

Bird of the Year 2024

Bateleur

Lesson 6

TOPIC: Breeding and Nesting	
GRADE: 4-6	
CRITICAL & DEVELOPMENTAL OUTCOMES: Understanding the ecology of the Bateleur	
LINKS WITH PREVIOUS LESSONS: More about the Bateleur	LINKS WITH NEXT LESSONS: Habitat happenings
FORMS OF ASSESSMENT: Vocabulary use	RESOURCES: Included worksheet/s
LEARNING ACTIVITIES & ASSESSMENT:	
<p>Background</p> <p>Bateleurs are long-lived species, slow-maturing and slow-breeding, where courting each other or the re-establishing of existing pair bonds is considered a “spectacular” display. During this, the male exaggerates his flight, diving down at the female, who then rolls to her back and presents him her talons. The male will at times fly with his legs dangling loosely, during which his wings will flap to create a conspicuous <i>whup-whup-whup</i> noise like a loose sail in the breeze. During breeding, only the male is usually active in the courtship of a female.</p> <p>The Bateleur is monogamous, meaning they only have one mate at a time, and will mate for life, if both survive, year to year. This species breeding season falls between September to May. The nesting season can be virtually any month in East Africa but peaks December to August, which matches the breeding time in Southern Africa. In some regions across the continent, there are no evident peaks as both breeding and nesting take place throughout the year.</p> <p>Nests are located in fairly large trees, near a watercourse, in hilly terrain or open flat country. The nest itself is found ten to fifteen meters above the ground, normally within the canopy, in a fork of the main trunk or a large side branch where it is shaded for much of the day. A variety of tree species may be used. In southern Africa, favoured trees tend to be Baobab trees and more especially <i>Acacia</i> trees. <i>Knob thorn</i> trees are favoured. Bateleurs usually nest on structures made by themselves. The Bateleur has been known to use old nests of other birds. One case reports a Wahlberg's Eagle nest that was taken over and added to, in order to deepen the nest.</p> <p>The nest is a solid structure of medium-sized sticks, measuring approximately 60 cm across, 30 cm deep with a leafy cup of about 25 cm across. The family, snake eagles, tend to build small but bulky nests relative to their size and the Bateleur is no exception. Nests are lined with green leaves by the pair. Both sexes are known to contribute to the building or repair of a nest, a process that typically takes about one to two months. The building of the nest has been reported to last for a long time or longer than expected even in years where no breeding occurs. The species will build a new nest in the same general area in consecutive breeding seasons, not more than one to three kilometers away and may reuse a nest they built previously. There is much variation in this regard, from one nest being used in five consecutive years to no nest reusage in three recorded years.</p> <p>Nests built by Bateleurs are also favoured by Lanner Falcons, most probably due to the Bateleur's young being fledged by July to August when the Lanners tend to start laying their</p>	

eggs. The female lays only one large egg, which is quite large for the size of the bird. It is broadly oval and usually an unspotted chalky white but sometimes with a few red stains or indistinct reddish markings. This may be from the feeding and defecating of the parents. The female normally incubates the egg alone and is fed by the male during this time. The females have been known to take a break, leave the nest and make a kill of her own. The male steps in here and will do some incubation. The Bateleur is known for breeding earlier than most other eagles irrespective of wet or dry seasons. Incubation stage lasts for fifty-two to fifty-nine days, averaging about fifty-five days. This may be the longest of any African raptor.

The hatchling is highly altricial (closed eyes, naked, patches of down feathers and unable to move from the nest) and very feeble - even more so than most other eagles. They are unable to lift their own heavy heads and possesses a deeply wrinkled cere. The small eaglet is initially covered in creamy down with a chocolate-brown patch behind the eye that matches the rest of the down colour above with creamy flanks. At about two weeks, the young become somewhat more active, and the down develops a patchy appearance. At three weeks, the eaglet has a downy white head but the down colour above is dark brown, with the first brown feathers sprouting on the back of the head, secondaries, and scapulars. By four weeks, they no longer have any white down and brown feathers grow especially on the back and wing; while a week later, the feathers continue emerge and the secondaries outgrow the primaries. At seven weeks, the feathering of the foreparts occurs rapidly, being complete by thirty-five days. However, the wing and tail feathers still grow, the last remaining down is on underwing coverts.

