

make observations of this kind upon *Cicindela vulgaris* Say, in collecting a large number of the beetles, I have made out the appended table, which will explain itself. The dates I give, as they will show how the sexual proportion varies at different times of the season. From my observations it would seem that when the insects first appear in spring the females are much the more numerous; but that when they first appear in fall the males outnumber the females as two to one. I have taken this species here from 3rd March (1882) to 25th October (1884).

The examination, as shown in the table, of over 1,500 specimens, as the figures stand summed up, shows the average proportion of males to females as $1.15299 +$ (approximately 1.153) to 1; or 115.3 males to every 100 females. The number examined being so large, the figures will be trustworthy. This is the average proportion through the whole year of those taken while out in their favorite haunts. I have also secured specimens in spring by digging them from their holes, where they had retreated on account of cloudy weather. All that I have ever taken in this manner have invariably been females. Some reference is made to this in the notes at the bottom of the table.

During the past few seasons I have amassed quite a stock of notes on this species, referring to many random observations on the perfect insects, the more important of which I will here give. As to variation in the elytral markings, many of the smaller specimens (generally ♂) have the bands narrowed into mere threads, being very much slighter than usual. The markings in both sexes vary from the full, broad bands or lunules to thin threads, and are sometimes partly defaced, as it were, at each end. Occasionally robust specimens (generally ♀) are found, which vary from the typical form by having the ground color of the upper parts very dark, approaching to black. In size there is also much variation; large males and small females occur, though, as is well known, the reverse is the general rule. Small specimens with well developed lunules also occur, and large ones sometimes have them narrowed and fainter than common. The male sexual character of the creamy fronts of the mandibulæ is well known, but I have taken females with this character nearly as well developed as in the males.

The pleasant-scented fluid which is so copiously emitted from the mouth is generally of a brownish color; however, in one specimen that I have noticed it was of a dirty greenish, while in another it was of a brick-red color. This fluid probably serves to soften the parts of insects to be