

that can be observed in the Nearpass section. These shales have not been identified with certainty in New York State. Near Cuddebackville a few miles north from Port Jervis, somewhat similar shales, but containing iron pyrites, have been observed. They hold a position below the Decker Ferry formation, but the contact with the Decker Ferry could not be observed. The shales below the Decker Ferry as recognized at Accord have a somewhat similar appearance to the Poxino Island shale. In this section the Bossardville limestone which lies between the Poxino Island shale and the Decker Ferry formation could not be observed. It is probable, however, that the Bossardville limestone has failed by thinning out before this section is reached. The age of the Poxino Island shales has as yet not been definitely established, but they probably belong to the Salina.

Bossardville limestone

No outcrop of this formation has been recognized in New York State, though it probably extends from New Jersey into Ulster county. At the Nearpass section, 3 miles south of Port Jervis, its entire thickness is shown to be slightly more than 12 feet. It directly overlies the Poxino Island shale and in lithologic features it much resembles some thin banded layers of the Manlius limestone. This is the lowest member of the Ontaric formation in this section that is fossiliferous, but even this is only sparingly so. *Leperditia altoides* Weller is found quite abundantly in several of the thin layers in the upper 2 feet of the limestone. Besides the *Leperditia* a single individual of the genus *Oncoceras* was found. This species is in some respects similar to *O. ovoides* Hall, but is smaller and probably a distinct species. The Bossardville limestone is regarded by the writer as a late representative of Salina time.

Decker Ferry formation

The term Decker Ferry formation as recently applied by Weller in the New Jersey section includes all the strata between the Bossardville limestone and the Rondout waterlime. The upper 6 feet of the formation as described by Weller may, how-