The young eaglet resembles snake eagles in appearance and feather growth pattern, particularly the less advanced growth of the primary feathers, and in general colouring. The nestling may first stand at about five weeks as well as engage in wing-flapping and perching or lying in the prone position (with the chest to the bottom of the nest) before they can fly well. The stage at which the young first feeds itself is dictated by what prey is brought; if it is large, the parents will feed the young to forty days, but small fragments will be eaten unaided by the downy young. Around six weeks is when the eaglet can typically feed itself for the first time. At nine weeks, Bateleur eaglets have been recorded doing effective threat displays against humans.

When the nest is approached, at times Bateleurs will react forcibly, engaging in aggressive barks, sometimes diving down from flight at the intruder with loud flapping wings. When disturbed in this way, however they very often leave the nest site and will not return to the nest for up to several hours. The Bateleur seems to be more likely than almost any other African eagle, to desert their young. During the incubation and nestling period, the male is more demonstrative than the female at the nest, sometimes doing the distraction display and regular dive-bomb attacks if the nest tree is climbed, the female more commonly flies away in the distance.

Bateleur parents are highly sensitive during breeding to human disturbance, oddly they may permit and adapt to regular inspections of the nest but dislike any attempts to hide or conceal photographic equipment nearby and regularly desert the nest even with a small nestling, thus nest photography should be avoided. The ease with which Bateleurs are flushed away from their nest appears to lead to uncommonly high nest predation rates, while many other eagles, including from other parts of the world, either sit tightly on their nest until the danger level becomes too high or attack fiercely at the potential threat.

The nestling is carefully tended to by the female, as she is at the nest 82% of the time up to the time the eaglet is ten days old. This continues to drop as the nestling matures. When the young are at later stages of maturity, the female tends to only engage in very brief prey deliveries. Both sexes bring prey and feed the young though the male takes a bigger share of this than in many eagles. After thirty days, the eaglet is often left by itself on the nest throughout the night. The eaglet is fed nearly every day in the early days but, only every two

to three days later, especially after leaving the nest.

Fledgling occurs around ninety to one hundred and twenty-five days. The young often returns to the nest after its first flight and continues to do so. The young Bateleurs become independent quickly within about a week in some cases and in others, they may remain close by and dependent on their parents for about two to four months. The young Bateleurs will follow their parents around in flight until they are fed. Coaxing behaviour by parents has been recorded (keeping away food until young fly to it, perhaps gradually encouraging the young eagle to go farther afield). After leaving the nest area, the young Bateleurs will wander widely, with a record showing a youngster having covered 1,347 km². When soaring near another Bateleur nest, young Bateleurs are often fiercely attacked by the adult males.

In southern Africa, the Bateleur typically breeds every year whether they are successful in raising their eaglet. In the Kruger National Park, the predation of Verreaux's eagle-owls may considerably lower nesting success. Furthermore, in Kruger, it was found that 33% of the population of Bateleurs were young birds while the remaining 67% were adults, meaning that younger birds are presumably underpopulated. The population, or at least in southern Africa, seems to be roughly even in terms of sex ratio, with an even number of males and females.

Bateleur pair for life and stay in the same nest for several years. Unpaired adults can sometimes be seen near a nest site. This bird is not rejected by the mating pair and does not help with nesting. The Bateleur is most seen in rapid, direct flight which is its preferred method of hunting.

Birds may cover 482 kilometers in an eight-hour-long daily searches for food. Due to the extensive area covered each day, the number of eagles in the wild is easily over-estimated in its native sub-Saharan region of Africa, but their numbers in parts of their range are declining.

A Bateleur will reach sexual maturity at the age of seven or eight years with full adult plumage at around seven years. In the wild, their life expectancy is unknown.

Activity:

Section 1 – Vocabulary use

Ensure sufficient copies for either group or self-work. Have the learners find the definition of the listed words and then to use as many of these to write a paragraph of the breeding and nestling of the Bateleur.

Section 2 – Life cycle

Using the information gained in the lesson, have the learners draw a life cycle of the Bateleur, noting special features/changes and time spans as the eaglet matures.



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Vocabulary Activity

Monogamous -

Courtship -

Clutch -

Incubation -

Hatchling -

Altricial -

Prone position -

Fledgling -

Maturity -
