

fluids pulsating through their canal, giving the appearance of a faint stripe extending the length of the body. Begins to pupate Aug. 24; to emerge, Sept. 22.

Pupa is 1.1 inches long, very active, and is able to move the anal segments to a greater angle with axis of the body than the preceding species. Slightly larger in the middle, tapering quite sharply to extremity, where the cremaster is made up of a two-pointed spur. Antennæ, eyes, and legs show out prominently; wing-cases faintly corrugated. There is a distinct prominence on front of thorax indicative of the large tuft; this is a strong specific character. Directly below, between the antennæ, is a much smaller projection, consisting of two separate points, that shows an approach to the striking clypeal armature of the *Nonagria* pupæ. Colour is brown, wing-cases a shade darker, becoming almost black at time for emergence. It is well to let a moth remain a day after hatching before mounting on the setting-board. *Necopina*, in common with the imagoes of most boring species, is prone to become greasy; in fact, this species is "up head" in this respect, oftentimes being an unsightly object before dry enough to be placed in the cabinet.

Larvæ begin to pupate Aug. 23; the first emergence out of forty pupæ was Sept. 23.

To sum up the factors for success with these species, we may sift from the foregoing notes the following:

Locate the larvæ or an infested locality, and by a reference to the dates given, a diligent search at the proper time will meet with its reward. It may be hard to get ahead of ichneumon and other insect enemies, but we can be the first *vertebrate* on the scene, which will mean a great deal in the aggregate of the specimens obtained.

A representation of this genus in any near degree to completeness will be an addition to any collection of Noctuidæ most pleasing to the owner, and doubly so if that addition is the fruit of individual labour in the field.

#### THE COTTONWOOD SNOW-SCALE OF NEBRASKA.

*CHIONASPIS ORTHOLOBIS* BRUNERI, subsp. nov.

*Chionaspis ortholobis*, Ckll.; Canad. Entom., 1894, pp. 189-190.

The *Chionaspis* from Nebraska, sent to me by Prof. Bruner, was named in MS. in 1894 *C. Bruneri*, but for reasons stated at the place cited the name was suppressed. Mr. R. A. Cooley, who is doing such good work in *Chionaspis*, now confirms my original opinion as to the distinctness of *Bruneri*, except that it is still an open question whether it is a good species or only a subspecies. For the present the insect may stand as above named.

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