The Outside Story

Early Bird Gets the Nest

By Loren Merrill

As the frost line retreats northward in the early spring, its withdrawal is often closely followed – and occasionally preceded – by the arrival of our most common flycatcher: the eastern phoebe. In fact, depending on where you live, you may already have one nesting above your front door.

Have you ever wondered why these small, onomatopoeic birds arrive weeks before the other flycatchers, such as eastern wood-pewees, eastern kingbirds, and least flycatchers? Why do phoebes pursue the cold so closely instead of giving the warmer weather a few weeks to get comfortably settled in? By riding Winter's coattails, they risk the inevitable backslides into freezing temperatures, which, for a phoebe, can range from minor annoyance to deadly depending on the severity and duration of the cold.

One possible reason for the phoebes' early arrival is that it allows them to track the oncoming spring and start breeding as soon as conditions turn favorable. Eastern phoebes are short-distance migrants, with most individuals wintering between the Gulf Coast and mid-Atlantic states, so they are able to quickly return to their breeding grounds. Soon after their arrival they locate suitable nest spots and begin the nest-building or renovating process. But they generally take a leisurely approach to this work, drawing it out over the course of a few weeks. Moreover, females typically delay the laying of their first egg for 7 to 14 days after finishing the nest.

This extensive, and consistent, lag between their arrival and the laying of the first egg suggests that the birds almost always arrive weeks before they need to in order to catch optimal nesting conditions. Therefore, while being able to respond quickly to favorable conditions could play a role in their breeding ecology, another variable may be more important in shaping the timing of their arrival: the phoebe's unusual nest-site requirements.

Eastern phoebes are rather particular about a prospective nest location's attributes. They like a flat surface on which to build the mud foundation of their nest, but it can't be too damp or the mud base won't adhere properly. They prefer a roof sitting just a few inches above the top of the nest opening, and ideally walls on

three sides of the nest for protection. It's best if the nest is atop a sheer wall with no nearby vegetation, and close to an open area for foraging. In short, they want the perfect "nook."

Before people built bridges, barns, houses, and other structures that phoebes have adopted for nesting in the past few hundred years, potential nest sites were very limited. Most natural nest sites are protected rocky outcrops, especially along streams and rivers. This rarity made nest sites a hot commodity in the phoebe real estate market, and the resulting competition for suitable locations may have been the driver of their early migration habits. The timing of their spring arrival would thus be a compromise between competition for nest sites (the early bird gets the nook), and their physiological and energetic limits for tolerating the cold weather and lack of high-quality food (the too-early bird gets the hook).

As is often the case in science, one question can lead to another. We might ask: why are phoebes so restrictive in where they nest? Why limit themselves to something that is relatively rare across the landscape?

One likely reason is the risk of nest-predation. Eggs and nestlings are prized delicacies for a host of other animals. Raccoons, crows, jays, and rat snakes are prime nest-predators, and even mice, squirrels, and deer will go out of their way for a nest meal. In a world of would-be egg thieves, a safe nest spot is of paramount importance.

The features that make a given nest site attractive to a phoebe are exactly those that make it safe from predators. A roof a few inches above the top of the nest, and the presence of walls, make detection and access very difficult for aerial predators such as crows, jays, and hawks. Being situated in or above a sheer wall without nearby vegetation makes access by terrestrial and arboreal animals challenging. Many of these anti-predator traits also help protect the nest from inclement weather, and buffer it from extreme temperatures.

As spring comes north, keep an eye out for phoebes doing the same. Though they may be a common sight in our yards and parks in the spring and summer, when we begin asking questions about their migration and nesting behavior, it becomes clear that our tail-bobbing neighbors are far from commonplace.

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