13th Meeting of the Advisory Committee

Cluj, Romania, 23 – 24 August 2008

Report of the IWG on Conservation and Management of Critical Feeding Areas and Commuting Routes

Convenor: Ms. Eeva-Maria Kyheröinen (Finland)



Members of the IWG

Eeva-Maria Kyheröinen (Finland, convenor), Ms. Marie-Jo Dubourg-Savage (France), Dr. Suren Gazaryan (Russian Federation), Ms. Lena Godlevska (Ukraine), Dr. Christine Harbusch (NABU, Germany), Ms. Kaja Lotman (Estonia), Dr. Ferdia Marnell (Ireland), Dr. Anthony J. Mitchell-Jones (United Kingdom), Dr. Danilo Russo (Italy), Mr. Per Ole Syvertsen (Norway)

Terms of reference

Referring to the resolution 4.9, point 4: Foraging habitats; to produce a synthesis of methods used to study the critical feeding areas and commuting routes and to produce guidance for the national guidelines for bat habitat conservation.

Work carried out after AC12

Based on literature review done earlier and information from new articles the group has started writing the guidance document. In AC12 the group agreed on writing first the species accounts and then the more general parts of the guidance document. A provisional list of elements to be included in the guidance and a model text from the part of species accounts is in the appendix.

Future work

The group continues writing the species accounts and after that starts drafting the other parts of the guidance documents. As there is very little published data on feeding habitat studies (especially using radio tracking for studying nursery colonies) on some species, the group would like to get all unpublished reports or articles on such studies.

Appendix.

Provisional list of elements for the guidance for national guidelines

1 introduction, background

why should bat habitats be conserved and managed

o to whom is the guidance – for land owners and managers, foresters etc

ecology of bats briefly – what do bats need in landscape

2 what is an important feeding area or commuting route

3 how to protect important habitats?

4 the process of taking bat habitats into account in developing etc.

5 species by species guidance

6 examples of successful habitat management cases

7 list of references

Guidelines document, species accounts

Draft model text: Daubenton's bat (Myotis daubentonii)

Feeding habitats and areas

Daubenton's bats forage mainly above water bodies of both flowing and stagnant water.

Feeding areas are usually at a maximum distance of 2 - 5 kilometres from the roosts

(Arnold et al. 1998, Dietz et al. 2006) - but may occasionally be as far as 10 kilometres

away from the roost. Females tend to forage closer to their roost than males (Encarnação

et al. 2005). Foraging areas of pregnant and lactating females are typically small while

after weaning of the young also females use larger areas (Dietz et al. 2007). Females

show high fidelity to good quality foraging areas (Kapfer et al. 2008) even though they

might change the roost quite often.

Critical feeding areas

Ponds and other water bodies with high insect production near roosts are important

especially for lactating females.

- 2 -

Commuting routes

Daubenton's bats use e.g. rivers and tree lines as commuting routes (Downs & Racey 2006).

Conservation and management of critical feeding areas

- attention paid especially on management of areas in distance of ~ 2 kms from nursing roosts
- tree lines and other commuting routes to be saved

References

- Arnold, A., Brown, M. Becker, N. & Storch, V. 1998: On the ecology of Daubenton's bats (Myotis daubentonii) in south-western Germany. Carolinea 56: 103 110.
- Bogdanowitz, W. 1994: Myotis daubentonii. Mammalian Species 475: 1 9.
- Dietz, M., Encarnação, J.A. & Kalko, E. 2006: Small scale distribution patterns of female and male Daubenton's bats (Myotis daubentonii) 2006: Acta Chiropterologica 8(2): 403 415.
- Dietz, M. & Kalko, E.K.V. 2007: Reproduction affects flight activity in female and male Daubenton's bats, Myotis daubentonii: Can. J. Zool. 85(5): 653 664.
- Downs, N.C. & Racey, P.A. 2006: The use by bats of habitat features in mixed farmland in Scotland. Acta Chiropterologica 8(1): 169 185.
- Encarnação, J.A., Kierdorf, U., Holweg, D., Jasnoch, U. & Wolters, V. 2005: Sex-related differences in roost-site selection by Daubenton's bats Myotis daubentonii during the nursery period. Mammal Rev. 35(3&4): 285 294.
- Kapfer, G., Rigota, T., Holsbeekc, L. & Aron, S. 2008: Roost and hunting site fidelity of female and juvenile Daubenton's bat *Myotis daubentonii* (Kuhl, 1817) (Chiroptera: Vespertilionidae). Mamm. Biol. 73 (4): 267 275.