

= Stresemann 's bushcrow =

The Stresemann 's bushcrow (*Zavattariornis stresemanni*) , also known as Abyssinian pie , bush crow , Ethiopian bushcrow , or by its generic name *Zavattariornis* , is a rather starling @-@ like bird , which is currently thought to be member of the crow family , Corvidae , though this is uncertain . It is slightly larger than the North American blue jay and is a bluish @-@ grey in overall colour which becomes almost white on the forehead . The throat and chest are creamy @-@ white with the tail and wings a glossy black . The black feathers have a tendency to bleach to brown at their tips . The iris of the bird is brown and the eye is surrounded by a band of naked bright blue skin . The bill , legs , and feet are black .

The range of this species is quite restricted , it being confined to thorn acacia country in southern Ethiopia near Yavello (Javello) , Mega , and Arero . It can be curiously absent from apparently suitable country near these areas ; the reasons for this are not apparent .

Feeding is usually in small groups and the bird takes mainly insects . Breeding usually starts in March , with the birds building their nest high in an acacia tree . The birds usually lay five to six cream eggs with lilac blotches . The nest itself is globular in shape with a tubular entrance on top . It is possible that more than just the breeding pair visit the nest and that the young of previous years help in rearing the young .

= = Taxonomy = =

The Stresemann 's bushcrow was described by Edgardo Moltoni in 1938 . This species has been placed in several bird families since its description . It has long been considered a member of the crow family Corvidae ; however , several atypical features , such as its lice being from the suborder Mallophaga , its bare facial skin being capable of movement , and the structure of its palate , have suggested that it may belong in another family . Some authors placed the species within the starling family Sturnidae due to the bushcrow 's similarities in behavior and size with the wattled starling . Other authors have placed it in its own monotypic family , *Zavattariornithidae* . DNA @-@ sequencing analysis supports its placement in the corvids , with its closest relatives being the ground jays , magpies , and the piapiac . It has been suggested that the bushcrow is a surviving relict ancestor to several of these relatives . However , its taxonomic situation is still considered to be in flux .

This species has numerous common names , including Stresemann 's bushcrow , bush @-@ crow , Ethiopian bushcrow , Abyssinian bushcrow , and *Zavattariornis* .

The genus name *Zavattariornis* commemorates Edoardo Zavattari , an Italian zoologist and explorer who served as the director of Rome University 's Zoological Institute between 1935 and 1958 . Its name commemorates Erwin Stresemann , a German ornithologist .

= = Description = =

The Stresemann 's bushcrow is about 28 centimeters (11 in) long and weighs 130 grams (4 @-@ 6 oz) . The genders look similar and are not sexually dimorphic . Overall it is pale grey with a black tail and wings . The head , mantle , scapulars , back , rump , and uppertail coverts are all a pale grey . The feathers on the forehead , upper ear @-@ coverts , and throat fade into white . The bright azure skin around the bushcrow 's eye is featherless and can be inflated , narrowing the blackish @-@ brown eye into a slit . The feathers behind the eye are capable of moving to reveal an oblong pink patch of skin . The bird 's black beak decurves into a sharply pointed tip and is relatively small for a corvid . This beak is 33 to 39 millimeters (1 @-@ 3 to 1 @-@ 5 in) long . The feathers on the bird 's chin are fine and can form a small tuft when erected . The bushcrow 's breast and flanks are pale grey , fading into white on the rear flanks , belly , and undertail . On the wings , the lesser and median upper @-@ wing coverts are grey , while the rest of the wing is a slightly glossy blue @-@ black . Its blue @-@ black tail is relatively long and square @-@ ended . Its legs are black . When the plumage becomes worn , the upperparts appear to have a brownish tinge . The juvenile

Stresemann 's bushcrow is slightly duller than the adult , and the feathers of the body and upperwings are fringed with creamy @-@ fawn . The facial skin , bill , and legs are also a dull grey .

The bushcrow is a very vocal species , particularly when foraging . Its main contact call has been described as a single metallic " kej " . While flying , the species frequently calls out a nasal , rapid " kerr kerr kerr " . While these are the most frequent vocalizations , several others are known . Allopreening adults utter a metallic " kaw , kaw , kaw " . Foraging birds call out " how , how , how " , a single , quiet " quak " , and a soft , repeated " guw " . While building its nest , the bushcrow is known to utter a low " keh " sound , and adults utter a deep " waw " while rubbing their bills together .

= = Distribution and habitat = =

This species is endemic to central @-@ southern Ethiopia . It lives in a small area circumscribed by the towns of Yabelo , Mega , and Arero in Sidamo Province . Its total range covers about 2 @,@ 400 square kilometers (930 sq mi) .

