Likely Nest Reuse by a Field Sparrow.—On 11 May 1978, I found a Field Sparrow (*Spizella pusilla*) nest containing 4 eggs. This same nest contained 3-day-old young on 13 June, thus 2 clutches had to have been laid in the same nest. This nest was located 16 cm above the ground in a clump of *Lespedeza cuneata,* on a partially revegetated strip mine 7 km west of LaFollette, Campbell County, Tennessee. A complete history of the nest follows: 11 May—adult flushed from nest containing 4 warm eggs; 31 May—adult on 4 eggs; 5 June—adult on, not flushed; 6 June—adult on 4 eggs; 13 June—3 young, about 3 days old; 15 June—3 young, about 5 days old; 25 June—nest empty except for one crushed egg in bottom of nest, fledglings in area.

Walkinshaw (U.S. Natl. Mus. Bull. 237:1217–1235, 1968) gives a mean incubation period of 11.6 days, and a maximum of 17 days, almost certainly precluding the possibility of the 31-day incubation period that would have occurred had only one clutch been laid in the nest. Neither Walkinshaw (op. cit.) nor Best (Ph.D. thesis, Univ. Illinois, Urbana, 1974) mention reuse of a nest by the Field Sparrow. Walkinshaw (pers. comm.) did observe a female desert a partially built nest, and following the loss of another nest, return and rebuild the same nest. Allaire (Auk 89:886, 1972) observed a Field Sparrow brood in an abandoned nest which was empty for at least 2 weeks prior to egg laying. Nolan (U.S. Natl. Mus. Bull. 237:1492–1501, 1968) mentions reuse of previously successful nests by the Song Sparrow (*Melospiza melodia*).—CHARLES P. NICHOLSON, *Tennessee Valley Authority, Norris, Tennessee 37828.* Received 4 September 1980, accepted 7 March 1981.

Observations on a Winter Roost of Rosy Finches in Montana.—Rosy finches (*Leucosticte* spp.) use a variety of structures as winter roost sites, including buildings and similar structures (Behle 1944, 1973; French 1959a,b; King and Wales 1964), shallow caves (French 1959b), lowland cliffs (Bent 1968), Cliff Swallow (*Petrochelidon pyrrhonota*) nests (Leffingwell and Leffingwell 1931, Shaw 1936), shallow wells (Behle 1973), and mine shafts (Miller and Twining 1943). Such roosts offer varying degrees of protection from winter climatic conditions, but, other than King and Wales' (1964), no data on the nocturnal microclimate of winter rosy finch roosts have been published. During the winter of 1978–1979 I was able to observe activity and measure the microclimate at a roost of Gray-crowned Rosy Finches (*L. tephrocotis*) located in a mine shaft (1900 m elev.) 1.5 km S of Virginia City, Madison County, Montana.

I first observed rosy finches in the Virginia City area 1 November 1978 when a flock of about 75 Gray-crowneds was encountered flying to feeding sites on the grassy, sagebrush (*Artemesia tridentata*) slopes within 0.5 km of the roost (which was not located until 20 February 1979). Rosy finches were observed regularly in the Virginia City area the remainder of the winter. Flock size varied from 5 to 100, fluctuating day to day, indicating that the larger group may have dispersed into smaller flocks during some days. Small numbers were often seen visiting a feeding station in town between 0700 and 1400. Maximum daily ambient temperatures (T_a) for the observation period (1 November–29 March) ranged from −17.6 to 7.2°C. Most of the birds were *L. t. tephrocotis,* but as many as 5 *L. t. littoralis* were seen within a flock.

On 20 February at 1500, I watched a flock of 60 rosy finches fly down the Cornucopia shaft (entrance 2 × 2 m) above town. From the top I could hear *chew* calls (see Shreeve 1980) from the birds, and when snow was dropped down the shaft wing-flapping and gutteral *chirp* calls could be heard. The birds were roosting at least 8–10 m from the top. The next day (21 February) the roost was occupied when checked at 1730 (T_a = −2.2°C). Subsequently, each evening the roost was checked (n = 11 days) I found it occupied. The shaft was still in use when last checked on 28 March at 1830 (T_a = 5.5°C). By this date most of the surrounding hillsides were snow-free.

On 21 February I measured the temperature of the mine air (T_a roost) in the U.S. Grant level 3 with a mercury thermometer at 9–10°C. This mine is connected to the Cornucopia shaft by a series of passages, thus most of the air drawn into the Grant-Cornucopia complex rises like a mild breeze out through the Cornucopia shaft where the finches roost. This means that, due to convection currents, the roost is bathed in 9–10°C air throughout the winter. On 30 January and 22 February the overnight outside tem-

perature droppea to −28.6°C while the finches slept in a relatively warm 9–10°C, a temperature difference of nearly 40°C.

On the mornings I checked in March (n = 6), the finches left the roost shortly after first light (about 0630) in groups of 3–10 birds. Estimated roost population remained at 60–70 individuals. On 17 March some finches still occupied the roost at 0800, indicating some variability in departure times. It appears the birds returned to the roost at about 1500 each day. Daily occupancy of the roost by the majority of birds was thus about 15–16 h in duration.

Discussion.—Studies by King and Wales (1964) at a rosy finch roost in Utah provide conservative calculations on the physiological capabilities of finches to survive a winter night. For February birds they calculated energy reserves of 26 kcal/bird for *L. t. littoralis* and 20 kcal/bird for *L. t. tephrocotis,* and a total nocturnal energy expenditure of 8.4–10.7 kcal/night when roosting at −3.3°C for 15 h. Their calculations do not incorporate radient heat reflected from the bird back to itself off the roost walls, nor the energy content of food in the alimentary canal. Still, it is clear that the reported energy reserves are more than sufficient to sustain a bird through the winter night when it occupies a sheltered roost.

Conditions at the Virginia City roost reduce the nocturnal energy requirements of the finches by reducing the temperature gradient between bird and roost environment. My observations indicate the Montana finches roosted in a more favorable microclimate than those in the Utah study. This situation should have allowed greater flexibility in an individual bird's daily time budget by reducing the amount of time required for the acquisition of food. A bird would have the option of spending a greater amount of time in the roost each day, reducing the risk of predation and the amount of maintenance energy expended when not obtaining food. This may explain the mid-day presence of rosy finches in the mine shaft roosts observed by Miller and Twining (1943).

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A Three-legged Cattle Tyrant.—In 1966 a surveillance program on arbovirus transmission was established in certain forested areas of the state of Sao Paulo, Brazil. We studied the emergence of Rocio Virus, (Togavirus, flavivirus), an agent of epidemic human encephalitis which includes wild birds as hosts during part of its life cycle (Lopes et al.