Integrated TPO 45

The reading asserts that the ancient structures have been found inside 200 million-years-old fossilized trees in the state of Arizona is not a shred of evidence that indicates bees existed 200 years ago. The lecture, however, finds the idea dubious and casts doubt on the reasons proposed by the passage.

The author argues that there are no fossils of actual bees found belong to 200 million years ago and the latest fossils of bees are related to 100 million years ago. Conversely, the lecturer brings up the idea that lake of fossils of bees related to 200 years ago does not prove that bees did not exist at that time; the fossils of bees could be conserved in the sticky liquid, resin, produced by special trees, and this kind of tree was rare 200 million years ago. After a while, this kind of special trees became common. So the fossil of bees had existed since 100 million years ago exactly when the special tree became common.

Furthermore, the reading passage holds the view that the absence of flowering plant is the evidence of not existing bees at 200 million years ago. Due to the fact that flowering plants first appeared 125 million years ago, probably bees could not have existed before that time. On the contrary, the professor underlines the fact that flowering plants were not the only possible source of bees' food and they would feed on non-flowering plant such as ferns, or pine trees preceded flowering plants although bees have a close relationship with flowering plants today. The professor also asserts that bees have fed on flowering plant stably since evolving them.

Finally, the reading asserts that fossilized structures found in Arizona were lack of some of the finer details of bees' nest and also the fossilized structures were made by other insects, such as wood-boring beetles. In contrast, the speaker dismisses this issue due to the fact that there is chemical evidence which results in the theory that bees built the chambers in spite of lack spiral caps. This chemical evidence contains water-proofing substances with a distinctive chemical composition used by bees for protecting their nests. The analyzing of this chemical substance turns out that new bees are using the exact waterproofing material which fossilized chambers contain it.