Cacicus cela (Yellow-rumped Cacique)

Family: Icteridae (New World Blackbirds)
Order: Passeriformes (Perching Birds)
Class: Aves (Birds)

Fig. 1. Yellow-rumped cacique, *Cacicus cela*.

[http://4.bp.blogspot.com/-UQejaBeMj3E/UGBAqkkmRKI/AAAAAAAADiE/DyOMuZiaMzA/s1600/Yellow-rumped+cacique+Cacicus+cela.jpg, downloaded 5 November 2014]

TRAITS. These are sexually dimorphic birds, i.e. the sexes differ in appearance. Adult males range from 27-30cm in length and weigh approximately 100g, while adult females can reach 23-25cm and 60-80g. They are slim birds, with long tails, blue eyes, and a pale yellow pointed bill. Colour: Adults are mainly black with a yellow mark on their wings and on their rump. Their legs and feet are black. When perched, the yellow marks on their rump and wings can still be seen (Fig. 1). Both sexes are similar in colour; however, females are less colourful and have duller black than the males. Young birds resemble the female, but have dark eyes and a brown colour on the base of their bill.

ECOLOGY. The **y**ellow-rumped cacique is resident across northern South America from Panama and Trinidad (but not Tobago), southwards to Peru, Bolivia and Central Brazil. They are found in temperate and tropical terrestrial environments, but are predominantly found in the tropics. They live predominantly along the borders of forest and near open areas, for example, near lakes and fields, as they are not commonly found deep inside forest. Thus, they are frequently seen perched on tree branches near areas of human activities. Their diet consists of fruit (Fig. 2), nectar and insects (beetles, caterpillars, crickets and spiders).

SOCIAL ORGANIZATION. Courting is carried out by the males flapping their wings and displaying the yellow feathers. If the female is interested in the male, she lifts her tail and shakes her wings. The male and female then take off and perform chases, before they begin mating in the forest. The females are responsible for building their long bag-like nest, about 40-45cm long, of plant fibres i.e. twigs and leaves (Figs 3 and 4) in tall trees, usually with an active wasp nest (Fig. 5). Nest construction takes approximately 10-21 days. They nest in colonies (Fig. 4) of many nests. Males keep look out over the colony and alert the colony if there is a threat. A colony can have from 2-250 nests.

Because the dominance of a male is determined by its size and counter-singing, a bigger male will attract more mates (Trainer, 1987). There is a hierarchy amongst the males of the colony which is dependent on the size of the individuals, with dominants and subordinates. The heaviest and biggest becomes the dominant. Dominant males pursue receptive females while the other males keep guard. However, these other males also wait for any opportunity to arise for them to mate with an unattended female. Fights may take place when a subordinate tries to become dominant. Ironically, since these dominant males are required to stay at their nest to guard their females, they begin to lose weight and eventually lose their status. Females also have a hierarchy, but this one depends on age, with the oldest females being the dominant. Fights evolve when older females steal the nest materials from the younger females.

FORAGING BEHAVIOUR. They feed on fruit, nectar and insects. In order to find food, all the birds, except the incubating females, leave to forage and the flocks are clearly visible at both dawn and dusk. They are also very visible during the flights between the roosts and the feeding areas because of their bright colour. They forage in pairs or small groups which usually includes a single male with a couple of females.

COMMUNICATION. Vocal communication: the songs made by these birds include: “scheeooo” in flight, “skeek”, or “weer” or “wrup” during foraging. Their alarm call includes a lound and frequent “quack”, or a harsh “tchak” or “chaaak”. Females, however, when during fights utters rough “rrrrrr”. Calls are diverse and they may even mimic other bird calls. They gain their song by a process of memorization and crystallization. Songs gained by memorization commence within the first couple of months after birth and this persists up until the first breeding season. Their songs are not entirely crystallized (fixed) until they are about 3 years old. These calls are used to attract mates and defend their habitat. Colonies can have between 5 and 7 unique song dialects. They can quickly adapt to changes in dialect and this allows the colony to recognize predators and intruders. Songs are socially important and males compete with song to establish dominance.

SEXUAL BEHAVIOUR. They are polygamous, meaning that many females are pursued and mated with by one male. These birds build their nest in trees and live together in colonies. The dominance of a male is dependent upon its weight, so that, larger males correlate to a greater number of females. Females fight to gain an ideal and safe nesting spot for their eggs. Similarly, males use their size to their advantage when competing with one another. One such example of this competition between males is counter-singing. The bird who fails to stay in tune with crystallized songs loses. During male fights, there is a recognizable winner or loser but for female fights this is not always the case (Webster, 1992). The breeding season spans from July to February. The limiting factor to the male's polygamous nature is their skill and proficiency to gain and protect the females. The males do not seek any interest in parenting offspring, but they help females in protecting the nest. Females go out and look for food and gather materials, while the males stay back to protect their nests and territory. Females are responsible for building nests, incubating the eggs, and feeding the young. Because of the demands of taking care of the young, the mother bird loses weight during the nurturing stages. Once young are mature enough to take care of themselves, mothers slowly regain their weight.

JUVENILE BEHAVIOUR. Although females lay two eggs (each 5-6g in weight), often only one survives. These eggs are pale blue with dusky spots. The hatching time for an egg is 15 days and the offspring weighs 2-3g. Like the adult birds, young feed on arthropods, given to them by their mother. It takes 25 days for the young bird to learn to fly. It takes approximately 2 years for the young to mature. They have to memorize the songs in order to communicate.

ANTIPREDATOR BEHAVIOUR. Like every other animal, these birds are exposed to the risk of predators while looking for food. Because of their brightly coloured feathers, they are highly visible. Some of their predators include goshawks and forest falcons. When building a nest, the safest location, away from predators (snakes, birds), is selected. Wasp nests that are nearby act as a protection mechanism from mammals, however, yellow-rumped caciques must be sure to leave sufficient space between their nest and the wasps as to avoid attack. Those that live in island habitats are inevitably protected from snakes because they are eaten by caimans before they can reach the birds nest. Nesting in a colony is a strategy used to protect the territory from other bird species; a greater size ensures safety. By doing this, predator birds are attacked by the large colony when seen as a threat to nests.

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Fig. 2. Yellow-rumped cacique feeding on bananas.

[http://trinibirds.yolasite.com/resources/_MG_1995.JPG, downloaded 5 November 2014]

Fig. 3. Yellow-rumped cacique's nest in a tree at UWI.

[original photo, taken 7 November 2014]

Fig. 4. Yellow-rumped cacique nests in a colony.

[http://farm6.staticflickr.com/5457/9838507004_a760360046.jpg, downloaded 5 November 2014]

Fig. 5. Yellow-rumped cacique nests built near wasp nest.

[http://www.scielo.br/img/revistas/bn/v13n2/1676-0603-bn-13-02-308-gf04.jpg, downloaded 5 November 2014]