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CARING & SHARING

One of the most conspicuous bird behaviours is the feeding of nestlings: parents toil away for hours, bringing food back to their rapidly growing and demanding offspring. Even after the young leave the nest, many parents continue to provide food, often for several weeks or months. In many species, the young leave home as soon as this parental provisioning stops, but in some the young stay with their parents after reaching nutritional independence (the point at which they feed themselves). Since juveniles are generally poor foragers – most species take a long time to become proficient at finding and catching food – they might still benefit from parental assistance.

Cambridge University and FitzPatrick researchers Andrew Radford and Amanda Ridley have been investigating how parents could assist their young once the period of direct provisioning has ceased. Studying birds once they have fledged is usually very difficult, because they tend to fly off whenever an observer approaches. The researchers have overcome this problem, however, by habituating 15 groups of Southern Pied Babblers *Turdoides bicolor* to their close presence in the Kalahari Desert (see *Africa – Birds & Birding*, June/July 2006). The scientists can therefore closely monitor the behaviour of parents and young throughout the period of juvenile development, and this has led to some fascinating discoveries.

Pied Babblers produce a variety of calls when foraging on the ground, where they spend much of their time probing for prey. Group members (three to 15 per group) usually forage within 20 metres of one another, but often in separate patches. While foraging, adults occasionally produce a ‘purr’ call. Individuals giving this call are far more likely to be approached than silent individuals or those giving other types of calls; the ‘purr’ appears to recruit others to the caller’s position. Intriguingly,

Southern Pied Babblers show a novel form of extended parental care, continuing to nurture their offspring long after fledging has occurred.

the call tends to be given only when the group contains independent fledglings (young individuals that forage for themselves, but which are still fairly hopeless at the task), and is given by adults that are foraging in a patch that contains a large amount of readily divisible food. For example, the call is never given when an adult catches a scorpion, a large item that would be difficult to share, but is commonly produced when an adult finds a termite nest, containing many individual prey items.

When a ‘purr’ call is given, independent fledglings are much more likely than adult group members to respond by approaching the caller. This may be because adults that try to share a patch are often chased away, whereas fledglings rarely receive such aggression. Adult callers really do seem to target those individuals which might benefit most from a good foraging patch. And the fledglings do indeed benefit: those responding to the call increase their foraging success rate and are able to spend a long time in the new patch, thus reducing the time spent searching for food. In other words, the adults appear to show fledglings better foraging sites than the fledglings are capable of finding for themselves. Parents probably benefit from this seemingly altruistic behaviour by increasing the survival chances of their offspring.

Pied Babbler carers are therefore using a recruitment call in a novel fashion – to extend the period of offspring care past the point of nutritional independence. This behaviour may well be widespread, since the young of many species continue to associate with their parents even when they are no longer fed directly. It seems like a parent’s job may never be done! □

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