

quently occurs at considerable altitude. I have taken them thirty to forty feet from the ground. While they sometimes, perhaps as a rule, take advantage of the broken cortex, I have found them where it appeared that they had worked through the same into the soft layer.

I have found the larva in the following localities: Hastings Center, N. Y.; Portage, N. Y.; Buffalo, N. Y. (?); Point Abino, Ontario. At the first named place they were found in several instances numerous enough to seriously injure trees of moderate growth.\*

I have taken the larvæ in autumn from .25 to .75 of an inch in length; they finally attain a length of 1 to 1.1 inch; diameter quite uniform, .18 of an inch. Color white; head light brown, flattened; first thoracic ring slightly clouded with brown, smooth; no trace of an anal shield; true legs scarcely colored, pro-legs prominent crowned with two rows of about eight hooks each. The brown hairs arise from papillæ, the base of each hair being surrounded by a brown annulation. The spiracles are but slightly elliptical, last pair large, placed sub-dorsally.

Before transforming they prepare a cell in the extruded pitch mingled with their *debris*; this they line with silk, but spin no other cocoon. While in their burrows they move through the soft pitch with impunity, but if removed from the same they soon die from the encumbrance of the hardening pitch adhering to them.

I have found the pupa the last of May; the moth appears from the middle to the end of June. It may be that others come in July and August, for I have found larvæ apparently full grown in July. On the 15th of July I brought to my rooms devoted to the rearing of insects, some blocks of wood containing such apparently mature larvæ, expecting them to complete their transformations in a few weeks at most; they are still in their pitch cells unchanged (Nov.) Is it a case of retarded development due to the drying of the bark and wood?

The pupa has a length of .73 of an inch. Color light brown with the extremities dark. Over the dorsal portion of the abdominal rings are the usual rows of teeth; those on the anterior margins scarcely extend below the spiracles. The clypeus is without a pointed process; the medio-dorsal ridge of the thorax is unusually prominent.

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\* For definite direction to collectors I mention Mallory, a station near Hastings Center, on the Syracuse Northern Railway, where they may be found in force in pines thirty rods south from the station.