

## Burleigh County SCD Soil Health Program

Dakota Prairies RC&D and Dakota West RC&D are partners in an EPA 319 water quality project offered throughout the 18 counties of southwestern North Dakota. Dakota Prairies RC&D is the administrator of the **SW North Dakota Water Quality Education Project**, working with additional partners (ND Department of Health, NRCS, and local Soil Conservation Districts) to promote water quality education and related best management practices throughout the area. The program is available to SCD and water quality partners and local project sponsors.

Included in this partnership is one of the most innovative, positive, and economically feasible conservation success stories in local area agriculture, since the advent of no-till farming. It began with a group of innovative crop and livestock producers (members of the Burleigh County SCD) who led the way. Their transition story began with the conversion to no-till, rotational crop production, and intensive grazing management. Their goal was to reduce soil erosion, improve water infiltration, and water quality. Along the way, they worked through an assortment of management challenges by sharing their successes and failures, mentoring each other in order to accomplish their goal.

As they bridged the no-till divide, these producers began to seriously investigate its effect on their most valuable and misunderstood resource, the soil. Thus began their journey into what is now referred to as soil health; implementing grazing and cropping management strategies that enhance the soil by building organic matter and enhancing microbial activity, nutrition, structure, and water-holding capacity. In their ongoing efforts to further advance soil health, they continue to break the barriers, experimenting with cover crops and combinations of cover crops, tailoring rotations to manage nutrient cycling and utilizing compost tea extracts to enhance microorganism activity. They promote actively growing plants and roots throughout the entire growing season; capturing optimum sunlight and precipitation, providing ground cover to control erosion and reduce ground surface temperatures. They include livestock and wildlife in the system to add diversity and capture even more benefits. **Their benefits include: reduced fuel, pesticide, fertilizer, and equipment inputs; improvements in soil health, weed control, crop and forage production, net profit, and above all - the satisfaction of truly being good stewards of the land.**

Dakota Prairies RC&D has been a major partner throughout this transition, providing technical assistance and cost share funding for: educational workshops & field tours, sponsorships for producers to attend regional training events, and demonstration no-till equipment for hands-on use by area farmers. **The biggest educational impact has come from utilizing successful producers to promote these practices to other producers.** The Burleigh SCD Soil Health events have been attended by as many as 500 participants, and many of the innovative practices they have developed are now being implemented by producers across the state. Dakota Prairies continues to support this soil health project as it further evolves. Council members set policy and review and approve the proposals that are received from partner SCDs. The Council also continues to solicit and secure added funding to further promote and implement these conservation practices that benefit producer families and their land, livestock, wildlife and water resources.

