

## = Cape sparrow =

The Cape sparrow or mossie ( *Passer melanurus* ) is a bird of the sparrow family Passeridae found in southern Africa . A medium @-@ sized sparrow at 14 ? 16 centimetres ( 5 @.@ 5 ? 6 @.@ 3 in ) , it has distinctive plumage including large pale head stripes . Both sexes are mostly coloured grey , brown , and chestnut , and the male has some black and white markings on its head and neck . It inhabits semi @-@ arid savannah , cultivated areas , and towns , and ranges from the central coast of Angola to eastern South Africa and Swaziland . Three subspecies are distinguished .

Cape sparrows are primarily granivorous , and also eat soft plant parts and insects . The birds typically breed in colonies and gather in large , often nomadic flocks while not breeding . The nest can be constructed in a variety of locations , in a tree or a bush in a hole or an empty nest of another species . A typical clutch contains three or four eggs , and both parents are involved in breeding from nest building to feeding young . The Cape sparrow is common in most of its range and coexists successfully in urban habitats with two of its relatives , the introduced house sparrow and native southern grey @-@ headed sparrow . The population has not been recorded decreasing significantly , so according to the IUCN Red List the species is not threatened .

## = = Description = =

For a sparrow , the Cape sparrow is brightly coloured and distinctive , and is medium @-@ sized at 14 ? 16 cm ( 5 @.@ 5 ? 6 @.@ 3 in ) long . The breeding male has a mostly black head , but with a broad white mark on each side , curling from behind the eye to the throat . On the throat a narrow black band connects the black bib of the breast to black of the head . The underparts are greyish , darker on the flanks . The back of the male 's neck is dark grey , and its back and shoulders are bright chestnut . The male has a white and a black wing bar below its shoulders , and flight feathers and tail streaked grey and black .

The female is plumaged like the male , but is duller and has a grey head with a different pattern from the male , though it bears a hint of the pale head markings of the male . The juvenile is like the female , but young males have black markings on the head from an early age .

The Cape sparrow 's vocalisations are chirps similar to those of the house sparrow , but much more musical and mellow . The basic call is used in flight and while perching socially and transcribed as chissip , chirrup , chreep , or chirrichup . A call used by the male to advertise nest ownership is transcribed as tweeng or twileeng . Distinctive and loud , this call sometimes becomes a jerky and repetitive song , transcribed as chip cheerup , chip cheerup .

## = = Taxonomy = =

The Cape sparrow was first described by Philipp Ludwig Statius Müller in 1776 , as *Loxia melanura* . Some other earlier biologists described the Cape sparrow in *Loxia* or *Fringilla* , but it has otherwise been regarded as a member of the genus *Passer* . Within this genus its relations have generally been regarded as obscure . Mitochondrial DNA studies , however , have strongly suggested that the Cape sparrow among the most basal member ( the earliest offshoot ) of its genus . It seems to be related to the southern grey @-@ headed sparrow and its relatives , and to the saxaul sparrow of Central Asia .

The Cape sparrow 's specific epithet comes from the Greek ????? ( melas , " black " ) and ???? ( oura , " tail " ) , while the name of the genus *Passer* comes from a Latin word for small birds .

The Cape sparrow has three subspecies . The nominate subspecies *Passer melanurus melanurus* is found in eastern South Africa , east to the western part of Free State . The subspecies *vicinus* , which is sometimes included in subspecies *melanurus* , occurs from Free State east to Eastern Cape and Lesotho . The subspecies *damarensis* ranges from the extreme southern coastal areas of Angola into Namibia , Botswana and southern of Zimbabwe , as well as northern South Africa .

## = = Distribution and habitat = =

The Cape sparrow inhabits southern Africa south of Angola and as far east as Swaziland . The northernmost point in its range is Benguela in Angola , and it is found in the coastal and central parts of Namibia , except for the driest parts of the Namib Desert . It occurs in all of South Africa except the farthest east , in southern Botswana and spottily in the Kalahari Basin of central Botswana . In the east , it breeds at small number of localities in southeastern Zimbabwe . It has been recorded as a vagrant in Harare , in central Zimbabwe . The eastern limit of its range is reached in the wet forests of Limpopo and KwaZulu Natal , extending into the hills of western Swaziland .

