

If it smells like a bower and functions like a bower then ... response to Frith

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My good friend Cliff Frith (2016) waxes eloquent on why the Tooth-billed Bowerbird (*Scenopoeetes dentirostris*) display area should not be referred to as a bower. He brings much scholarly material to support his argument. However, there are several aspects where I feel his emphasis is misplaced. He quotes several authors as referring to bowers in terms that imply a structure, or use such terms as “build” or “construct”, but these folk were not making arguments regarding the definition of a bower, they were simply describing what their study species were preparing in the way of display artifacts. Furthermore, I believe there is no reason to bring in dictionary definitions of the word bower in entirely different contexts, such as a bower in a rose garden, because the term applied to bowerbirds was based on a loosely conceived term of convenience before the behaviour of all species of Bowerbirds was considered part of the equation, for example Gould (1894) quoted in Frith & Frith (2004).

The Tooth-billed Bowerbird’s display area has exactly the same function as that used by, say, the Golden Bowerbird (*Amblyornis newtonianus*). Whether the leaves used are analogous to the twigs used by the Golden Bowerbird or the applied “decorative” *Melicope* fruits and lichen is an interesting consideration. For starters, the term decoration is a human concept and must be considered with caution. It could be that the Toothbill “bower” is “constructed” with leaves rather than grass or twigs, the only difference being the longevity of the vegetable material used. Alternatively, the “construction” activity could be the clearing of the forest floor, which enhances the

“decorative” display of pale leaves (at least to the human aesthetic).

My conclusion is that the term bower is not a scientifically defined term but we are clearly stuck with it. Tooth-billed Bowerbirds may be anomalously named if we define “bower” in terms of other, non-avian definitions of “bower”, but within the family Ptilonorhynchidae they are correctly grouped with the Bowerbirds, because their breeding system and breeding display is characteristic. By definition, male Bowerbirds physically prepare and defend sites of a few square meters, which we call “bowers”; it is only within their vicinity that they are known to have sexual intercourse. Unlike the closely related monogamous Catbirds (*Ailuroedus* spp.), the males mate with as many females as they can get and take no part in the raising of the young.

Another essential similarity of the Tooth-billed Bowerbird’s behaviour to other Bowerbird species is that the sites they prepare for display continue to be used from year to year (Frith & Frith 1995). As in other Bowerbird species, occasionally a site may be moved or cease to be used but the overwhelming characteristic is persistence from year to year. Even when the “owner” of the site fails to return for the spring breeding activity and may be presumed dead, another bird will open the site, often in exactly the same place (Frith & Frith 2004; my unpublished data from 24 years of observation). This achievement is impressive because to the human eye there is no physical clue to where the site was stationed the previous year; the forest floor is strewn with leaves hiding the previous clearing and the plants, being plants, have

grown, died or germinated from seeds thus changing the physical and light characteristic of the site. My proposed explanation is that there is a memory amongst the community of male birds of where the sites “should be”.

My assertion is that it is the term “bower” which is anomalous because the human bower is completely different in structure and function, and that its application to bowerbirds is arbitrary because the supposed structural similarity doesn’t accommodate the behaviour of all the “Bowerbirds”. So perhaps the Bowerbirds should be renamed “Courtbirds”. But that depends on the definition of “court”. If it means where the males court the females prior to having sex with them then all the Bowerbirds could be called “Courtbirds”. However, if the concept relates to a defined area of open ground as in “tennis court” or “courtyard” then it is not a universal term to be used as descriptor for the Bowerbirds.

To be logical, if we insist that bowers must be physical constructions which persist over years then the Tooth-billed Bowerbird should be renamed Tooth-billed Courtbird or, if the “court” refers to courting of females, which applies to all the bowerbirds, another term is required to set the Tooth-billed Bowerbird apart. “Leafdisplaybird” is a possibility! As a name this is more descriptive than “Catbird”.

With tongue in cheek, I have gone to these lengths to demonstrate the kind of decisions that follow from restricting use of the term “bower” as proposed by Frith (2016).

We are stuck with the term “Bowerbird” so we should accept that the male Tooth-billed Bowerbird prepares a “bower” to display and exercise his sexuality.

References

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