

Notes on the Mating Behavior of a Captive Colony of *Tadarida brasiliensis*

Rehabilitation activities from 1990 through 1995 in the state of Texas resulted in the accumulation of a captive colony of 27 non-releasable *Tadarida brasiliensis*. No mating activity was observed in the colony until the late fall of 1993. In November of 1993, several of the males were heard singing a faint, bird-like song, unlike any audible sounds heard in the colony for the previous two years. At the same time, several of the males in the colony began exhibiting territorial behavior, rubbing their chests (gular gland area) against fabric roosting pockets provided in the cage, as well as portions of the cage itself. These areas were aggressively defended, both vocally and physically, against intrusion by other males. Only females were allowed to enter and share these roosting pockets. Some of the males also appeared to exhibit possessive behavior towards particular females.

Although no equipment was utilized to record non-audible vocalizations during this time, such vocalizations may have been associated with this behavior, as males appeared to be aware of other males that came within proximity of their female roosting companions when such encounters were artificially manipulated outside of their sight, as evidenced by audible irritation buzzes. There was a significant change in the roosting pattern in the colony at this time, and four of the females began roosting with one particular singing male who had always roosted somewhat separately from the rest of the colony. The male singing, aggression, and territorial behavior continued through the month of February, 1994, and then ceased abruptly, and the colony resumed its former roosting pattern. All four of the females who had been roosting with the lone male became pregnant that season. Aggressive behavior was subsequently exhibited by males in the colony only towards this lone male, who was consistently chased off from any communal roosting area. This behavior repeated itself in the fall of 1994, when once again several males were heard singing. Again male aggression and territorial behavior was observed that continued through February of 1995, and then ceased. Again, several females moved into the roosting pocket used by the lone male while singing was heard, and again these females became pregnant.

This season, pregnant females subsequently moved into a roosting pocket utilized by a second adult male who appeared to guard the area, allowing only pregnant females to enter. Live births resulted in both 1994 and 1995. Infants shared the roosting area that had been utilized by the pregnant females, and also appeared to be guarded by the adult male. Females returned to alternate roosting areas after giving birth, but continued to move into the "guarded" roosting area to nurse infants. One interesting observation regarding the care of the young has been noted in relation to a female who gave birth to a still-born infant. This female was subsequently seen coaxing the two day old infant of another female to nurse from her. Although the mother of this infant continues to nurse the pup as well, this "surrogate mother" has been observed nursing the infant on a number of occasions for the entire three weeks since its birth.

Information regarding the caging, diet, and behavior of each individual in this captive colony is recorded in "Behavioral Study of a Captive Colony of Non-releasable *Tadarida Brasiliensis*", Amanda Lollar, 1995, and can be obtained from Lollar at 817-325-3404.

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Submitted by Amanda Lollar