

## COLD-WEATHER BLOOD FEATHERS IN DOVES?

by

Wilmer J. Miller  
Department of Genetics,  
Iowa State University  
Ames, Iowa, 50011

Iowa in the winter is located just south of the North Pole, so we have to keep the doves in-doors then. In fact, any state where the temperature is likely to present a wind-chill of 20°F or lower can be a serious problem for doves. I expect most of the squabs to succumb at such temperatures. Recently we have had - 18°F (and - 44°F wind chill). The adults can endure such spells if they stay dry, cannot put their feet into water, are protected from wind and are well nourished.

But a strange trouble has often appeared -- new feathers that do not open normally but stay blood-filled (see photo\*). These feathers may freeze and then burst. I have not seen such in domestic pigeons, which seem much more cold-tolerant.

So far as I know, nobody else has previously reported such blood-feathers in doves and their relation to frigid weather. If anybody raising doves observes such abnormal feathers and has a different explanation, I would be interested in hearing from them. Also, does it occur in other species of doves? Anyway, I am sure it is not some new disease, since I see it every winter here, and the problem disappears with the warmer weather, although the blood stains may be seen for quite a while. When a big regrowing tail feather bursts, it looks awful -- life threatening, although it is not.

Possibly the thyroid gland of the dove is "over-active" from cold-stress, and this may induce some molt. It is known that thyroid hormone is necessary for normal molting.



\*Courtesy of W. F. Hollander

ADAN May - June '86