

A DAY ON THE "ATMOSPHERIC" FARM

Although many things change at AES, the Station for Atmospheric Experiments, (SAE) known affectionately as "The Farm" at Woodbridge, Ontario, carries on with most of its scientific projects intact.

In fact there is a constant coming and going of scientists and

technicians between the 106 acre farm and AES headquarters in Downsview some 12 kilometres away.

The main change at the farm is the removal of the weather radar station to King City.



This 50 metre radar tower stands abandoned with an uncertain future. The small platform on the right was the original weather radar installation.



Still very active, however, is this solar radiation suntracker operated here by technician David Barton of Experimental Studies Division.



Equally farm-conscious are scientist from the Atmospheric Dispersion Division. This truck is fully equipped to do atmospheric probing of aerosol structures in the boundary layer. Standing beside the vehicle is F. Froude, electronics technician.



These large horns create an acoustic sounder system with the sound projected upwards and reflected back from clouds. The result is recorded and processed by a computer. The horns have been used on and off for environmental and pollution studies.



The SAE was once a real farm belonging to the Watson brothers and their family since 1870. Acquired by the Weather Service in 1963 the original farmhouse is still standing.



While the farm has no more cattle, one of the few "farm animals" is Lucky, the 7 year-old Labrador/German Shepherd dog, owned by farm manager Peter Chirka.



There is also Trina a grey cat and a good mouser and several thousand field mice. The latter are part of a five year research study conducted by the University of Toronto on small mammals to determine factors regulating the size of mouse populations. The picture shows their breeding pens.



Mr. Chirka also runs a Climate Station on the farm. He is seen here with a Nipher snow gauge that collects snow, which is then melted and measured in a graduate tube.



He also operates the underground instrument shelter and is seen here recording solar radiation data. The two clocks show Eastern Standard Time and Local Apparent Time (LAT) respectively.