
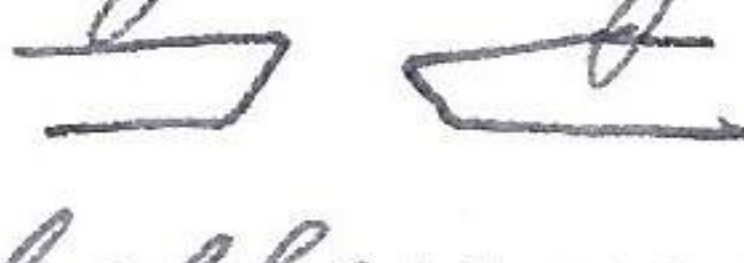
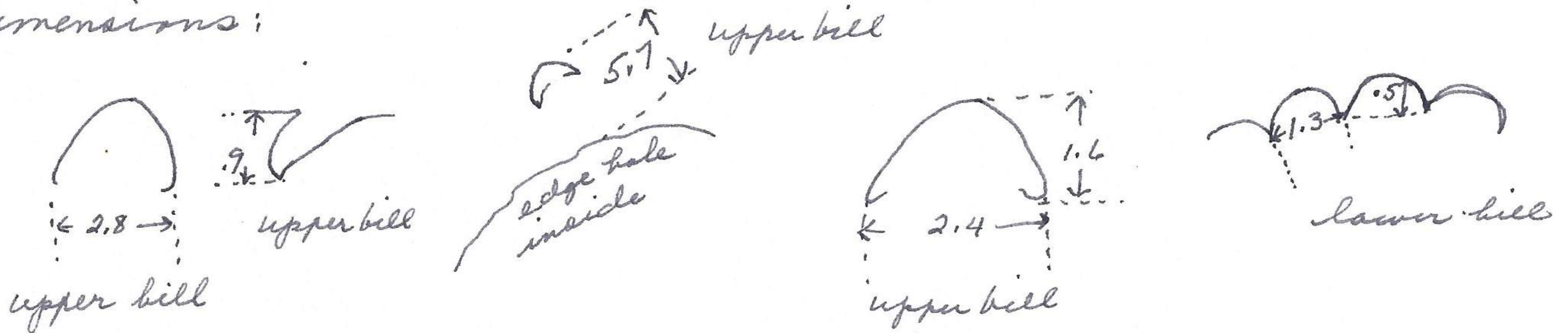



Museum of Natural History, Univ. of Kansas, Lawrence, Kansas  
 Feb. 28, 1978

Lothers brought in 4 fronts of bird house in which the Eng. sparrow size hole had been enlarged by at least  $\frac{1}{3}$  or more. These house were placed on sides of barns and were inaccessible to mammals. The openings were, for the most part irregularly enlarged  and showed a beveled excavation angle  Imprint marks in the soft plywood (1/4 inch) were of the following dimensions:



The upper bill marks were on inside of hole while the lower bill marks were on the outside and edge. The upper bill was used as a holdfast whereas the lower bill was used to cut ~~the~~ and enlarge the operative. The action of enlarging was throughout the entire margin of the hole. The bill would have to have been a raptor with a length of upper bill to gape of at least 5.7 mm. Will check on the two most likely suspects, the sparrow hawk & screech owl. It is assumed that they were after a bird that was inside of the box. See notes of February 14, 1978 for sparrow hawk at martin house. The bill would have been of this order  This winter the sparrow hawk has been handicapped in capturing mammals by persistent snow cover and cold weather and they may have been forced to prey upon small birds for food.

402 Yorkshire Dr., Lawrence, Douglas Co., Kansas  
 March 2, 1978

Snowed today and last night up to six inches. Temp below freezing.

March 2, 1978

High winds last night and some drifting of snow. At feeder today at one particular time (average numbers). 40 Eng. sparrows, 11 tree sparrows, 5 slate-colored juncos, 12 cedar waxwing and 6 robin, 2 bluejays, 7 starling, 7 goldfinch, 1 Harris sparrow and Lincoln sparrow. Other birds that have visited the feeder in the last week are chickadee, meadowlark, sparrow hawk, pine siskin. The