

"It is my intention to classify the *Tucans*, 'so called by the Guarani,' amongst the diurnal birds of prey, although nature seems to have united in them a character and figure altogether opposed to a cruel and sanguinary appetite. They are nearly always gregarious, since it is usual to meet them in a family party or congregated in little troops.

"They have very short wings and a misshapen beak, incapable of the operations of bending, sawing or grinding. The legs cannot be advanced alternately, but only by forced jumps. The two hind-claws are quite useless for seizure, attack or defence.

"The Toucans, contrary to all appearances, destroy a great number of birds, and on account of their large and strong beak are respected and feared by all species. They attack and drive them from their nests, and in their very presence eat their eggs and young; these they draw from the holes with the long beak, or throw down nest and all together.

"It is credibly reported that the Toucans do not even respect the eggs or young of the 'Aras' and 'Caracaras'; and if the fledglings are too large or too strong to be lifted from the nest, they dash them to the ground, as if it were their nature not only to devour but to uselessly destroy.

"The solid nest of the White Ant, that resists the action of the weather and other destructive causes, is not proof against the Toucan's attack, for he waits until the clay of which the nest is formed is moistened by the rain, and then breaks it up with his beak so as to obtain the eggs and young ants; in fact during the breeding season the Toucan feeds upon nothing else; the rest of the year is for him a long fast, so strict, that he can only get fruits with sometimes a few insects and buds of trees, nor does he continue to annoy other birds. It is my opinion that the Toucans are unable to catch adult birds; but supposing they were, their stomach would not be capable of digesting the feathers and bones, nor their bill of plucking and disjointing. But in order not to deviate in any respect from the truth, I confess that I am not sure that the small species of Toucans do not break the nests and devour the young ones, because, being more rare than the others in Paraguay, I have not been able to verify the fact, although I do not doubt it; for having the same form and the same manner of living, they must have the same habits.

"In the first two species the bill is out of all proportion. The bird in flying presents the point of it to the wind, so that it does not offer more resistance than that of other birds in which the head and superficies are equal in extent; besides which, the conformation and specific lightness of this long beak cannot impede flight, because the highest points of the bird being the bill itself and the anterior portion of the body, they form no obstacle, the wind first taking effect upon the point of the bill: when in a state of repose, the Toucan carries its bill rather more elevated than a horizontal line that would pass through the eyes, and when closely looked at it appears like a false bill, because its base exceeds the breadth of the head, which presents the appearance of being enclosed in a case.

"In addition to these singularities, the nostrils are placed behind the aforesaid base.

"The tongue is very narrow and of an equal thickness throughout; it is entirely osseous, and resembles somewhat a feather two lines in width furnished with an osseous fringe, which is directed from