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Effects of a late spring storm on a local Dusky Flycatcher population.—Few investigators regard the breeding season as a time of significant adult mortality, but in regions of highly variable and unpredictable weather conditions, high adult mortality can occur in local breeding populations. The effects of juvenile mortality on population size are well documented (Lack 1966, *Population studies of birds*, London, Oxford Univ. Press), as are those of inclement weather on nestlings and juveniles (Jehl and Hussell 1966, *Arctic* 19: 185; Stewart 1972, *California Birds* 3: 69). While severe winter weather contributes to high mortality in both adults and juveniles, only rarely is significant weather-related adult mortality reported in the breeding season.

In the course of a study on the foraging strategies of insectivorous birds in Kawuneeche Valley, Rocky Mountain National Park, Colorado, I observed the elimination of a local population of Dusky Flycatchers (*Empidonax oberholseri*). The spring of 1974 at this elevation (2900 m) was relatively warm and dry. Dusky Flycatchers had arrived and were singing by 30 May (one week earlier than in 1973), as were the several warbler species that also nest there. By 1 June at least five male Dusky Flycatchers were singing in the 35-ha study tract of willow thickets, beaver ponds and channels, and small stands of lodgepole pine, where seven pairs bred in 1973.

Although other species of flycatchers had begun to take up residence in similar habitats nearby, only Dusky Flycatchers were present in the study area when it began to rain on 5 June. Rain continued almost without interruption, through 6 and 7 June. On 8 June the rain turned to snow, and by the end of the day, lower Kawuneeche Valley was covered with 14 inches of snow. The wet snow bent willows double, often pressing them to the ground. Warm temperatures on 9 June began to melt the snow but patches of open ground did not appear until the following day, and many birds found it impossible to survive such difficult conditions. I saw a number of ground-feeding birds actively gleaning from the trunks of lodgepole pines. Park Service Naturalist Jerry Spangler found dead Hermit Thrushes, *Catharus guttatus* (12), Gray-headed Juncos, *Junco caniceps* (9), and Chipping Sparrows, *Spizella passerina* (5), at the Green Mountain residential area, about half a mile from the study tract. Around four houses in Sun Valley, a private residential area one mile to the south, on 10 June my assistant and I found the following dead birds: Hermit Thrush (about 10); Savannah Sparrow, *Passerculus sandwichensis* (1); Gray-headed Junco (3); American Robin, *Turdus migratorius* (1); Lincoln's Sparrow, *Melospiza lincolnii* (2); Yellow-rumped Warbler, *Dendroica coronata* (1); Water Pipit, *Anthus spinoletta* (1). For the only time in 3 years' work, I found dead adult birds in the study tract: a Brewer's Sparrow (*Spizella breweri*), a Lincoln's Sparrow, and two Gray-headed Juncos.

On our first working day after the storm, 10 June, even with the ground still covered by snow, the first Western Wood Pewees (*Contopus sordidulus*) and Willow Flycatchers (*Empidonax traillii*) of the season were singing in the study tract. Previously abundant Dusky Flycatchers were now absent, nor did any appear during the following weeks. Both Western Wood Pewees and Willow Flycatchers completed a successful breeding season in the study tract, as well as in nearby areas of similar habitat, where some Dusky Flycatchers also nested successfully. Though no Dusky Flycatchers appeared in the study tract after the June storm, three pairs nested there in 1975.—ROBERT C. ECKHARDT, *Department of Entomology, Comstock Hall, Cornell University, Ithaca, New York 14853.* Accepted 21 Nov. 75.