

One theory from Pfister et al. (2013) proposes that females are spending more time in flight using their hearing to avoid predators while trying to find their mates who are singing mating calls on the ground. Therefore, in order to survive and reproduce

was also removed in order to achieve better electrophysiological recordings. This was done by peeling the sheath from the top of the neck to the bottom using a desheathing tool.

Electrophysiological recordings were obtained by placing two silver hook electrodes beneath the neck connectives and then isolating them in petroleum jelly. After placement of the electrodes the cervical and promesothoracic connectives were cut in order to minimize electrical activity that was not from AN-2. Responses were amplified with an A-M Systems differential amplifier Model 1700 and recorded on a PC using a CED Micro 1401 board and the computer software Spike 2, version 7.17.

During recordings, a sound sweep was played in order to elicit

Figures/Charts



Figure 1. AN-2 Recovery, quantified as the number of action potentials fired in response to a 15kHz, 85db stimulus. Sound stimuli was played in triplicate ipsilateral to the intact tympanal membrane, and responses from AN-2 were averaged in a 15 day, control, female (n=1) as well as a 15 day post deafferentation female (n=1). In each condition, the side with the intact connective displayed a higher spike count than the deafferented side. The control female also exhibited a higher spike count than the 15 day post deafferentation female.

Acknowledgements and References

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