

## Novel Winter Bathing Behavior by a Merlin (*Falco columbarius*)

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Few reports of bathing in the family Falconidae have been published. Bent (1938) mentions it only for the Prairie Falcon (*Falco mexicanus*), as does Holthuijzen et al. (1987). Palmer (1988) describes bathing behavior for the Peregrine Falcon (*F. peregrinus*). Ristow et al. (1980) describes bathing by Eleonora's Falcon (*F. eleonora*), as does Eisermann (2005) for the Orange-breasted Falcon (*F. deiroleucus*). For the Merlin (*F. columbarius*), Warkentin et al. (2005) reported one bathing in rainwater, and Haak and Buchanan (2012) reported several instances of winter bathing behavior. Most of these accounts are of birds wading in shallow water.

Schmidl (1988) lists various observed bathing techniques by falcons, including stand-in bathing in shallow water, flight bathing on the wing through a series of dips and rises, rain bathing either perched or on the wing, and snow bathing. Palmer (1988) also describes flight-bathing behavior, whereby a flying falcon briefly contacts the surface of a water body at a low angle before immediately ascending. Eisermann (2005) reported a different type of flight-bathing behavior whereby Orange-breasted Falcons flew directly into rain-soaked leaves. Swann et al. (1993) report several instances of immature Peregrine Falcons engaging in swimming behavior, and speculate that the behavior was associated with bathing. In this account, I report on a presumed bathing behavior of a Merlin using a swimming technique.

### OBSERVATION

The observation occurred from the Chesapeake & Ohio Canal National Historical Park (C&O Canal) towpath. The location of the observation was upriver from Milepost 91 near the confluence of Opequon Creek with the Potomac River. Temperatures at the start of the morning had been around (-9° C [15° F]) but by the time of the observation were just above freezing (0° C [32° F]). The observation was made using a 10x Zeiss binocular.

At approximately 1140 hours on 30 January 2016, I observed a Merlin flying several meters above the iced-over Potomac River. The falcon flew near the West Virginia shoreline within 200 m (656 ft) of where I stood, swooped low

over the river where the open Opequon Creek met the frozen Potomac River, then landed on the West Virginia shoreline on a broken tree trunk. Within about one minute, the Merlin flew from its perch and landed on the edge of the ice where the open water of Opequon Creek met the Potomac River. The Merlin stood in this location for another minute and then jumped into the open water breast first. It immediately flew from the water and landed at the edge of the ice. There it remained relatively motionless for several minutes, scanning the area by turning its head from side to side. The Merlin again suddenly plunged into the open water breast first, but rather than exiting the water immediately, it began to use its wings to row into open water away from the edge of the ice. It rowed in a shallow circle approximately 2 m (~7 ft) away from the ice shelf, returned to the edge of the ice, flapped out of the water, and stood on the ice. It then shook its feathers and soon flew back to the previous perch on the broken tree trunk. The Merlin then proceeded to preen its feathers. The entire sequence of activities lasted approximately 10 minutes, after which I departed with the Merlin still perched.

## DISCUSSION

While few reported observations exist of bathing Merlins and none that I could find that involved swimming, it is well known that falcons regularly bathe. For Peregrine Falcons, Palmer (1988) suggested that this has been known for centuries. Swann et al. (1993) also stated that, "Peregrines have a strong 'motivation' to bathe daily." At a falconry event in Utah during late autumn, falcon owners, including those with Merlins, would break ice in frozen bird baths to allow their birds to bathe (Tom Humphrey, pers. comm., 4 February 2016). The observation of a Merlin bathing in winter by swimming may have been a result of a scarcity of open water resulting from extremely cold temperatures in the area at the time and an opportunity to exploit access to open water in an area with good visibility of the surroundings, which enabled scanning for potential predators. Swann et al. (1993) postulated a similar explanation for immature Peregrine Falcons swimming in Maine where access to shallow water for wading was limited.

## ACKNOWLEDGMENTS

I thank Tom Humphrey (falconer and immediate Past President of the Frederick Bird Club) for relating the story to me about falconers breaking ice to allow their falcons to bathe. I also thank Joseph B. Buchanan (Natural Resource Scientist, Washington Department of Fish and Wildlife, Olympia, WA) for his thoughtful review of an earlier draft and for providing additional falcon bathing references. Comments of two other anonymous reviewers also improved an earlier draft.

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