

Aggressive Display in Adult Jardine's Parrots (*Poicephalus gulielmi*)

By Werner Lantermann

Jardine's Parrots belong to the African *Poicephalus* parrot group with ten distinct species and a wide distribution all over the African continent south of the Sahara desert. Four of them – *P. robustus*, *P. suahelicus*, *P. gulielmi* and *P. flavifrons* - representing a separate suborder *Eupsittacus* within the genus due to morphological characteristics, are different from the other *Poicephalus* species in some respect (HOPPE & WELCKE 2006). Within this group *P. gulielmi* and *P. flavifrons* seem to be very close relatives due to their morphology, but up to now there are only few behavioural observations of the latter species to support this theory of relationship. More should be known about the Jardine's Parrot, but unfortunately – although well-represented in several private and public collections – descriptions of behavioural details are rare in literature.



After a short description of the epigamic display of a pair of the species (LANTERMANN & SCHUSTER 1989), now some details on the aggressive behaviour and the nest-hole defence of an adult pair in captivity can be added.

The two birds are 5 and 6 years old and belong to the nominate subspecies *P. g. gulielmi*. They came to my collection in 2002 after living some time in a German zoo (male) and in an animal sanctuary (female). They first bred in 2004, followed by two clutches of eggs in autumn 2005 and late spring 2006. The next breeding period started in December 2006, when the aggressive display of both birds was first recorded in detail.



As the birds always spend the breeding period in the winter house, optically separated from other parrots, the aggressive display was always directed against the human “intruders”, either me and my wife or the girl of the holiday replacement. The lowest level of aggressive defence is a dark continuing growl, when someone is opening the feeding shutter of the aviary to provide new food and water. The birds then normally sit at the furthest sitting perch and observe the process from the distance. The intensity of growling is increasing with minimizing space to the birds. Probably this behaviour is of ambivalent character and switches between fear (defence) and threat display (attack).

The second level is an aggressive display by taking postures of enlarging the body contours by fluffing the feathers of belly, cheeks, crown and back and by raising the wings slightly over the back. So the birds resemble a feather bowl similar to this display of the Grey Parrot (*Psittacus erithacus*). This behaviour is sometimes combined with the “aggressive walk” known especially from several new world parrots, and the “aggressive bite” into the perch combined with repeated beak scrubbing along the perch (probably either a kind of displacement behaviour or just to show bite and attack intention). Very often both birds

additionally perform a kind of “bowing behaviour” by lowering the head, but without erecting the lower back and tail and without the tail feathers spread. This posture is accompanied by frequent beak grinding, that is normally part of the comfort behaviour when the birds relax. Again this behaviour is known from some Amazon Parrots of the neotropics and some Cockatoos, where it reaches the highest intensity with a maximum bowing display and the tail feathers spread like a fan (DIEFENBACH 1982, LANTERMANN 2000). It is probably a kind of threat display against the “intruder”.



The third level of aggression is either vanishing in the nest box, where the birds continue with growling, that sounds more intense due to the amplifying effect of the cavity, or they fly a real attack with maximum fluffed body feathers against us human “intruders”, that is stopped however through the welded mesh, which they use as a substitute for object biting.

There are only few behavioural differences between the sexes of the birds; the male of this pair primarily does the growling part, mainly the female does the “aggressive walk” with fluffed body feathers. The communication of both birds is enriched through a two or three-syllable hu-hu(hu) call of the female, the meaning of which remains obscure.

It is evident that both sexes are able to perform all kinds of aggressive display, so that the behaviour of Jardine’s Parrots is appropriate to the theory of “ambivalent sexual behaviour” in monomorphic species (LANTERMANN 2000).

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Photos:

1. Growling female Jardine’s Parrot
2. Aggressive display of female
3. Male and female “bowing” against the “intruder”

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