

Comments on Climbing Ability of the Common Barn-Owl

Bruce A. Colvin and Paul L. Hegdal

Department of Biological Sciences, Bowling Green State University,
Bowling Green, Ohio 43403;
Denver Wildlife Research Center, U.S. Fish and Wildlife Service,
Building 16, Federal Center, Denver, Colorado 80225

We recently encountered a brief note by Hamilton and Hamilton (1981, Bull. Texas Ornith. Soc. 14:24) describing climbing behavior displayed by an adult female Common Barn-Owl (*Tyto alba*). When flushed from its nest inside a water tower, the female flew to the bottom rung of a steel-rod ladder inside the tower and climbed rung by rung to the top of the ladder and water tower opening (ladder length 3 m, angle 75°). Hamilton and Hamilton (1981) could not find any reference to barn-owl climbing in the literature and implied this behavior to be peculiar.

We have been investigating a Common Barn-Owl population in SW New Jersey (1980–present) and have documented about 350 barn-owl nestings (1984, Colvin, B. A. Barn owl foraging behavior and secondary poisoning hazard from rodenticide use on farms. Unpubl. Ph.D. dissertation, Bowling Green State Univ., Bowling Green, Ohio. 326 pp.). In our opinion, barn-owls are excellent climbers and such behavior is common.

Tree cavities are common nest sites for barn-owls (56 different nest trees observed in our study area) and, because of depth and restricted space, owls must enter and exit by climbing. We frequently have observed owls at night coming to nest-cavity entrances with prey, disappearing head first down into the cavities, and soon after climbing back out. Our best observation of a barn-owl climbing out of a tree cavity was during the day when a female flushed from a nest containing 3 young inside the base of a silver maple (*Acer saccharinum*). The cavity was 6.2 m deep, essentially vertical, and approximately 0.6 m in diameter. While observed from above, the owl ran vertically up the cavity wall to the exit with its wings only slightly ajar from its body.

We also have observed barn-owls climbing vertical and near vertical man-made structures such as chimneys and objects inside abandoned water towers. We have documented 4 chimney nest sites in New Jersey (4 others in Ohio). One of these nest sites, for example, was approximately 8 m deep. The property owner frequently observed owls passing by a stove-pipe hole (approx. 12 cm diam.) in the wall above the cemented-over fireplace in which the owls nested. In chimneys, when observed from above, owls walked or ran up the inside walls. In water towers, while making their way to the exit, owls frequently climbed or walked up leaning pipes, boards, or ladders when present.

Our most noteworthy climbing observation was made during the day inside a covered, 15-m high silo. Barn-owls had nested in a nest box inside the top of the silo, and both adults were captured by hoop net as they flushed out the slot in the silo top. After banding, they were released separately into the silo base. The male began flying in a circular pattern around the silo bottom to gain elevation in his ascent to the top, as typically occurs with adults released in this fashion. However, when approximately 4 m from the bottom, the owl grabbed a vertical steel cable that ran from the center of a silage unloader in the silo base to the center of the silo roof. The bird then began climbing the cable by placing one foot above the other. Its wings were held slightly ajar as it climbed and the vertical axis of its body was essentially parallel to the cable. When it was halfway up the cable, we released the female into the silo and witnessed an identical performance. We stopped observations when the female was halfway up the cable and the male was near the top; both adults were climbing steadily foot over foot. In other silos where we have released owls during the day, the steel cable was absent, and in such cases, upon release, owls regularly flew halfway to the silo top, perched momentarily on an open door from the climbing-well, and then completed the flight to the top.

The excellent climbing ability of the Common Barn-Owl is not surprising, given its cavity nesting behavior and the lack of room for much wing movement in such cavity situations. In addition, young owls reared in the base of a deep cavity must be able to climb in order to exit the cavity as they approach fledging age.