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Behavior of the Mountain Whistler in Dominica

Introduction

Legends hold that in the higher forests of Dominica there resides a spirit that calls out in a long and plaintive cry, sounding like a swing set in a park or an old windmill. However, the sound belongs to the Rufous-throated Solitaire, or Mountain Whistler (*Myadestes genibarbis*). This bird is found exclusively in high, dense, wet rain forests in mountains across the Lesser Antilles, and is thought to have originated in Jamaica. Its breeding season extends from March to July, and it builds its nests in tree ferns and along stream banks (Evans 103-104). Enchanted by its sound, we decided to study its behaviors, focusing on its singing. Since we are the first Texas A&M Dominican student group to research the Solitaire, we decided to take a rather general approach toward it, hoping to spur future students into researching the specific questions that we would find.

Hypothesis: Is there a discernable pattern in the Solitaire's song?

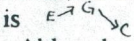
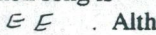
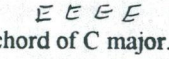
Materials and Methods

As we set out to generally describe the behaviors of the Solitaire, especially its singing patterns, much of our attention was focused on sound. Using a rather crude guitar pitch pipe that lacked a few notes, we attempted to discern the Solitaires's song. We also used an altimeter to get an elevation for our sightings, and a chronometer to time the cycles of silence and singing that the Solitaire uses.

As Middleham falls was its closest habitat to us, we would hike up there and listen to the bird at various points along the trail. We hiked there a total of three times.

Observations

The Solitaire lives exclusively in high, wet rain forests such as those at Middleham falls, Emerald Pool, and the beginning of the Boiling Lake trail. We found that we only heard the Solitaire in these rain forests at about 1800 - 2100 feet. At Boiling Lake, we did not hear them above 2500 feet, except for the songs that wafted up from the forest below us. Although the Solitaire is consistently found at these elevations, they are not found in any drier rain forest at a comparable density and elevation.

Using our pitch pipe and our musical backgrounds, we were able to determine that the Solitaire's usual two note song is  Another common song is  There are several variations on these such as  and  . Although we could not discern all the songs, they do all seem to be in the same chord, the chord of C major.

Another interesting observation is that the Solitaire's singing is cyclic. It seems that the birds will sing as a group for anywhere from ten to fifteen minutes. And then there will be a total lack of singing for about five minutes.

Conclusions and Results

We concluded that the Solitaire uses the key of C for all its singing as discussed above. We also found that the birds do not dwell anywhere outside their elevation and rainfall range. We do not know if their territorialism is attached to either one of these factors or both of them. Unfortunately, we were unable to discern a pattern in the songs that the birds sing. In fact, each time we listened a new pattern would emerge in their singing. We can, however, conclude that they are extremely creative singers.

Further Research

There are many opportunites for further research on the Solitaire's behavior. In fact, our hypothesis can still be researched further, to determine if in fact the singing is just a creative rhapsody session, or some complex pattern of songs. Recording the songs over a long period of time would be beneficial.

In addition, it would be exceptionally interesting to discern the cause of their cyclic singing. It could be any number of causes. Also, it would be interesting to know what their signal is to start and stop singing. The stop and start of the singing seem to be too definite for the behavior to be unsignalled. We hypothesized that the cyclic singing my be either a result or cause of the distribution of the Solitaire within their territories.

And finally, the relationship of the Solitatire's habitat to the elevation and the rainfall could be investigated. It would be useful to understand why the Solitaire is so exclusive in its choice of habitat, especially on a small island with plenty of pristine rain forest.

Acknowledgements

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Works Cited

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Rufous-throated Solitaire
Myadestes genibarbis