The Case of the (almost) Missing Soil Power Probe

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It was a cold, gray day in February—typical winter weather for northern Idaho. The Bonner County Soil Survey party was industriously laboring over their CAW mapping unit descriptions for the fifth time.

Signs of cabin fever were setting in. Every once in a while someone would stop and look wistfully out the window at the truck-mounted power probe, anxious for the field season to begin.

Yes, a new soil power probe, a Giddings hydraulic soil sampler was mounted on a 4 × 4 pickup. We had wondered about its usefulness ever since it arrived in early January. Little did we realize how soon we would find out.

The phone rang, breaking our concentration. It was Dale Nielson, the Soil Conservation Service area engineering technician in Moscow. He needed one of us to help him with an inventory and evaluation, and thought we should use the soil power probe! Some background on the problem was necessary, so Dale filled us in on the details.

Since the early 1970s, the Idaho Department of Fish and Game had planted wild rice in the Coeur d'Alene River Wildlife Management Area at Thompson Lake. But their efforts at improving the wildlife habitat were hindered by seasonal water level fluctuations. With the approval of Washington Water Power, they planned to build a dike that would stabilize the 250-acre area of marshland and provide a year-round water level, improving the habitat for waterfowl and fur-bearers.

Al Brunner, of Idaho Fish and Game, contacted the Soil Conservation Service requesting assistance. He estimated that the mineral soil was no more than eight feet from the surface and would support the dike, and merely needed confirmation from a soil scientist to assure a cost-sharing plan with the Soil Conservation Service to fund the project. Dale Nielson designed the system.

As you can imagine, getting soils information from an organic soil is at best a messy project. The request was made during the winter. If we waited until the marsh dried out in summer to find out how deep it was to mineral soil, construction would be delayed another year.

We could have rowed a boat out there in the spring and augered down through the water and into the muck to a depth of six feet, or if we were lucky, the extensions wouldn’t get stuck in the muck and we could auger a little deeper.

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