

Vesicular Stomatitis on Ossabaw Island

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Intensive vesicular stomatitis (VS) virus surveillance by SCWDS on Ossabaw Island, Georgia, over the last few years has begun to elucidate some of the unknown aspects of how this virus is maintained in the environment and its transmission cycle. In summary, exposure of wildlife to the VS virus on Ossabaw Island is predictable. Although somewhat variable in intensity from year to year, virus activity begins each year from late April to late May and continues into October. The presence of VS activity appears to be associated with particular microhabitats on the island, and there is increasing evidence that VS virus is arthropod-borne. One significant development in 1987 was the isolation of VS (New Jersey type) virus from active lesions on 3 wild swine trapped on the island. Further evaluation of these isolates by Dr. Stuart Nichol at the University of Nevada-Reno showed that the virus was genetically similar to the VS virus isolated on Ossabaw in 1983. However, neither of these isolates was similar to VS isolates identified from other parts of the United States and Mexico from 1982 to 1986. This adds considerable support to the theory that VS virus is endemic on Ossabaw Island. Arthropod collections were continued on the island this summer in an attempt to identify an arthropod host for the virus. Collections have been concentrated on the sand fly, *Lutzomyia shannoni*, as it is the most likely host for the virus on the island. Over 15,000 *L. shannoni* were collected this summer, and virus isolation attempts on these tiny insects are in progress at USDA's National Veterinary Services Laboratories in Ames, Iowa.