

Thresholds for evoked vocal responses of *Eupsophus emiliopugini* (amphibia, leptodactylidae)

Penna, Mario

Narins, Peter M.

Feng, Albert S.

Thresholds for evoked advertisement calling for 18 males were measured in a temperate forest in southern Chile, in order to relate this behavior to the intensities of neighbors' calls that males of this species encounter in nature. Stimuli used were bouts of natural single-note advertisement calls played back at increasing intensity in steps of 6-12 dB. Male frogs responded with single-note advertisement calls to stimulus bouts at average sound levels of about 60 dB peak SPL (range: 39-85 dB peak SPL), measured at the subjects' position. Frogs increased their call rates in response to increasing stimulus intensity, reaching a plateau at about 24 dB above threshold. At intensities above threshold, 11 frogs also responded with double-note calls, and two of these frogs occasionally gave triple- and four-note calls. The average thresholds for advertisement calling are low enough so that males respond to their nearest neighbors in low-density aggregations, thereby sustaining the chorusing a