# Become a Certified Green SnowPro

consequently more than 40 water bodies in the state are polluted. The effects of the pollution range widely from increased deer-strikes as they are drawn closer to roadways by salty runoff, to polluted residential wells, fish and plant death, decreased soil quality, and increased erosion.

The chloride problem is more challenging than other water quality concerns due to the complete solubility of the chloride ion. Once salt is dissolved in water it cannot be removed by any practical means until it flows out of the watershed. This occurs relatively quickly in surface waters (rivers and streams) but when salt-laden runoff from roads and parking lots enters the groundwater, it can take a long time to leave the system since groundwater moves much more slowly than surface water.

Since there is no feasible way to remove the salt, then the only option to deal with the problem is to use less. Salt alternatives, such as calcium magnesium acetate,

are part of the solution, but since sodium chloride is so much cheaper, a focus on salt reduction is needed.

Long considered to be a highway problem, recent studies in the southern I-93 corridor have shown that up to 50% of the total salt load is coming from private parking lots and driveways. In addition to state and municipal highway crews, salt reduction is needed from the diverse array of private salt applicators, who number in the thousands.

Since salt applicators' primary goal is maintaining safety, New Hampshire's approach to salt reduction is to improve efficiency in salt use. Applying salt when it is not needed adds unnecessary pollution to local water bodies and wastes money.

To improve communications with private applicators and increase training opportunities, the University of New Hampshire Technology Transfer Center (UNH T²) created the Green SnowPro certification program.



*Patrick Santoso works with the private sector to teach winter maintinence equipment calibration techniques.*

The voluntary program allows salt applicators to become green certified by participating in training and passing a test.

Training topics include: how salt works, anti-icing with liquids, pre-wetting, spreader calibration, material storage and housekeeping, and salt accounting. UNH T² developed a web-based salt accounting system so that applicators can track usage storm by storm or annually.

The first two training sessions were at maximum capacity and resulted in over 100 applicators earning Green SnowPro certification.

This response is attributed to several factors. Green certification can be an asset in marketing winter maintenance services to clients concerned about environmental impact. Applicators learn techniques that maintain level of service while using less salt, saving time and money. Increased professionalism is better business and can reduce risk exposure.

*For more information about Green SnowPro certification, contact Patrick Santoso at 603-862-4209 or Eric Williams at 603-271-2358, or see www.t2.unh.edu for more information.*



# ADA Prioritization Software

*By Dave Salzer, University of New Hampshire Technology Transfer Center*

T²2 is currently developing a system for municipalities to collect and manage their handicapped sidewalks and access ramps to be in compliance with the Americans with Disabilities Act (ADA). A pilot/development project was started with the City of Concord in July to accomplish the following four goals:

1. Identify attributes of the pedestrian network that limit pedestrian mobility;
2. Evaluate the condition of the existing pedestrian facilities;
3. Prioritize facilities on a need for renovation basis;
4. Identify locations where new pedestrian facilities are needed;

The program is built on a weighting system that allows the asset owner to assign points based on a variety of factors. Additionally the program considers environmental factors like population density, proximity to public facilities (libraries, schools, hospitals) and access to public transportation to prioritize repairs and replacements. A preliminary report will be published in January outlining the program methodologies and a final product is expected by mid-summer 2011.

*To learn more about the Project or to find out how you can be involved email Dave Salzer at dsalzer@unh.edu.*