The original habitats of this species were the semi arid savanna , thornveld , and light woodland typical of southern Africa . When settled agriculture arrived in its range about a thousand years ago , it adapted to cultivated land , and since the arrival of settlement , it has moved into towns . The Cape sparrow prefers habitats with an annual rainfall of less than 75 centimetres ( 30 in ) , though in desert areas it is usually found near watercourses or watering holes . While it occurs in urban centres , it prefers parks , gardens , and other open spaces , and has a low reproductive success in more built up areas .

In towns , the Cape sparrow competes with both the native southern grey headed sparrow and the introduced house sparrow . Since it is more established around humans in its range than either , it successfully competes with both species , though they may exclude it from nesting in holes . There are reports by birdwatchers in suburban areas of South Africa of increases in some regions ( the northern Johannesburg area , and Pietermaritzburg ) and decreases in others ( the southern Cape Town area ) . The house sparrow is reported decreasing in several urban areas , as it has in parts of Europe , declines which are attributed to factors including the increasing density of garden plantings and increases in predation .

= = Behaviour = =

= = = Social behaviour = = =

The Cape sparrow is social , lives in flocks , and usually breeds in colonies . Away from humans it is nomadic , and forms flocks of up to 200 birds . In cultivated and built up areas , smaller flocks form where food is provided for livestock or birds . In such places , it associates with other seed eating birds , such as the house sparrow , the cape weaver , and Euplectes weavers . Birds from urban areas form flocks seasonally and fly out to nearby countryside to feed on ripening grain , returning at night to roost .

Cape sparrows prefer to roost in nests , and while wandering when not breeding , birds in uncultivated areas roost socially in old nests or dense bushes . In farmland and towns , birds build special nests for roosting , lined more poorly than breeding nests , but made of more insulating material .

An unusual social behaviour has been described from Cape sparrows in Johannesburg . Groups of 20 ? 30 birds separate from larger flocks and stand close together on the ground with tails on the ground and heads held high . These groups sometimes move in an unconcerted fashion by hopping slowly . Often birds will fly up and hover 30 ? 60 centimetres ( 12 ? 24 in ) above the ground . During these gatherings birds are silent and are never antagonistic . This behaviour 's significance is unknown , and it is not reported in any other sparrow .

= = = Feeding = = =

The Cape sparrow mostly eats seeds , foraging in trees and on the ground . The larger seeds of cereals , wild grasses , and other small plants are preferred , with wheat and khakiweed ( *Alternanthera caracasana* ) being favourites . Buds and soft fruits are also taken , causing considerable damage to agriculture . Insects are eaten , and nestlings seem to be fed exclusively on

caterpillars . The Cape sparrow eats the soft shoots of plants , and probes in aloes for nectar , but these habits are not important sources of food .

= = = Breeding = = =

= = = Courtship and colonies = = =

The Cape sparrow usually breeds in loose colonies of 50 ? 100 birds . 10 to 20 percent of the breeding birds in each population nest away from colonies , for unknown reasons . The Cape sparrow is usually monogamous , but some records of a male and two females nesting and raising young in one nest have been made in Western Cape . It seems pairs are formed in the non @-@ breeding flocks , but it is not known how pairs are formed , or if the pair bond is for life . Once ready to breed , newly mated pairs look for a suitable nesting site , spending mornings searching , and returning to their flock in the afternoon . Once a site has been selected , both birds begin to build their nest . Other pairs seeking a nest site join them , and in this matter a colony forms quickly .

