

Females of polygynous species fed their young on larger prey collected within territory near the nest. In monogamous species smaller prey was collected from longer flights often outside territory.

Polygynous species also had larger bills as an adaptation to take larger prey.

Males of polygynous species had short, simple songs used in territorial defense, whereas males of monogamous species had long, complex songs for mate attraction.

These correlations were then used to make predictions about the mating system or ecology and behaviour of less well known *Acrocephalus* species.

The comparative approach is a useful tool in the continuing investigation into the evolution of polygyny. It suggests that the emancipation of males from biparental care and the constraints of food supply have been important factors in the evolution of polygyny. In *Acrocephalus* warblers, polygyny is best viewed as a continuum of gradual departure from monogamy in the rich but variable marshlands of Europe.

## **Ecological differences between Reed and Marsh Warblers at the same site**

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Since 1987 we have studied syntopically coexisting Reed Warblers and Marsh Warblers at an eutrophic reed bed near Düsseldorf. A mosaic-like and continuously interfacing structure of mixed vegetation consisting of reeds, stinging nettles, and other herbaceous plants enables coexistence.

Both species demonstrate a clear ecological segregation with respect to choice of song posts, nest sites, feeding sites (RW preferentially foraged in willow bushes, MW almost exclusively in herbaceous vegetation), and further aspects.

Furtheron there existed marked differences with respect to prey taxa, prey sizes, and feeding techniques. Both species fed outside their for short periods defended and small breeding territories, a fact which perhaps minimizes the need for interspecific territoriality.

Some aspects of our study recommend to redefine the role of territoriality in the case of *Acrocephalus* warblers with respect to some diverging functions, e.g. nest site and foraging sites.

Breeding success (fledglings / nest) - as demonstrated by several studies - is just double as high in the MW as in the RW. These differences could be confirmed even at the same site due to 100% higher cuckoo parasitism and egg losses. By indirect measures it seemed most probable that the Cuckoo was the main egg predator too. MW conceal their nest much better than RW (nesting in herbaceous vegetation vs reeds) and counteract better against cuckoo parasitism.

The higher losses by RW seem to be balanced through its longer laying period, higher extent of replace and second clutches, perhaps lower mortality and higher age, and through a supposedly less costly migration strategy.

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