originally supposed to have been deposited by a large lake, some three hundred miles long and one hundred and fifty miles wide, and containing fresh water, as mentioned by Hayden in the description quoted above. Evidence accumulated within the past two years, however, indicates that the beds were formed by a number of small lakes, with a saline content at least part of the time (Bradley, 1926; Henderson, 1926; Cockerell, 1926).

Studies on the plants of the formation have determined the geological age as approximately middle Eocene. Knowlton (1922) in his excellent revision of the flora lists eighty-four species of plants and presents some interesting conclusions on the environment of the biota: "... It appears that an overwhelming preponderance of the living forms in the families represented in the Green River flora are inhabitants of tropical or subtropical regions, many of them in both hemispheres, yet a considerable number include either genera or species that extend into temperate regions.... The physical setting can be pictured somewhat as follows: about the shores of the lake were certain flat, low-lying areas, some of them probably swampy, others sandy, whereon grew the palms, figs, Lomatia, Oreodaphne, hackberries, the several papilionaceous trees and shrubs, the ferns, grass, sedge, etc., and in the water the pickerel weed, Brasenia, algae, etc. On the adjacent somewhat higher land might have been the willows, waxberries, sweet fern, walnuts, oaks, sumacs, maples (?), hollies, etc.... The conditions of temperature and moisture under which the Green River flora flourished are somewhat difficult of interpretation, as there is seemingly more or less conflict between the elements of the flora. The nearest living relatives of certain of the genera that are believed to have inhabited the lowlands ... are found mainly in tropical and subtropical areas. The palms, at least one species of which existed in abundance, could hardly have lived where the temperature fell below 42° F. and probably not even where it was considerably higher than this.... The upland flora ... could well have withstood some degree of frost, but on the other hand all these genera contain species that could find a congenial habitat in a warm temperate region. It is doubtful if any of them had to withstand cutting frosts."

The insect fauna of the formation contains nearly 300 described species and is not very different from that of the region at the present time. The abundance of the Fulgoridae, however, is rather striking, and Cockerell (1920) believes that these insects have a certain tropical appearance and resemble tropical genera. On the other hand, Alexander (1920) considers that the tipulid fauna is typical of that of the