

advertising song of Hammond's Flycatcher (*E. hammondi*) but due to the dense vegetation (Auk Vol. 71, plate 12) never saw the bird.

Other species of the family Tyrannidae have a flight song and position notes. More careful work needs to be done to establish the function of the vocalizations.

Indeed we should not be surprised that a bird with a different set of syringeal muscles should have different vocalizations and functions from those of a true song bird.

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### Response to D. E. Davis

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Davis (1988) raises two interrelated points. The first is defining "song." In general, songs are separated from calls by one of the following criteria: ontogeny, complexity or advertising function. As all vocalizations of tyrannids seem to be innate (Kroodsma 1985), the ontogeny criterion is inapplicable in that group. Further, except for the "dawn songs," all flycatcher vocalizations are quite simple (Fitzpatrick 1985). In Willow Flycatchers (*Empidonax traillii*), the "fitz-bew," "fizz-bew" and "creet" vocalizations to which I referred as songs (Seutin 1987) are only slightly more complex than the other notes of the species. I judged these vocalizations to be songs on the basis of their advertising function.

The second point is the statement that "*the advertising song [of Empidonaces] is given at dawn or dusk and is an elaborate performance*" (italics are mine). Davis clearly refers to the "dawn song" typical of many tyrannids. I know of no convincing demonstration of a specific function for these performances, but, if they are used to advertise territories, they are most probably not the only vocalizations with that function because they are given only during short periods in the morning and evening. My personal experience, that of others (e.g. Stein 1963), and results of playback experiments (Stein 1963, Prescott 1987), all strongly suggest an advertising function for the "fitz-bew," "fizz-bew" and "creet" vocalizations of the Willow Flycatcher. That these vocalizations may also serve as "position notes" in intrapair communication, as Davis suggests, does not preclude them being called songs.

Finally, Davis states that position notes (my songs) are "given by both male and female Empidonaces

(Davis 1954, 1959)." In these papers, however, Davis stated that female Empidonaces *do not* give "males' position notes." Specifically, Davis (1959) stated that: "... sex [of Least Flycatchers (*E. minimus*)] was determined by the 'chebec' call," and "... collections of Hammond's Flycatcher (Davis 1954) always verified the belief that only the male called." I reiterate that flycatchers should never be sexed on the basis of their vocal behavior (see also Kellner and Ritchison 1988).

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