

excavation; wing cases raised, flaring at base, compressed in middle, with a prominent point on the margin on dorsal side; on the abdomen three rows of tubercles, those corresponding to the dorsal row of the larva minute, to the first laterals large and conical, the pair on middle of the series particularly prominent; those in the excavation gilded; color variable, in shades of brown from light yellow to dark, often clouded with olivaceous or lilac; sometimes a dark green stripe on the side of abdomen below wing cases. Duration of this stage from 7 to 11 days, according to the weather.

*Grapta Interrogationis* is found over the entire United States, except on the Pacific slope, flying from Arizona to Montana and through Canada to Nova Scotia. In the northern States, and probably in Canada, it is two-brooded, but in West Virginia there are three broods, and a more or less successful effort for a fourth, depending on the weather late in the fall. In Florida there are at least four broods, and probably five. At Coalburgh, eggs laid by hibernating females give butterflies last of May. This is the first brood of the season. Eggs laid early in June give butterflies early in July—the second brood. Eggs laid last of July give butterflies in September—the third brood. Eggs laid through September give butterflies in October. Individuals of each brood are emerging for some weeks, say for a month, so that the earlier females may be laying eggs while the later members of the same brood are coming from chrysalis. But in case of the fourth brood, it often can be only the earliest hatched larvae which produce butterflies, because by 1st October we are apt to have frost and cold weather, and the food is thereby destroyed. But in some seasons frost holds off till late in the fall, and then the greater part of the larvae might reach chrysalis. As stated in *Can. Ent.*, x., p. 72, I think it probable that the butterflies of the third brood do not hibernate, but that the continuance of the species depends on the individuals of the fourth brood, usually but few in number. This would account for the species being so rare in this district late in the fall and early in spring as compared with *Comma*, which has no fourth brood. The *Comma* butterflies of the third brood are the hibernators, and are to be seen in multitudes before winter, or in November. Whereas *Interrogationis* then is rarely seen. And yet in midsummer it is as common as is the other species.

*Interrogationis* is a seasonally dimorphic species, the two forms being also very distinct in both shape and coloration. They are figured in *Butterflies of N. A.*, Vol. 1. The hibernating form is *Fabricii*, but in one