

# Winter Snow Removal Rural Grundy County

Grundy County removes snow and ice on 195 miles of paved roads and approximately 650 miles of gravel roads, which can be an overwhelming task during a snowstorm. To illustrate, if you would place all of Grundy County's roads end to end in a straight line, this would comparatively represent the distance it would take to drive from Conrad to Birmingham, Alabama. On the average, each snow plow clears approximately 47 miles of roadway, which would be equivalent to plowing snow from Dike to Marshalltown. The widespread rural system is a strain local snow and ice budgets. Counties are responsible for almost four times the amount of road miles as compared to the collective state and city miles.

Snow clearing is done mostly during the daylight hours. Crews may start before dawn or work after sunset following a snowstorm to get ahead of traffic or respond to emergency situations if requested by the sheriff. Grundy County does not have enough personnel to work in shifts as state and some city crews. Given the size of the county rural system and the remote nature of many roads, the safest and most efficient operation is during the daylight hours. When visibility drops to unsafe levels, usually due to high wind, snow removal operations will be limited or halted. Some residents could expect to be snowed in for the duration of the severe weather and for a reasonable amount of time afterwards depending on the severity of the storm.

Each storm has its own individual characteristics and must be handled accordingly. The expected duration of the storm and the range of temperatures expected are all considered in determining when the crews are sent out. The paved road system is initially plowed when snow begins to accumulate and the wind is low enough so that drifting does not counteract what has been plowed. The gravel road system is subsequently plowed when snow continues to accumulate and the wind is not a serious problem.

The first assignment for the truck plows is to open the paved roadways and apply salt and/or sand to the surface if appropriate. Salt continues to be the most economical material available to restore safe driving conditions and is particularly effective with air temperatures above twenty degrees. Salt is not used on gravel roads because it would melt the frost in the gravel base and create a swampy, marsh-like condition.

The county uses motor graders to open the gravel roads. The goal is to provide access from at least one direction to all residences, followed by creating two-way traffic on those roads. Then the remaining connecting gravel roads are cleared creating more direct travel between destinations.

During winter, motorists are reminded to reduce their speed according to road surface and visibility conditions. Rural residents should be prepared with adequate food and fuel supplies so that they may be able to remain in their homes during exceptionally severe weather for a few days.

### *Why does it take so long to clear gravel roads?*

Restoring access on gravel roads is a slow process since the motor graders are not built for speed and a typical route covers approximately 60 miles of road (or 120 2-lane miles) that need to be cleared. Windy conditions, creating drifting, only serve to slow the progress being made. Sometimes after a severe storm it is not possible to reach remote areas and homes in the County until another day. Continued windy conditions can result in a road blowing shut shortly after it is opened. Rural residents are encouraged to plan accordingly for the winter season.

### *I saw the snowplow at the intersection and there is not as much snow on that road as mine, why haven't they been past my place yet? Do you know when they will be by?*

Snow plowing is done by following designated routes. This is to assure removal in a systematic and timely manner by operating the plows in a continuous course rather than jumping from one location to another. We cannot calculate when they will get to a specific location because there is no way to predict what conditions may be encountered.

### *Why do they keep plowing my driveway shut?*

Unfortunately, this is due to the continuous operation of the plow. It is necessary for the operator to push snow without stopping in order to efficiently remove the snow and complete the route in a timely manner. If we pause to clear each driveway, both momentum and time are lost and the snow removal process would be lengthened considerably, and may not get completed before the next storm arrives.

### *I've seen plow trucks on the road that sometimes aren't spreading salt. Why don't they since they're there anyway?*

Salt does not melt ice, but it does lower the freezing temperature of water. This works down to a temperature of approximately 20 degrees. At critical temperatures, applying salt to roads packed with snow or ice may create worse problems by causing the snow or ice to "glaze" and form a slick shiny surface.

At times, during windy storms, snow will often blow off a dry, bare road, whereas if salt is present on the roadway, the snow may begin to stick and create a slick surface. We monitor the forecast and current temperatures to determine the most efficient use of our salt.

### *Is there anything that I can do to help with snow and ice operations?*

During severe storms, be patient and wait for the plow -- abandoned vehicles create problems. Snowplow operators try to go around these vehicles. The County does not accept any liability for damages caused to vehicles left unattended within the roadway.