The courtship display is poorly recorded . Ornithologist J. Denis Summers @-@ Smith observed a display in which the male hopped beside the female in a tree , drooping its wings and ruffling the chestnut @-@ coloured feathers on its back . Groups of two or more males have been observed chasing a female . In the house sparrow a similar display exists , in which a female who is not ready to copulate is chased by her mate , who is joined by other males . It is not known if the display in the Cape sparrow has a similar significance . When ready to mate , the female crouches in solicitation and is mounted by the male . Instances of hybridisation with the house sparrow , the southern grey @-@ headed sparrow , and the Sudan golden sparrow have been reported .

= = = Nesting = = =

The Cape sparrow utilises a variety of nesting sites , including holes as well as open locations . Bushes and trees , especially acacias , seem to be preferred . Many nests may be built in a single tree . Holes and other covered sites are chosen less frequently . Nests have been recorded from the eaves of buildings , on creepers on walls , in holes in earth banks , and in holes in haystacks . Sometimes the Cape sparrow nests in the disused nests of other birds , such as weavers and swallows . Pairs that nest away from colonies usually choose low bushes or utility poles as nesting sites . Nests are placed at least a metre above the ground , and can be only a few centimetres apart in colonies . Only the nest and its very close vicinity are defended as a territory . Males defend their territory with threatening postures , and sometimes by fighting with bills on the ground .

Nests built in the open are large and untidy domed structures . Nests are built mainly of dry grass and twigs , with a soft lining of plant down . Any leaves or thorns present in a nest tree are worked into the nest . In cavity nests , the hole is simply filled with a shapeless mass of grass with a cup of soft material containing the eggs on the inside . When the disused nests of weavers are utilised , they are simply given a soft lining . The nest entrance is in the side , and is sometimes extended into a funnel . The male and the female construct the nest together , keeping close when finding material and weaving it together .

= = = Eggs and young = = =

Clutches contain between two and six eggs , typically three or four . Variation in clutch size depending on the amount of food available for young birds . Presumably owing to the greater availability of food , clutches are larger during the peak of the breeding season , and in more southern latitudes of the Cape sparrow 's range . Both birds of a pair incubate the eggs during the day , switching every ten or fifteen minutes . At night , only the female incubates the eggs , while the male roosts outside or in the nest . In pairs breeding outside of colonies , birds leave the nest to make room for their mates upon hearing their mates approaching . Among colonial pairs , the

incubating bird waits until its partner arrives in the nest , to prevent other birds from entering the nest . Incubation seems to begin before the clutch is complete , and lasts 12 ? 24 days .

The young of a clutch hatch over two or three days and are brooded until their feathers develop and eyes open five days after hatching . The young are fed on insects until they fledge 16 to 25 , typically 17 , days after hatching . After this they are fed for one or two weeks . While feeding nestlings , the female is dominant over the male . Cape sparrows are among the main hosts of brood parasitism by the dideric cuckoo , and have been recorded parasitising others of the same species .

= = Relationships with humans = =

The Cape sparrow is an abundant and familiar bird of human habitations and cultivation in most of southern Africa . It is not believed to be threatened , and accordingly is listed as a least concern species on the IUCN Red List . It can be an agricultural pest , especially of grain cultivation and vineyards .

When vineyards in the south @-@ west Cape started letting weeds grow between vines to conserve moisture , around 1956 , the Cape sparrow moved in . Cape sparrows quickly exhausted the seeds and started eating the grapes . The Cape sparrow is now a serious pest in vineyards . However , vineyards are not optimal habitat : some populations have had such a low reproductive success that they could not be maintained without immigration .

The Cape sparrow was featured on the lowest @-@ denomination South African coin , from the farthing ( ¼ -cent ) in 1923 to the cent that ceased to be minted in 2002 , with designs based on an original by George Kruger Gray . This was said to be because women interned at a concentration camp in Bethulie during the Boer War adopted a biblical quotation ( from Matthew 10 ) as their motto : " Are not two sparrows sold for a farthing ? and one of them shall not fall on the ground without your Father . " Additionally , it has been featured on stamps from Lesotho and the Central African Republic .