they learn more about their environment and all of the wealth of their and then it will be important to them to conserve it. This can be achieved in a couple of ways:
 - The children have to continue their education so that they can help Monserrat but also so that they can have even bigger goals. If the roads are improved and more emphasis is placed on education this can be achieved.
 - Local people can also be trained to recognize some of the wildlife and plants of the cloud forest to promote tourism.
 - Agricultural adaptations such as rotating crops and reforestation of local species of trees may improve the condition of the land and help conserve it.
 - The government has to take a more active role in protecting the wildlife by strictly enforcing anti hunting and poaching laws.
 - Recycling and other methods of dealing with trash will help protect the environment from pollution

The future is in the hands of the people of Monserrat. In the future Monserrat can be self sufficient through tourism and farming. The local people will work with tourists and scientists who appreciate and love the cloud forest to work toward a better future for Monserrat.



Classifying Plants

- After collecting and pressing the samples of leaves and branches, we went to the books and using the keys, we tried to clasified the plants.
- Then we went to Museum of Natural History's botany department and met with experts to figure out what species we had.
- Thanks to Joaquin Sanchez and Alejandro Rojas that help us to clasified some plants

Previous list of plants of Monserrat

Nombre	Nombre	Identificador	Detalles
Aymenophylum fucoides		A.Rojas	
Aisophila erinacea		A.Rojas	
Cuniidiso cuinsoibodora		A. Rojas	
Theiypxeris rudis		A. Rojas	
Melastomataeae Leandra subseriata	V 12	J. Sanchez	
Conostegia sp		Juan Fco Morales	
Melastomataeae Topobaca sp		J. Sanchez	
Ericaceae Cavendishia bracteata	V 13	J. Sanchez	
Anthopteropsis sp			
Selaginella sp		A. Rojas	

Actinidiaceae Saurauia sp	Moco?	J. Sanchez	
Juncos sp		J. sanchez	
Caparidaceae Cleome sp		J. Sanchez	Frutos en vaina morada
Chusquia		M. Bottazzi	
Piper lancifolium		J. sanchez	
Rubiaceae Gonzalagunia rosea		J. Sanchez	Parece onagraeae
Melastomataceae Monochaendum floribundum		M. bottazzi	
Lauraceae Persea sp		J. sanchez	
Rubiaceae Hoffmania sp	V14	J. sanchez	
Myrsinaceae Ardisia sp	V15	J. Sanchez	
Urticaceae Myriocarpa sp		J. sanchez	
Fern Diplazium uraisisolum		A. rojas	

Lycopodium clavatum		A. Rojas	
Lycopodium cesnua		A. Rojas	
Juncaceae Juncus sp		J. sanchez	

Previous list of Birds of Coronado and Monserrat

#	NOMBRE COMUN	NOMBRE EN INGLES	NUMERO DE LÁMINA Y AVE
1	Pava negra	Black guan	12 – 5
2	Tinamú serrano	Highland tinamou	12 – 7
3	Elanio coliblanco	Black sholder kite	15 – 2
4	Gavilan bicolor	Bicolored hawk	16 – 8
5	Gavilán colirrojo	Red tailed hawk	17 – 8
6	Tortolita serranera	Maroon chested ground dove	18 – 10
7	Paloma piquirroja	Red billed pigeon	18 – 2
8	Perico frentirrojo	Crimsom fronted parakeet	19 10
9	Lechuza café	Mottled owl	20 – 6
10	Lechucita serranera	Bare shanked screech owl	20 – 10
11	Cuco ardilla	Squirrel owl	21 7
12	Golondrina azul y blanco	Blue and white owl	22 – 20
13	Ala de sable violáceo	Violet sabrewind	23 – 9
14	Colibrí orijevioláceo verde	Green violet eared	23 – 7
15	Colibrí montañas gorgimorado	Purple throated mountain gem	24 – 7
16	Colibrí garganta de fuego	Fiery throated hummingbird	24 – 12
17	Chispita gorginaranja	Scintillant hummingbird	25 – 7
18	Chispita volcanera	Volcano hummingbird	23 – 3
19	Quetzal	Resplended Quetzal	26 – 1
20	Trogón collarejo	Collared trogon	26 – 5
21	Momoto corona azul	Blue crowned mot mot	27 – 8
22	Tucancillo esmeralda	Emerald toucanet	27 – 17

