

Molothrus bonariensis (Shiny Cowbird)

Family: Icteridae (New World Blackbirds)

Order: Passeriformes (Perching Birds)

Class: Aves (Birds)



Fig. 1. Shiny cowbird, *Molothrus bonariensis*.

[http://neotropical.birds.cornell.edu/portal/species/overview?p_p_spp=672716, downloaded 15 September 2016]

TRAITS. Shiny cowbirds, *Molothrus bonariensis*, are generally small, sexually dimorphic brood-parasitic birds (Lowther, 2011). The male shiny cowbird has a blue-black violet appearance and a glossy finish from head to tail (Fig. 1), whereas the female cowbird has a dull grey-brown appearance (Fig. 2). The total length of cowbirds is 18cm in both males and females (Odeide, 2015). Cowbirds have slender black legs and 4-toed feet with long, curving claws; and medium length, conical blackish-grey bills adapted for omnivorous feeding. The wing span in males is 96.5mm and 85.8mm in females. Their squared off tails and wings are glossy greenish blue (Friedmann, 1929).

ECOLOGY. The shiny cowbird occurs throughout South America and parts of the Caribbean, such as Trinidad and Tobago (Fig. 3). They are mainly found in open or semi-open habitats ranging from agricultural lands to suburban areas. *Molothrus bonariensis* practices interspecific brood parasitism. That is to say, they do not build their own nests, but lay their eggs in nests of other bird species (known as hosts). The host will raise the cowbird hatchlings as its own until time for them to leave the nest.

SOCIAL ORGANIZATION. *Molothrus bonariensis* is a highly social bird, which moves around in coordinated flying groups of up to 100-200. They are known to join other blackbirds in mobbing or attacking humans. Their natural habitat in South America covers the expanses of the Argentinian pampas, southern Brazil and Uruguay (Invasive Species Specialist Group, 2013). In the Caribbean it has been found in savannah areas as well as bordering suburban areas. Shiny cowbirds avoid laying their eggs in inappropriate nests, and depend on precision and timing. They locate host nests and use synchronisation, laying eggs at the same time as the host. They do this because they rely on the host bird to incubate their eggs and rear their chicks.

FORAGING BEHAVIOUR. Shiny cowbirds hardly feed during the early morning, they mostly forage in small flocks in the afternoon. Cowbirds consume readily-available items found by scratching the ground (Fig. 4). Their diet may be arthropod-based in the breeding season and throughout the year they feed on grain cattle feed and small seeds. They do not store food (Lowther, 2011).

COMMUNICATION. Research indicates that there are three main displays by cowbirds used for various communicative actions. These are Bow, Head Down display and Bill Tilting, not necessarily in that order. The Bow is mainly used for sexual contact or displays of aggression. The male ruffles its head and body feathers, purrs gutturally, drops its tail and does arching of its wings and bill-dragging or vigorous bill-wiping on the ground to attract the female (Selander, 1964). Head Down behaviour is a preening invitation (Selander, 1964; Lowther, 2011). The cowbird raises the feathers around its neck and head and lowers its head, remaining still so that the other bird may commence preening. Bill Tilting may occur with male to male or female to female (Wiley and Wiley, 1980), where the bill is pointing upwards towards the other bird.

SEXUAL BEHAVIOUR. Cowbirds court using the Bow with a song. They are promiscuous (Friedmann, 1929; Sick, 1985). They do not pair or seem to stay together for long (Mason, 1987). After courting they may mate once (Wiley and Wiley, 1980).

ANTIPREDATOR BEHAVIOUR. Cowbirds, like most other small birds, fall prey to many larger carnivorous predators such as falcons, snakes and mongooses. They display the tactic of strength in numbers by staying mainly in flocks and even attacking their many threats to scare them off (Mckenzie, 1990).

JUVENILE BEHAVIOUR. The incubation period for the eggs of *Molothrus bonariensis* is usually from 11-13 days. Upon hatching, the young birds lie flat with heads down and peep-cry for food and attention. After about five days they will sit upright and begin preening their bodies (Friedmann, 1929). At birth the birds are bare and cannot physically move around too much, and are incapable of leaving the nest. As the nestling grows, it develops yellowish skin, and small patches of pale grey feathers. Their eyes starts opening on day four and then they are completely open and operational by the next day. Wing feather sheaths start appearing by the sixth day. Normally by the tenth day there is enough feather growth and physical development to allow the bird to successfully depart from its host's nest (Friedmann, 1929).

REFERENCES

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Fig. 2. Male (left) and female (right) shiny cowbirds.

[https://en.wikipedia.org/wiki/Shiny_cowbird, downloaded 10 November 2016]

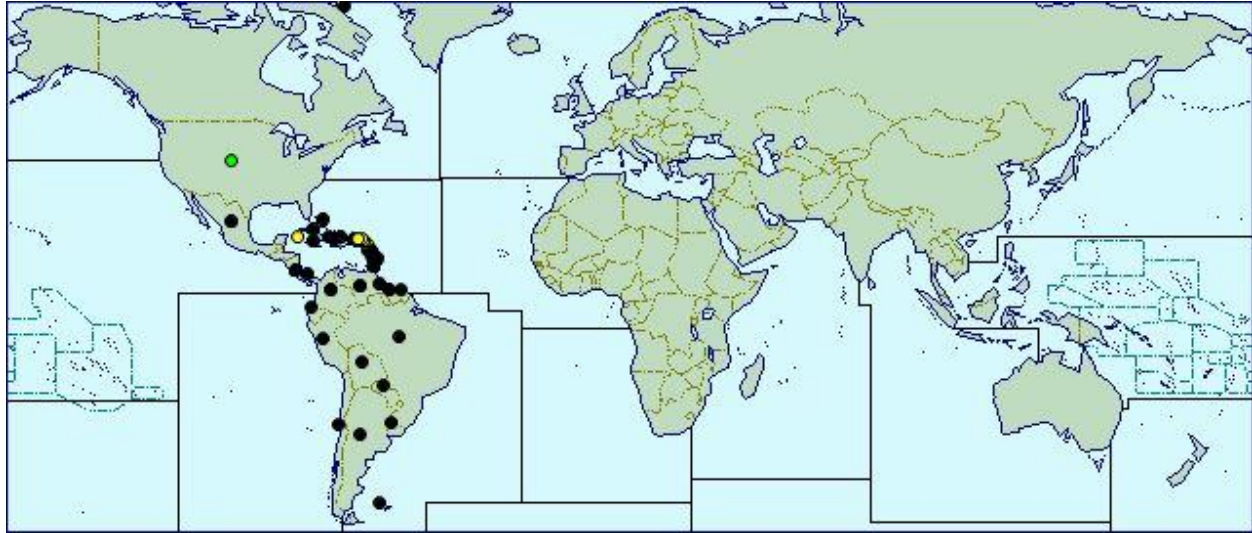


Fig. 3. Shiny cowbird, *Molothrus bonariensis*, geographic distribution by country.

[<http://www.cabi.org/isc/datasheet/75202>, downloaded 10 November 2016]



Fig. 4. *Molothrus bonariensis* (shiny cowbird) foraging.

[[http://www.planetscott.com/speciesdetail/9698/shiny-cowbird-\(molothrus-bonariensis\)](http://www.planetscott.com/speciesdetail/9698/shiny-cowbird-(molothrus-bonariensis)) , downloaded 10 November 2016]