

A Feeding Congregation of Local and Migratory Birds in the Mountains of Panamá.—While banding migrant and local birds in the highlands of western Panamá, we discovered a large congregation of birds feeding in an area that had many shrubs, *Leandra subseriata* (family Melastomaceae), in fruit. The area (6,000 ft. elev.), near Cerro Punta, Chiriquí Province, Panamá, was essentially second growth, with the fruiting shrubs up to 15 ft. tall. The surrounding land was originally humid montane forest, but has recently been cleared and used agriculturally.

The berries, abundant on the shrubs and being eaten by the birds, were about 5 mm. in diameter and light blue. Netted birds frequently showed the blue berry stains which revealed their feeding habits. Typical stains included marks on the feathers of the abdomen or vent area, light blue excreta, and bluish coloration inside the mouth. Below are listed the species and numbers of individuals captured with 12 nets in this fruiting area on 31 March 1968, the first day of banding in this location. (The nine species showing berry stains are marked with an asterisk.)

Sulphur-winged Parakeet (*Pyrrhula hoffmanni*), 1; *Mountain Elaenia (*Elaenia frantzii*), 102; *White-throated Robin (*Turdus assimilis*), 1; Clay-colored Robin (*Turdus grayi*), 4; *Mountain Robin (*Turdus plebejus*), 3; Black-faced Solitaire (*Myadestes melanops*), 1; *Swainson's Thrush (*Hylocichla ustulata*), 18; Ruddy-capped Nightingale-Thrush (*Catharus frantzii*), 4; Rufousbrowed Peppershrike (*Cycalrhis gujanensis*), 1; *Flame-colored Tanager (*Piranga bidentata*), 3; Common Bush-Tanager (*Chlorospingus ophthalmicus*), 4; Buff-throated Saltator (*Saltator maximus*), 2; Streaked Saltator (*Saltator albicollis*), 2; *Rose-breasted Grosbeak (*Pheucticus ludovicianus*), 2; *Yellow-thighed Finch (*Pselliophorus tibialis*), 2; Yellow-throated Brush-Finch (*Atlapetes gutturalis*), 2; and *Chestnut-capped Brush-Finch (*Atlapetes brunneinucha*), 2. In addition, about fifteen individuals of nine non-frugivorous species were netted. Throughout April most of the foregoing species continued to congregate and feed in the area, in numbers similar to those recorded on the first day, although the Swainson's Thrush greatly increased (e.g. on 23 April we banded 110).

Several points of interest are reflected in these data.

(1) A concentrated food source, such as fruiting shrubs, can cause a large congregation of both local and migrant species. In our study, for example, six species of thrushes were present, and the migrant Swainson's Thrushes formed sizeable feeding flocks.

(2) Although the Mountain Elaenia is said to be a non-migratory resident in the area, the very high local density recorded on 31 March indicates that the species is rather mobile and may in fact be partially migratory. Fruit eating has been previously reported for several species in this genus (*Elaenia*) of flycatchers: *E. gaimardii* and *E. flavogaster* by Beebe (*Zoologica*, 2: no. 3, 1916), *E. martinica* by Crowell (*Auk*, 85: 265-286, 1968), and *E. chiriquensis* by Skutch (*Life Histories of Central American Birds*, II, 1960).

(3) The food source appeared to be "superabundant" as the berry production of the shrubs far exceeded the birds' consumption rate, at least for several weeks. Thus, migrants may avoid possible competition with resident species by feeding at such food sources.

(4) Banders can obtain information on food habits by taking notes on the occurrences of berry stains on netted birds.

The material for this note was gathered during a season of banding with Dr. Horace Loftin's migrant research program in Panamá, with support of the Public Health Service (grant AI 06072). Our thanks also for facilities provided during our period of research at the Volcán de Chiriquí Field Station and Nature Center, jointly operated by the Florida Audubon Society and the Florida State University Center for Tropical Studies. Bertram G. Murray, Jr., kindly read the note and offered his suggestions; and P. A. Hyypio of the L. H. Bailey Hortorium identified specimens of the shrubs.—Charles F. Leck, Section of Neurobiology and Behavior, Langmuir Laboratory, Cornell University, Ithaca, New York, and Steven Hilty, Department of Zoology, University of Arkansas, Fayetteville, Arkansas.