The Stresemann 's bushcrow lives in flat savanna covered with mature acacia and Commiphora thornbushes . The bird prefers open short @-@ grass savannas with scattered stands of these mature thornbushes . The soil must be deep and rich to support the bushcrow . It is most numerous when these stands are next to agricultural fields . For many years it was unknown why the species could be completely absent from areas of suitable habitat near seemingly identical but inhabited land . However recent research has revealed that the bird appears to inhabit an area with a very precise average temperature extreme , all of the seemingly suitable but uninhabited surrounding land actually has a slightly higher average temperature that appears to prevent the birds from successfully colonising . It is also not found near the scattered broadleaf woodland made up of Combretum and Terminalia . Its habitat is between 1 @,@ 300 and 1 @,@ 800 meters (4 @,@ 300 and 5 @,@ 900 ft) above sea level .

= = Ecology and behavior = =

The Stresemann 's bushcrow is normally found in groups of about six birds . This species does not migrate .

= = = Diet = = =

The bushcrow feeds both on the ground and in trees . It begins foraging at sunrise . While foraging , a bushcrow can be alone , in a pair , or in a group of six or seven other bushcrows . A foraging bushcrow digs vigorously in the soil while its beak is held slightly open to catch any insects it unearths . When it catches something , it carries it to the nearest tree or bush , pins it down with its foot , and kills and eats the prey . This species has also been seen using its beak to tear apart rotten wood and inspecting cattle dung in the search for food . It may also land on the backs of cattle to search for parasites . It can also chase flying insects , which it does on foot , abruptly changing direction and taking flying leaps after its prey . It often mixes with white @-@ crowned starlings , red @-@ billed hornbills , red @-@ billed buffalo weavers , and superb starlings while foraging . When hunting in the trees , it is capable of walking atop horizontal branches and jumping upwards towards the crown , then descending in a glide from the crown to the ground .

It eats primarily invertebrates and specifically insects , including termites . Larvae and pupae , especially of Coeloptera moths , are eaten as well as the adults .

= = = Reproduction = = =

The Stresemann 's bushcrow nests either alone or in a small , loosely connected colony of three to five nests . It is monogamous and may form a lifelong pair bond . The bushcrow occasionally has a third bird , or in rare cases two to four more , help the breeding couple both build the nest and care

for the young . The helpers may also not be restricted to helping one nest at a time , as they have been seen at nests across the loose colonies . Allofeeding and allopreening , where the birds feed or preen each other , takes place both between the pair and with the other bushcrows in the colony . The bushcrow lays its eggs shortly after the first rains , which normally occur in late February and early March , leading to its eggs being laid in late March and early April .

The nest is an untidy globular structure , on which the roof tapers to a point that has an opening into the interior chamber . The nest is 60 centimeters (24 in) in diameter while the interior chamber is 30 centimeters (12 in) across . To start constructing the nest , a single twig is inserted into the top of an acacia tree 5 to 6 meters (16 to 20 ft) above the ground . This leads to the paired bushcrows becoming excited , engorging their blue facial skin . Almost ritualistically the pair then pick the acacia 's leaves and twigs , dropping them to the ground . The pair end this display by chasing each other through the trees before continuing construction . The nest is made out of thorny twigs while the interior chamber is lined with dry grass and dried cattle dung . Damp soil is used to keep the initial twigs connected . Old nests are repaired and reused .

Up to six eggs are laid in the nest . The bushcrow 's eggs are cream @-@ colored with pale lilac blotches that concentrate into a ring at the wider end .

= = Relationship with humans = =

Prior to modern settlement in villages , the nomadic indigenous peoples of Ethiopia provided easy hunting grounds for the bushcrow as they left loose , dung @-@ covered soil behind as they moved their cattle . This provided a rich abundance of beetle larvae for the bushcrow to feed upon .

= = = Conservation = = =

Changes in the grazing habits of Ethiopia 's indigenous peoples following the recent trend of settling in permanent villages have negatively impacted the Stresemann 's bushcrow . While previously grazers left the soil loose and covered in dung to support the bushcrow 's prey , this new lifestyle has resulted in overgrazing and soil compaction in some areas . The idea of private land ownership has also led to intensive planting of cash crops such as maize . The rich soil that the species needs to forage is also prime farming land . In the Yabello Wildlife Sanctuary , acacia trees are being collected for firewood , removing the bushcrow 's nesting site . While protected under law , this sanctuary has difficulties enforcing the law . It is believed that between 1999 and 2003 the population of the bushcrow declined by 80 % .

The IUCN Red List of Threatened Species lists the Stresemann 's bushcrow as endangered because of its very restricted range and loss of suitable habitat . The population seems to be declining rapidly and in 2007 it was estimated that there might be fewer than 10 @,@ 000 birds remaining .