

Lawrence, Kansas

Dec. 31, 1967

Snowed yesterday & last night to approx. 2 1/2 inches. Temp at 8:00 A.M. 4° F. Noted starling standing on edge of chimney with heat passing directly onto bodies. This is one instance where the starlings were touching each other. Nearly all other times they are separated by the width of their body. Also noted that on the feeder they are always separated except when they share a common source of localized food when heads are close together. Antagonism in birds may be a result of shape and use of bill; the sharp pointed ones being the more aggressive. The order of dominance on the feeder from most aggressive to less aggressive is ^{house sparrow} flicker, red-bellied woodpecker, bluejay, starling, cardinal, ~~house~~ junco ~~sparrow~~.

Noted an Oregon junco (*Junco oregonus mearnsii*) at feeder. The slate colored junco dominates the mearns junco. This bird has a light gray head & breast evenly colored. The sides are pinkish and the back ^{light} brownish in contrast to light gray of head. There is ^{irregular} no brownish color in head & breast as is found in a juvenile slate colored junco. I have noted juvenile & females of the slate-colored junco with pinkish sides. Some good slate-colored birds have a brownish cast to a dark striped back that contrasts with black of head (in good sunlight).

House sparrows leave first when there is outside disturbance. Starling second & junco remains. The starling sorts feed by thrusting lower mandible backwards resulting in a wide gape of mouth. Musculature of the lower mandible in starling must be adapted to this behaviorism. Starling remain on chimney for 30-60 sec or longer and then leave to feed and then return to chimney. Other birds at feeder include downy woodpecker and yellow-shafted flicker. Watched a yellow-shafted flicker work down a trunk of a large elm covered with virginia creeper vines, to base of tree and then drop to snow and start to excavate at base of vine in snow. Even though the temp was 4° F it still searched the vines, especially beneath the vine at tree contact. Speaking of vines, there is one growing in cellar with roots and 4 feet of vine on outside of house and exposed to these low ^{outside} temperatures. The English sparrow is the first to react to disturbance and will generally call the starling away at the same time. The slate-colored junco remains but pauses one or two seconds to survey the area before commencing feeding.