## COMMENTARY

Age Separation of Mallards: A Reply.—Lent (J. Field Ornithol. 55:500-501, 1984) reviewed my article "Spring and summer age separation techniques for the mallard. J. Wildl. Manage. 47:1054-1062" and questioned the validity of my published technique. I believe that Lent misunderstood my analyses and has probably confused readers. I would like to clear up several points.

Lent questioned "the validity of the original qualitative classification" without giving a basis for his statement. The qualitative method is a tested and accepted method to determine ages of Mallards in the fall and winter, as referenced in my paper. In my research, this method was performed by S. Carney, who developed the qualitative method and who is a recognized expert in its use. Carney's original classifications in my sample were then reviewed by 2 other researchers, who rejected any wing that both felt was of questionable age. This further "cleaned up" the "flyway sample."

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Contrary to Lent's claim, I did not use the discriminant equations to "test the validity of the qualitative aging method." Instead, I used a sample of 50 free-flying, known-age Mallards in Manitoba to test the validity of the discriminant equations; these birds were of known age through marking in previous years. His misunderstanding leads him to erroneously imply circular reasoning in my paper. I did also test the validity of using the qualitative method in the spring and early summer, and I again used the 50 known-age Mallard sample, but this test did not use the discriminant equations. This is different than testing the validity of the accepted method in the fall, which Lent implies.

Lent confuses the 594 Mallards captured in Manitoba with the 50 known-aged Mallard sub-sample, and claims that the former tested the validity of the qualitative aging method. The majority of the 594 Mallards were aged by both methods for general comparative purposes, and were not presented as a test of either method. It is therefore of little consequence who or how many people aged these 594 Mallards (Lent's question).

Age functions presented in my original paper remain as valid means of separating ageclasses of Mallards during the breeding season. Lent misunderstood my analyses and his review resulted in false implications of circular reasoning.—Ronald C. Gatti, Wisconsin Department of Natural Resources, 3911 Fish Hatchery Rd., Madison, Wisconsin 53711. Received 8 Nov. 1985; accepted 26 Dec. 1985.

Reply to Gatti.—I certainly did not intend to discredit Gatti's work, and regret any confusion that my review (J. Field Ornithol. 55:500–501) may have caused. Regarding the qualitative technique used to age the flyway sample, my phrase "I question the accuracy of the original, qualitative classification" was a poor choice of words. I merely wanted to comment that the discriminant equations derived from feather measurements of the flyway sample depend for their accuracy on the original, qualitative classification. The qualitative aging of wings from the flyway sample formed the groupings that produced the discriminant equations, and any inaccuracies that might have been present in this original grouping will be reflected in the resulting equations. Gatti himself states (p. 1060) "The accuracy of the qualitative method depends on observer experience and makes this method difficult to standardize." Although use of quantitative discriminant functions "requires little prior experience and eliminates observer bias," any bias or error in the original flyway sample, the source of data for generation of the discriminant equations, is still present.

As Gatti points out, I misunderstood the part of his analysis where he validated the discriminant equations, leading me to incorrectly imply circular reasoning. Confusion resulted from my difficulty in keeping track of which data set was being used for what purpose. I regret my misinterpretation of Gatti's methods while at the same time remarking that a reviewer's material is the paper he reads. If that material is not written clearly, then errors in interpretation can result, even, as in this case, after several readings.

I hope that we have vindicated Gatti's paper, for it represents careful work.—RICHARD A. LENT, Seatuck Research Program, Laboratory of Ornithology, Cornell University, P.O. Box 31, Islip, New York 11751. Received 16 Dec. 1985; accepted 26 Dec. 1985.