

**WINTER FORAGING OF EASTERN PHOEBE AT A NORTH
MISSISSIPPI SEWAGE LAGOON**

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On 4 January 1999 I visited the City of Oxford waste water treatment plant (WWTP) to survey the waterbirds using the 4.25 hectare sewage lagoon. This facility is located 9.7 km south of the center of Oxford and 0.48 km east of MS highway 7. While viewing ducks on the lagoon from its southwest corner by means of an 80 mm 20-60X spotting scope mounted on my car window, I noted a small bird on the slanted side of the east end of the impoundment, which also is covered by the heavy black-plastic liner of the lagoon. Instead of a small sandpiper as I had supposed, a closer look showed the bird to be a passerine species. I was able to identify it confidently as an Eastern Phoebe (*Sayornis phoebe*) because it showed a blackish head and upperparts and whitish underparts, and it pumped or wagged its tail when perched in the manner characteristic of an Eastern Phoebe.

It struck me as quite unusual that the phoebe was foraging only at the very waterline of the lagoon, or within about 0.4 m above it. It perched on wrinkles or seams in the plastic surface between frequent forays consisting of fluttering, short flights directed at food objects that were beyond my discerning. I observed this behavior continuing from 1625 to about 1655 hours, when the bird may have left to go to roost as dusk approached. During this interval the bird only once flew above the layer from the water level of the lagoon to the top of its impounding rim, a vertical

distance of about 0.7 m, but a distance of nearly 2 m on the slanted (ca. 30°) surface. At that point the phoebe was disturbed by the passing nearby of a Northern Harrier (*Circus cyaneus*) so that it flew into the shrubby edge of woods adjacent to the northeast corner of the lagoon; but it remained for only one or two minutes before returning to feeding as before. While being observed, the phoebe foraged along about 100 m of the edge of the lagoon.

The reason for the phoebe's choosing this extremely limited microhabitat for its foraging probably was the severity of the weather prevailing on that day. The air temperature was below average, -6.7°C (20° F), and the wind was from the north at about 32.2 km/hr (20 mph). These factors combine to give a quite low windchill of around -23.3°C (-10° F). However, it seems likely that there was a significantly more moderate microclimate for the bird near the surface of the lagoon where it was foraging. More importantly, this condition likely made food more available there than anywhere else in the vicinity under those weather conditions.

Other observers have noted a tendency for Eastern Phoebes to be found in winter near sewage ponds or lagoons in northern Mississippi (G. Knight, A. Jolley, personal communication, January 1999). Indeed, Knight had independently observed one or several Eastern Phoebes on multiple occasions in the vicinity of this lagoon or an older, much smaller sludge pond on the same WWTP property. However, neither Knight nor Jolley had noted such restricted feeding behavior as is described here.

The use by the Eastern Phoebe of feeding habitats near water in fall and spring migration, as well as when nesting, has been noted (Weeks, 1994). However, Weeks cited only one report on winter season use of feeding habitat near

water, that being from an area outside of the species' typical winter range, California. The present report serves to affirm that the Eastern Phoebe feeds near wetlands in winter as well as at other seasons, and to suggest that man-made wetlands of WWTP lagoons may provide an especially rich foraging microhabitat of particular value during more severe weather. This possibility may warrant further study.

Acknowledgments

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Literature Cited

Weeks, H. P., Jr. 1994. Eastern Phoebe (*Sayornis phoebe*).
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