Upper Range of Stringocephalus
(Devonian Brachiopoda)

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with 2 figures

Abstract. Stringocephalus occurs in a succession of shelf-edge faunas in Nevada as high as beds that yield conodonts diagnostic of the upper hermanni-cristatus Zone. This is confirmed in 3 measured sections in which conodonts and silicified brachiopods occur in the same samples.

The giant terebratulid brachiopod genus Stringocephalus de France 1825 (Cloud 1942) has been considered a guide fossil to the upper Middle Devonian for more than a century (Cooper and others 1942, Boucot, Johnson & Struve 1966).

In Europe, the highest reported occurrences of Stringocephalus have been regarded by some workers as range extensions into the Upper Devonian, but there is not unanimous agreement on this (Boucot, Johnson & Struve 1966: 1356, Kullmann & Ziegler 1970: 76).

In addition, the present lack of international agreement on definition of the series boundary between the Middle and Upper Devonian necessarily makes all discussions of the range of Stringocephalus with respect to that boundary inconclusive.

In North America, opinions regarding the range of Stringocephalus have varied greatly.

Cooper (in Cooper and others 1942: 1784, Cooper & Phelan 1966: 10) supposed that the genus occupies a restricted stratigraphic interval that can be assigned to the base of the Givetian Stage, equal to mid-Cazenovia of New York terminology. In western Canada, Stringocephalus species have been reported (Crickmay 1960, Warren & Stelck 1962) to range through large stratigraphic intervals. Johnson (1970) hypothesized that Stringocephalus ranged through a lower to mid-Givetian interval and that it then became extinct in North America during the Taghanic onlap.

We now report occurrences of Stringocephalus spp. in several collections of silicified brachiopods from sequential horizons in three measured sections in the northern Antelope Range of central Nevada. These co-occur with zonally diagnostic conodonts (Fig. 1),

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