

SALMONELLA TYPHIMURIUM INFECTION IN FERAL BIRDS*

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THIS report concerns the isolation of *S. typhimurium* from free-flying birds. As far as the authors are aware this is the first time that such isolates have been made.

Case no. 1. On 2 Apr 1954 a starling was received from Mrs. S. of North Bergen, Hudson County, New Jersey, who stated in her accompanying letter that so many birds had been sick and dying during the winter that she suspected the neighbors were poisoning them. Since the bird had been in the mail 9 days, it was not in a suitable condition for examination, and Mrs. S. was requested to send in more of the afflicted birds. One starling was received on each of the following dates: 21 Apr, 3 May, and 27 May 1954. The first bird had an enlarged spleen, a yellow nodule in the pectoral muscle, and raised yellow nodules in and along the esophagus. The other birds were thin but had no visible pathology. A pure culture which fermented glucose and maltose with acid and gas formation but not lactose and sucrose was obtained on nutrient agar from each bird. All three cultures were typed as *S. typhimurium*.

Case no. 2. On 5 Apr 1955 a sparrow and a cowbird were

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received from Mrs. B. of Pompton Plains, Morris County, New Jersey, who wrote that during the preceding fall and winter at least 50 birds had died on the premises. No particular pathology was noted. A pure culture was isolated from the liver which gave acid and gas in glucose and maltose. Lactose and sucrose were not fermented. The culture from the cowbird was typed as *S. typhimurium*. The culture from the sparrow was rough and typed only as probably *S. typhimurium*.

Case no. 3. On 16 Nov 1955 two rusty blackbirds and four sparrows were received from Mrs. B. Mrs. B. reported that seven birds were found dead on 13 Nov and six more the following day. In these birds the liver and spleen was enlarged. A pure culture was isolated from the liver of each. Glucose and maltose were fermented with the formation of acid and gas. Lactose and sucrose were not attacked. All cultures were typed as *S. typhimurium*.

Case no. 4. On 11 Sep 1956 two sparrows and four rusty blackbirds were received from the premises of Dr. W. of Chatham, Morris County, New Jersey. Ten birds had been found dead over the weekend. The birds were found to have an enlargement of the liver and spleen. A pure culture was obtained from each bird on nutrient agar, which gave acid and gas in glucose and maltose. Lactose and sucrose were not fermented. All cultures were typed as *S. typhimurium*.

The four outbreaks of *S. typhimurium* infection in feral birds occurred in three communities in north-central New Jersey about 18 miles apart. In all three communities the people who sent in the specimens were bird lovers and were accustomed to feeding them. This practice caused the birds to concentrate on the premises and thus helped in the spread of the disease. The possibility that these birds may play a part in the spread of this infection to domestic animals and man cannot be overlooked.