



**INTRODUCTION AND OVERVIEW
OF DAKOTA LAKES
2005
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The Dakota Lakes Research Farm's primary goal is to identify, research, and demonstrate methods of strengthening and stabilizing the agriculture economy.

I invite you to visit the www.dakotalakes.com web site for more background on the center. The role played by the farmer owners through their Board of Directors cannot be over emphasized. These are some of the best farmers in the world. The fact that they give of their time for the good of others needs to be recognized.

The researchers from SDSU and the USDA-ARS that do some of their work at Dakota Lakes are sincerely appreciated. You cannot build a system without components. One of the most important of these individuals was Leon Wrage, Extension Weed Specialist. He was invaluable in bringing no-till and some of the new crops into the mainstream. We wish him well in his retirement.

Not all of the research performed by staff from SDSU and USDA-ARS is reported here. The work at our station is often only one snapshot in what should be a collage. Variety trial information, for instance, is more valuable if several years and locations are examined. Consequently, when these data are reported, information from other locations is included where possible. Similarly, weed control studies often contain experimental treatments that are not labeled for use by producers. These plots are destroyed without entering marketing channels. Extension web sites are an excellent source of more comprehensive information. Not all of our data are shown either. This is especially true in a year like 2005 where weather impacted many studies negatively.

Lastly, the staff at Dakota Lakes plays a large role in our accomplishments. They are often not sufficiently acknowledged.

The Following Reports Are Included:

- 1. Growing Season Weather**
- 2. Dryland Rotations through 2005: shows all results from 1992 to 2005 for dryland rotations. Information on rotations types is also included.**
- 3. Fungicide Options for Winter Wheat 2005: Covers a series of studies on fungicide treatments to winter wheat.**
- 4. Winter Wheat Variety Trials: Includes all Winter Wheat trials in the State**
- 5. Winter Wheat Breeding Project 2005 by Amir Ibrahim.**
- 6. Nitrogen Management of Spring Wheat 2005. This covers the Wheat Commission sponsored research into managing N fertilizer placement and timing.**
- 7. Fertilizer Placement in Irrigated Corn. A series of studies on placing Nitrogen and Starter Blends with the seeder and separately.**
- 8. Seeding Equipment Video: This is a video developed under the technology project. It covers the basics of no-till equipment set-up and serves as background for the following reports.**

9. Christianson Coefficient of Uniformity Applied to Corn Spacing. Much reporting has focused on using standard deviation of plant spacing to define stand uniformity. This paper proposes another method.

10. Corn Planter Closing System Evaluation and Chart 2005. Several closing systems were evaluated over a range of conditions in a series of preliminary trials.

11. Individual Row Corn Planter Control 2005. The concept seeder was switched to run on small electric motors that allow control of each row independently.

12. Let Them Eat Cake: Reports on a project that made range cake using a mixture of field peas and corn.

13. Pea Q and A: Is an article written for visitors interested in growing pulse crops.

14. Rotation Impact n Weeds at Pierre, Wall, and Aurora Colorado b Randy Anderson. Randy had done extensive comparison of the low-disturbance systems at Pierre vs higher disturbance systems at Wall and Aurora. The impact of rotations in low-disturbance systems is particularly striking.

15. Corn Bt Technology Comparisons: Compares Bt vs no Bt (both CRW and Corn Borer) on a field after 16 years of continuous corn.

If there are any questions, please feel free to contact us.