DOMINANCE RELATIONSHIPS IN JUVENILE FIVE-LINED SKINKS (PLESTIODON FASCIATUS): DOES SMALL SIZE MATTER?

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I studied aggressive behavior of neonate Common Five-Lined Skinks (Plestiodon fasciatus). Two neonates of differing sizes were placed on opposite sides of a divided observation chamber for 48 hours. Then the partition was removed and a single retreat was placed in the center of the observation chamber, and the behaviors of the two neonates were recorded for 60 min. During an encounter, one lizard typically displayed aggressive behavior (lunging at or biting the other lizard) while the other lizard displayed submissive behavior (avoidance/fleeing/tail-wiggling); though in 24% of encounters the two lizards showed no reaction to each other. Scoring of behaviors made it possible to determine which lizard was dominant and which was subordinate in each trial. The larger of the two lizards was dominant in 75% of the trials, and the smaller of the two lizards was dominant in 25% of trials. In trials in which the smaller lizard was dominant, the dominant lizard “won” barely over 50% of encounters compared to over 70% in trials in which the dominant was larger. In all trials, the two lizards spent significantly more time on opposite sides of the observation chamber than on the same side because the subordinate almost always fled from the dominant, often to the opposite side of the chamber. Nonetheless, the two lizards often used the retreat simultaneously.