

presents. This has been especially noted for such subjects as geology, botany, zoology, general biology and entomology.

In the first place, the geological formations are such that in an excursion of twenty miles one is able to pass over the outcroppings of rocks representing all the periods from the lowest of the Silurian (Trenton) to the Carboniferous, inclusive; with the largest natural cave in the State only eighteen miles from the College; and the phenomena of much injected and metamorphic rock to be found at various points, besides an abundance of iron ore, fire clay, sandstone, limestone and flint.

Since the nature of the fauna of any region depends much upon the flora, and the latter is in turn greatly determined by the character of the soil, which is in accordance with the kind of underlying geological formation, we can see at once that where there are differences in the rock formations we should expect to find some corresponding differences between the kinds of soil, plants and animals. In no place in America can this fundamental principle be better exemplified than in the vicinity of State College. Beginning within a mile west of us is a vast tract of very sandy territory popularly known around here as "The Barrens," not because it is void of life, but because the soil is nothing but disintegrated sandstone and consequently the kind of crops that are cultivated in other parts of this county can not be grown there, while north of us, as well as east, is a limestone region which is consequently a fertile and well cultivated country, with an abundance of streams.

In the former region no streams of water or springs are to be found, and where water does occur naturally (which is but seldom) it is in small isolated and often temporary pools. Such ponds are generally teeming with micro-organisms, and a few microscopical forms of life, and it is at once apparent that all such creatures must by nature be pecu-