

Letter

Bats and tourism: a response to Paksuz & Özkan

The Dupnisa Cave System in Turkey, the subject of the recent article by Paksuz & Özkan (2012), includes three caves (Sulu, Kuru and Kız), of which two were opened for tourism in 2003. The authors report counts of bats carried out between 2002 and 2008, compare the period 2002–2003 with 2004–2008, and conclude that the total number of bats in the Dupnisa Cave System increased significantly after the caves were opened to tourism. In our opinion, however, the situation is not as clear-cut as suggested by Paksuz & Özkan.

Firstly, most of the construction within the Dupnisa Cave System was carried out during 2001–2002. The construction activities included, amongst other matters, building stairs connecting Sulu and Kuru and a promenade, and installation of lighting. The work was finalized in 2003 with the installation of the main generator. The caves were formally opened to the public in June 2003. Paksuz & Özkan began their monthly monitoring of bats in April 2002 and refer to the years 2002–2003 as the period before and 2004–2008 as the period after the caves were opened for tourism. This comparison is, however, ambiguous, as it contrasts the construction period (including the early days of tourism) with the later period after construction was finished and the system opened to tourists.

The suggestion that the total number of bats in the Dupnisa Cave System increased significantly after the caves were opened for tourism is confusing. The total number of bats in the study of Paksuz & Özkan refers to abundance in the three caves. Yet the only significant increase was observed in Kız, which is closed to tourism. The number of bats in the caves opened to tourism did not therefore increase. It is possible that bats moved to the less disturbed cave.

The only counts of bats made in the pristine Dupnisa Cave System were in 2001 (Furman & Özgül, 2004). Paksuz & Özkan refer to those data stating that 'In the Dupnisa Cave System the highest total number of bats previously

recorded in a single survey was 33,000, in the winter of 2001 (Furman & Özgül, 2004) whereas in our study we recorded 42,800 individuals in January 2003 and 54,600 individuals in January 2004 (Table 1)'. However, in 2001 the counts were not in January but on 28 February (Kız), 1 March (Sulu and Kuru), and 29 April (all three caves). These data cannot be compared with the counts in January 2003 and 2004. Taking into consideration that Sulu hosts mainly hibernating bats and Kuru nursery colonies, we compared the 2001 March counts in Sulu and April counts in Kuru with the corresponding data reported by Paksuz & Özkan. In Sulu the mean numbers of bats in February and March 2003–2008 were c. 20% and 60% lower than on 1 March 2001, respectively. In Kuru the mean numbers of bats in April and May 2002–2007 were c. 90% lower than on 29 April 2001. These figures indicate the opposite trend to that suggested by Paksuz & Özkan.

The suggestion that tourism can have a beneficial effect on bats should be supported by convincing evidence because it could set a precedent for similar cases and justify or encourage the opening of more caves to the public. In our opinion, such evidence is not provided by Paksuz & Özkan (2012).

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