

# A GYNANDROMORPHIC EVENING GROSBEEK IN BURLINGTON COUNTY, N.J.

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During the Grosbeak "season" of 1972-73, a single bilateral gynandromorph of this species was seen at irregular intervals in Pemberton Township, Burlington County, New Jersey. It was carefully observed whenever present between November and March, both by my daughter, Mrs. Glenn M. Senter, and me at our respective home feeding stations located perhaps a half mile apart on either bank of the main branch of the Rancocas Creek between Browns Mills and New Lisbon.

Three Evening Grosbeaks appeared on November 7, and thereafter numbers slowly increased until a flock of about fifty birds came to the area for the winter months. The gynander was first observed by Mrs. Senter on or about November 10 (while I was in England), in company with normal birds then coming to sunflower seed. Its striking appearance caught her eye, and when I returned to Browns Mills on November 14 she described the bird to me. Close watch of our birds was kept thereafter, and the gynander was first observed by me on November 24. I was absent during the entire month of December, but Mrs. Senter maintained both feeding stations, and the gynander appeared occasionally at one or the other of them but no record was kept by her of those dates. From January 1 until the grosbeaks departed for the north in early May I maintained a daily watch but saw the aberrant bird on the following dates only: January 10, 12, and 24; February 13, 24, 25, and 27; and March 2 (last appearance).

Efforts to trap or collect the bird all failed, due in part to its sporadic and usually brief appearances. It was not possible, therefore, to obtain measurements of the bird or to weigh it. However, close and satisfactory observation was possible, and it was studied and also photographed 17 times at distances ranging from two to twenty feet. The pictures are in my possession.

As stated previously, the grosbeak was a bilateral gynandromorph, male characters appearing on the left side of the median line and female on the right. When viewed from its right side the bird appeared in all respects to be a normal female in pattern, definition, and color. When viewed from its left side it was in most respects, but not all, a male in both color and pattern. Exceptions were as follows. The dark olive of the head, neck, and upper back in normal males was paler in the gynander. The white area of the wing was not solid but rather broken, and when the bird was viewed from above the two wings were marked alike (in this respect) and like a female. Where the normal male wing is yellow, so the left wing of this bird was also yellow. Still viewed from above, the median line of demarcation between the sexual characters was less distinct than when the bird was viewed from below. The bird was nevertheless clearly more yellow and darker on the male (left) side and was normally gray on the right (female) side. Viewed from below, the median demarcation line was sharp and very dis-

tinct on breast and belly—right gray, left yellow—but the throat was whitish as in normal females and defined on the right side by the blackish malar line normal in that sex. The male (left) side of the throat was very imperfectly and obscurely defined by slightly darker shading. Viewed laterally the head was darker on the left side as in males, light gray on the right as in normal females. The yellow eyebrow line on the left side was narrow, sharply defined, but present only directly behind the eye. No yellow forehead or yellow shading above and before the eye was present, as in normal males. The gray, female, side of the head was, of course, unmarked. The tail, viewed in flight, appeared to be symmetrically spotted as in a female, although not as heavily as in some. When the bird was at rest and viewed from above the tail appeared to be spotted as in a normal female on the right side, but was largely solid black on the left side as in a normal male. However, there was a white spot on the left side near the base, and one of the retrices was tipped with white on the left, male, side. Undertail coverts were clear yellow on the left side and white on the right.

I was always able immediately to recognize the bird by the female white wing pattern on the male side and the absence of the yellow forehead. When the bird was perched in a tree in front of and above me, the male yellow and female gray portions of the breast and belly were clear and obvious. Added together, the gynander appeared to predominate slightly in female characteristics.

Since a gynandromorph by definition is a bisexual individual, and presumably incapable of reproduction and therefore untypical of and "useless" to its species, particular attention was paid to observing its behavior and that of the normal birds toward it—and its toward them. At no time was I able to discover anything abnormal in its behavior. It fed, normally, with the others. Its vigor and alertness seemed in all respects comparable to that of normal birds. It neither yielded more readily to aggressive behavior nor gave more in competition for feeding space at the tray than did normal males and females, and with them it "exploded" and dashed for cover with the flock when, for whatever reason, they frequently indulged in this behavior during any given feeding period.

It must be remembered that my observations were confined to wintering birds in winter quarters, not to breeding birds on their breeding grounds. It might be assumed that if any unusual behavior toward or on the part of this sexually abnormal bird were to develop it would be in the breeding season, not during winter. No opportunity to observe this was, of course, possible.

Gynandrisms has been reported in the Evening Grosbeak before, but not to my knowledge in the Delaware Valley. In 1967 Roxie C. Laybourne of the U.S. National Museum described a gynander of this species taken March 30, 1962, in Arlington, Va., by A. H. Fast. Like our bird it was bilateral, male left, female right side. The specimen is now in the National Museum (USNM No. 466993) and apparently resembles in many details our bird. Reference is made to the full paper, and to the literature cited in it by Lay-

bourne, but of special note is the observation regarding disposition of plumage in gynandromorphs generally. Laybourne states: "To date there appear to be only a few recorded cases of bilateral gynandromorphism in which the plumages of the two sexes occurred on the same sides of the body as in the gynander described herein. These include: a flicker (Cabanis, 1874), that had a strongly developed red malar stripe (typical of male Red-shafted Flickers, *Colaptes cafer*) on the left side, but which was absent on the right side; a Bullfinch (Benoit, 1950); and one or possibly two Evening Grosbeaks (Shaub, 1960). Kumerloeve (1954) considered this type of gynander very rare, and it is interesting that there have occurred two, and possibly three, cases of this type in the Evening Grosbeak." It would appear that now our bird adds another to that list.

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#### LITERATURE CITED

- Laybourne, Roxie C. Bilateral gynandromorphism in an Evening Grosbeak. *The Auk*, Vol. 84, April 1967, pp. 267-272.

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