23	Barbudo cocora	Prong billed barbet	28 – 1
24	Carpintero serranero	Hairy woodpecker	28 – 19
25	Subepalo rojizo	Ruddy treerunner	29 – 4
26	Subepalo moteado	Spotted barbtail	29 – 5
27	Trepador cabecipunteado	Spotted crowned woodcreeper	29 – 9
28	Trepamusgo cachetón	Buffy tuftedcheek	30 – 1
29	Trepamusgo cuellirojiso	Streaked breasted treehunter	30 – 7
30	Colaespina carirroja	Red faced spintail	30 – 12
31	Cabezón ondeado	Barred becard	33 – 14
32	Tirano tropical	Tropical kingbird	35 – 1
33	Mosquero ventridorado	Golden bellied flycatcher	35 – 9
34	Mosquero listado	Streaked flycatcher	35 – 11
35	Mosquero picudo	Boat billed flycatcher	35 – 12
36	Bienteveo grande	Great kiskadee	35 – 13
37	Bienteveo pequeño	Social flycatcher	35 – 14
38	Pibí sombrío	Dark pewee	36 – 2
39	Pibí boreal	Olive sided flycatcher	36 – 4
40	Mosquero de agua	Black phoebe	36 – 5
41	Mosquerito moñudo	Tufted flycatcher	36 – 11
42	Pibí tropical	Tropical pewee	36 – 9
43	Mosquerito cabecinegro	Black capped flycatcher	36 – 16
44	Mosquerito amarillento	Yellowish flycatcher	36 – 19
45	Alaenia montañera	Mountain elaenia	37 – 24
46	Soterrey cucarachero	House wren	38 – 18
47	Soterrey ocroso	Ocraceous wren	38 – 19

48	Soterrey de selva pechigris	Gray breasted woodwren	38 – 14
49	Zorsal sombrío	Slaty backed nightingale – thrush	38 – 23
50	Zorsal piquianaranjado	Orange billed nightingale thrush	38 – 26
51	Zorsal gorrirojiso	Ruddy capped nightingale thrush	38 – 27
52	Mirlo montañoero	Mountain robin	39 – 6
53	Yiguirro	Clay colloed robin	39 – 8
54	Capilinerio negro y amarillo	Blak and yellow silky flycatcher	39 – 10
55	Capulinerio colilargo	Long tailed silky flycatcher	39 – 15
56	Jilguero	Black faced solitataire	39 – 13
57	Urraca de toca celeste	Azure hooded jay	39 – 17
58	Vireón cejirufo	Rufous browed pepershike	40 – 2
60	Reinita cabecicastaña	Rufous capped warbler	40 – 16
61	Reinita carinegra	Black cheeked warbler	40 – 17
62	Vireo aliamarillo	Yellow winged vireo	40 – 10
63	Reinita garganta de fuego	Flame throated warbler	41 – 7
64	Reinita gorginaranja	Blackburnian warbler	41 – 8
65	Reinita gorgiamarilla	Yellow throated warbler	41 – 12
66	Reinita trepadora	Black and white warbler	41 – 13
67	Reinita alidorada	Golden winged warbler	41 – 5
68	Reinita gorrinegra	Wilson´s warbler	42 – 4
69	Candelita collareja	Collared redstart	42 – 6
70	Candelita pechinegra	Slate – throated redstart	42 – 7
71	Reinita amarilla	Yellow warbler	42 – 2
72	Reinita pechirrallada	Canada warbler	42 – 8

73	Reinita cariamarilla	Black throated green warbler	43 – 9
74	Zanate	Great tailed grackle	44 – 16
75	Clorofonia cejidorada	Golden browed chlorophonia	45 – 10
76	Eufonía capucha celeste	Blue hooded euphonia	45 – 9
77	Tangara de monte ojeruda	Common bush tanager	45 – 13
78	Tangara dorada	Silver throated tanager	46 – 6
79	Tangara moteada	Speckled tanager	46 – 8
80	Tangara ventricastaña	Spangled cheeked tanager	46 – 12
81	Viudita	Blue gray tanager	46 – 15
82	Picogrueso carinegro	Black faced grosbeak	48 – 5
83	Picogrueso pechirrosado	Rose breasted grosbeak	48 – 8
84	Tangara veranera	Summer tanager	47 – 5
85	Tangara dorirrallada	Flame colored tanager	47 – 9
86	Saltón gargantiamarilla	Yellow throated brush finch	48 – 15
87	Pinson orejiblanco	White eared ground sparrow	48 – 19
88	Saltón de muslos amarillos	Yellow thighed finch	48 – 22
89	Semillerito caramarilla	Yellow faced grassquit	49 – 6
90	Pinchaflor plumiso	Slaty flowerpiercer	49 – 9
91	Come maíz	Rufous collared sparrow	50 – 13
94	Zopilote Negro	Black vulture	13 – 4
95	Zopilote de cabeza roja	Turkey vulture	13 – 3