

SECOND GENERATION OF BEETLES.

June 18, '92.—Two beetles issued to-day from the lot in vivarium. None to be found out doors so far. Apparently the last of the larvæ are now descending the trees. Pupæ are present in heaps around base of trees. Placed a lot in breeding cage to obtain beetles.

June 20, '92.—To-day 51 beetles issued from lot in vivarium. Placed them all with a branch of Elm to permit feeding and breeding. Examined the trees but failed to find any of the beetles. There are still a few of the larvæ feeding.

June 21, '92.—Noticed the first few beetles on the trees; there are still some larvæ.

June 22, '92.—Beetles have become somewhat more numerous, particularly on the last tree at the east entrance. Found also a few batches of recently deposited eggs. Separated these in another vivarium.

June 24, '92.—Large numbers of beetles are issuing; eggs are still very scarce. Beetles are feeding on leaves, eating small holes. There are still a few larvæ of the first generation.

June 25, '92.—There are still a few larvæ. Beetles have become quite numerous, though eggs are still very scarce.

June 27, '92.—Eggs are still scarce on the trees. Beetles in vivarium have deposited quite a number of eggs.

June 30, '92.—Beetles have become very numerous, and have almost ruined the leaves on one tree. The majority have now issued. They do not like to oviposit on the trees on which the leaves are nearly ruined, but eggs are now already quite numerous on all other trees, the foliage of which, so far, is but slightly injured.

July 2, '92.—Nearly all beetles have issued. Plenty of eggs have been deposited by them on some trees, so that often 5-7 egg-masses are deposited on one leaf. On other trees, on which the beetles are also plentiful, extremely few eggs can be found.

THIRD GENERATION OF BEETLES.

Eggs in vivaria, both those taken out doors and those obtained in breeding cage, are hatching.

July 8, '92.—A number of beetles died. No eggs deposited.

July 15, '92.—Beetles are getting very scarce.

July 18, '92.—Some of the larvæ in cages have changed to pupæ, just seventeen days since hatching of the eggs.

July 19, '92.—The oldest larvæ are already descending the trunk of the trees. There are still a few beetles to be seen, also quite a number of unhatched eggs, some of which have been but recently deposited; also larvæ in different stages, from the youngest to the oldest.

July 22, '92.—Larvæ are descending the trunks by thousands; large numbers are heaped up between tufts of grass, ready to change to pupæ. There are still some beetles on the trees; plenty of unhatched eggs and larvæ in all stages of growth. Badly infested trees look as if scorched by the sun; leaves are dropping.

July 26, '92.—Some trees are now almost bare of leaves, most of them having dropped. Larvæ of all sizes are running about on branches and trunks; those which are full-grown go to the ground to transform, all others are doomed to die of starvation. No more beetles to be seen. There are already plenty of pupæ and huge piles of larvæ around badly infested trees.