

Feeding and Nesting Behavior of the Eastern Wood Pewee

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On 1 July 1977 we saw a pair of Eastern Wood Pewees (*Contopus virens*) feeding from a powerline at a height of about 3 m in front of a house near Duke University, Durham, N.C. Several days later it was noticed that construction of a small nest had begun at a height of about 5 m in the fork of a branch of a southern sugar maple (*Acer barbatum* Michaux). Over the period of the next 2 weeks a bird was found sitting on the nest every time the area was checked. On 16 July the eggs had hatched.

The adult pewees now became much more conspicuous in their feeding. The male appeared to be slightly larger than the female. Frequently they were observed on powerlines and in the canopies of nearby red oaks. The birds sat on the perch, looking about for flying insects. When prey was detected, the pewee would sally forth and quickly catch the insect in flight. Even insects flying about vegetation less than 0.5 m in height were sometimes taken by the birds. The insect was then killed and either eaten directly or, more commonly, taken to the nest to be fed to the young. The birds appeared to be highly successful in capturing insects; on one occasion when their success rate was scored, the female went to the nest with food one out of every three times she sallied forth from her perch.

Noting this behavior, we attempted to feed the bird small crusts of bread. After inspecting and letting fall the first few samples, the bird then ceased even to leave the perch for the tossed crumbs. When the bread was replaced by live grasshoppers, however, the bird responded in the normal fashion: first, catching and crushing the insect and then taking it to the young in the nest. Both birds were willing to accept hand-tossed insects, but the female seemed more receptive and had a higher success rate (approaching 100%). The birds accepted grasshoppers, crickets, moths, and larvae feeding on ears of corn, although their usual diet probably consists largely of high-flying insects. They also accepted ladybird beetles but refused a similar-looking beetle collected feeding on horse nettle (*Solanum carolinense* L.). They would merely approach a tossed shield bug and return to the perch. Furthermore, grasshoppers or other insects larger than about 2.5 cm had to be dismembered before the pewees would accept them.

In an attempt to discover whether prey discrimination is visual or olfactory, a grasshopper of suitable size was covered with the body fluids of a crushed shield bug. The pewee accepted the grasshopper, suggesting that the birds rely upon visual cues to discriminate among food items. This system of perception must be quite sharp as the bird could apparently distinguish an edible ladybird beetle from another inedible beetle with similar coloration.

From the time the young appeared to 30 July, when the young birds were fledged, the parents were observed gathering food both in the morning (as late as 1000 EDT) and in the evening (as late as 2000 EDT). The birds became increasingly bold and actually would approach a potential feeder entering the yard and hover waiting for a handout. Finally, the female was willing to take insects from the hands of a feeder.

The Eastern Wood Pewee is reported to lay from two to four eggs per clutch. We do not know the size of the clutch in this case, but two young birds were successfully fledged on 30 July at an age of about 2 weeks. The parents were observed to continue feeding in the area for some time following the departure of the young.

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