

The title is centered and surrounded by several blue, multi-pointed snowflake graphics. The text "Snow Survey Centennial Celebration" is in a large, blue, cursive font, and "1906-2006" is in a smaller, blue, sans-serif font below it.

## *Snow Survey Centennial Celebration* 1906-2006

Welcome to the first of many tales, facts and figures from the Snow Survey Programs Centennial Year! What, you may ask, is a Snow Survey and why does it belong in NRCS? Why is Snow Survey having a Centennial when NRCS isn't? Well, here is the introduction to the Snow Survey Program, AKA CO45.

Snow Surveying was first invented in the late 1800's in several different locales and it is difficult to ascertain exactly who was first. In the United States a Professor of Philosophy at the University of Nevada, Reno named Dr. James E. Church brought the fledgling technology from Russia, Germany and Switzerland in 1906 to the Lake Tahoe region to solve a vexing problem - the prediction and hence the wise management of a very limited and often fought over regional Water Supply.



Dr. James E. Church, near Mt Rose - the birthplace of modern day Snow Surveying.

The Lake Tahoe Water Wars provide insight to the importance of water in the western United States and the ability to predict water supply, reduced tension throughout the region. Dr. Church connected the dots between seasonal runoff and snowpack. Being able to systematically measure snow across a watershed would yield the ability to predict seasonal water supply. Hence, the birth of Snow Surveys.

A Snow Survey today is much the same as it was in 1906, systematically measuring snow depth and water equivalent at specific locations called snow courses. Today, they are typically measured three to five times per year and are accessed via snowshoes, skis, snowmobiles, snow cat or helicopter.



Trial Lake Snow Course, 9,960 ft elevation in Utah, May, 2005.

The Program has grown from the early days of collecting a few thousand data points per year to a highly technical endeavor involving the remote sensing of snow depth, water equivalent, temperature, precipitation, soil moisture, soil temperature and other parameters on an hourly basis, which now yields tens of millions of data points annually. These data are the foundation for not only Agricultural interest in water, but for the operation of dams, flood forecasting, hydroelectric power generation, recreational interests such as skiing, rafting, snowmobiling, boating as well as the eclectic and strange ... mushroom collection to the futures market in natural gas and electricity. In future issues of the "Snow Survey Centennial Celebration" we will bring you the fascinating history of this remarkable program, including stories and pictures of actual surveys, helicopter accidents, avalanches, moose attacks, economic analyses, floods, droughts, saving the farm and even death. We hope that you are educated as well as thoroughly entertained by our history, the current program and

our passion for all things Snow and Water. We are constantly pinching ourselves and asking the question ... "We get paid for this?"

Welcome to the Snow Survey Centennial Celebration!

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