

## South Brown Conservation District (No. 48)

History from 1969 publication:

The Conservation District was organized in April 1949 and was originally called the South Brown Soil and Water Conservation District. It includes the entire south half of Brown County, located in the northeast part of the state, and covers 548,480 acres. The name was changed to South Brown Conservation District on June 20<sup>th</sup>, 1996.

The land varies from level along the east and south to undulating along the west and northwest. The level part of the Conservation District was within the old glacial Lake Dakota, while the undulating part is of glacial origin. The area is drained by the James River and its tributaries, the Elm River, Putney Slough, Mud Creek and its tributaries, by Moccasin Creek, Foot Creek and Snake Creek, along with smaller tributaries.

The area is drained by the James River and its tributaries, which flow in a general southerly direction. The James River enters the district from the north, a little east from the middle point, and flows southward, leaving the district about the middle on the south side. The Elm River drains a small part of the north central part of the district and flows into the James. The east portion of the district is drained through Putney Slough and Mud Creek and its tributaries. The area west of the James River is drained, in addition to the Elm River, by Moccasin Creek, Foot Creek, and Snake Creek, along with other smaller tributaries.

The soils are of glacial origin, with those in east and south parts especially influenced by the old glacial Lake Dakota. The surface soils range from clay to sandy loam. Beardon silt loam predominates, with a considerable amount of Barnes loam and silt loam. Scattered over the south part are considerable amounts of Aberdeen which have a heavy clay sub-soil. Many other soils appear in scattered areas. However, the surface soil is generally classified as loam and silt loam and sandy loam. Much of northeast and along the James River and Elm River is subject to overflow in the spring and during seasons of heavy rainfall.

Much of the area depends on artesian wells for their domestic water supply, with shallow wells supplying some water for both livestock and homes. The rivers and streams supply livestock water to pastures through which they flow. Reservoirs created by dams supply water to some of the pastures in the west and northwest parts of the Conservation District.

The Conservation District lies in an area where both the soil and the climate are very favorable to crop production; consequently, grain farming is the leading type of agriculture. However, most farms combine grain farming with livestock production. So, in general, the agriculture is mixed grain and livestock farming. Livestock production occupies a more important position to the west and north, while small grain farming is more important to the east and south. Very few farms are without livestock. Beef cattle predominate, followed by hogs, dairy and sheep.

There are approximately 417,089 acres, or about 85 percent of the land, in cultivation in the Conservation District. Of this, approximately 75 percent is used for the production of small grains. The general rotation now being followed is small grain three or more years with some row crops. Very few farmers include legumes and grasses in their basic rotations, but late years sweet clover, as a green manure crop, is becoming quite common. Crop production is somewhat limited by moisture, weeds, insects, cropping systems, and flooding of flat areas. Approximately 95,213 acres are in native grasses, which are used for hay and pasture. The predominating native grasses are western wheat grass, blue grama, side oats grama, needle

grasses, sand grasses, big and little blue stem and blue grass. The native grass pastures are generally good. However, some farms do not have sufficient pasture acreage, which results in overgrazing. The acreage of legumes and introduced grasses is small, being only about 25,000 acres, or 6 percent of the cropland. This consists chiefly of alfalfa, sweet clover, brome grass, crested wheat grass and blue grass.

Only about one-third of the farms have farmstead tree plantings or shelterbelts. Some of the soils are not favorable to tree growth.

Problems facing the district and solutions for these problems:

- Water erosion is not a problem on the flat lands of the district, but is always a problem on the sloping croplands. Water erosion is often not visible to the casual observer until "bald" spots appear on the higher ground, gullies appear in the water courses across farm lands, or until bottom lands have been covered with silt. Therefore, it is necessary to handle all lands in a way so as to prevent water erosion or reduce the damage. To do this, the supervisors suggest the use of grass and legumes in rotations; the seeding of grass in waterways that cross cropland; the blading in of gullies; packing and fertilizing the soil and seeding grass; the setting up of practices that will reduce the amount of water that flows into the waterways, such as contouring, terracing, and the use of crop residue management.
- Wind erosion has taken some toll on all cultivated lands. It is more serious on the light sandy soils than on the heavier soils. Recommended practices to prevent or reduce wind erosion are: field strip cropping, contour strip cropping, sub-surface tillage and crop residue management; seeding grass on bad areas, the use of grass in rotations, and a more extensive use of crop rotations and use of tree belts. The supervisors of the district recommend contour farming and terracing where needed, crop residue management, the use of crops and tillage practices that leave a reserve of moisture in the soil, and water spreading where possible on grass lands. The cropping system of small grains and row crops has had some effect upon soil fertility, as well as materially reduced the organic matter content of the soil. That has made the soil more subject to erosion. As a remedy, the supervisors suggest the use of crop rotations containing grass and legumes, with a growth plowed under to add humus to the soil.
- There are areas of poor drainage in parts of the district. These areas are characterized by numerous sloughs and potholes that are often too wet to farm in the spring. The supervisors suggest that many of these sloughs and potholes can be dried up by the establishment of such conservation practices as contouring, terracing, and stubble mulch farming. Some potholes can be eliminated by draining them into natural water courses, or by draining several into one large one. Some small sloughs may be drained into natural sloughs or water might be diked out of them. Where large areas are involved, community action is necessary.
- A high percent of farms have no farmstead windbreaks and in many other cases, they are not effective because of their location. There is need for additional field shelterbelt plantings, for
- field protection and wildlife cover. The supervisors recommend a tree planting program to meet the needs of the district. Weeds cause serious loss to crops as well as create a needless farm expense. The supervisors pledge their fullest cooperation to the County Weed Board in the control of noxious weeds. They further recommend a practical chemical and cultural control program for annual, as well as perennial, weeds, consistent with good soil conservation practices.

- Some land that is now being farmed should be seeded to grass. Some pastures are overgrazed, weedy, and have low carrying capacity. The supervisors recommend the seeding of adapted grasses on some of the wet lands that are subject to flooding, and grass and legume mixtures on eroded croplands or lands that are hard to farm. The mowing or spraying of weeds in some pastures would increase the forage produced. More grass and legumes are recommended for use in a good pasture management program.

South Brown Conservation District's accomplishments to June 30, 1968, include:

Conservation cropping system -322,895 acres

Contour farming --1,627 acres

Farm ponds --494

Farmstead windbreaks 1,618 acres

Field windbreaks - 253 miles

Grass waterways --54 acres

Terraces -55 miles

Wind strip cropping - 3,090 acres

District cooperators - 686

Basic farm plans --473

The first district supervisors were: Ernest Nillson, Marshfield, vice chair; C. B. Quam, Groton, chair; Kenneth Holum, Groton; Max Hoeft, Groton, treasurer; August Greben, Ferney; and Ben Schaub, county agent, secretary.

The original purpose the Conservation District was organized: "The landowners of the south half of Brown County have organized a Soil Conservation District in order that they might obtain the necessary assistance to cooperatively promote the maximum conservation of soil and moisture resources, prevent erosion and encourage good land use and thereby preserve the county's natural resources, control floods, prevent the impairment of dams and reservoirs, preserve wildlife, protect the tax base, and protect and promote the health, safety and general welfare of the people. It is believed that such a program will establish a more stable agriculture in the south half of Brown County".

Updated information provided in 2012:

Many of the same issues are concerns today, including water & wind erosion, drainage, flooding and noxious weeds. The priorities set in 2011 by the Conservation District are as follows:

- EXCESS/INSUFFICIENT WATER—Ponding, flooding, seasonal high water table, seeps and drifted snow
- SOIL QUALITY DEGRADATION—Concentration of salts or other chemicals
- SOIL EROSION—Concentrated flow erosion
- SOIL EROSION—Excessive bank erosion from streams, shorelines or water conveyance channels
- EXCESS/INSUFFICIENT WATER—Inefficient moisture management

In 1949, there were approximately 1,200 operating units in the Conservation District, with the average size of farms at 480 acres. In 2007, the total number of farms in *all* of Brown County was 1,036. Today the size of many of the farms is measured in number of quarters.

In 1949, approximately 417,689 acres *in the Conservation District* were under cultivation. Of those acres, 47% were planted to wheat and only 17% planted to corn. By the early 1980s, the economics of farming were changing and small grains were being replaced by corn and beans. Statistics for 2011 shows corn and soybeans at 73% of the 830,000 cropland acres *in the county* and spring wheat at less than 10%. Due to the recent wet years, the Conservation Reserve Program (CRP) has increased to approximately 10% of the county-wide cropland acres. Cropland is currently valued at \$2500 to \$5500 per acre. With the increased corn production and higher yields, there have been several ethanol plants constructed in the county.

Total Acres of Tree Planting by decades:

Decade	Total Acres--Field, Farm & Feedlot Windbreaks, Other	Farms Planted	Total Deciduous, Conifers planted
1950s	1605.6	650	921,053
1960s	1037.6	473	561,775
1970s	1450.3	624	755,166
1980s	1276.5	549	588,790
1990s	859.2	437	655,528
2000 thru 2011	869.8	273	606,041

The following is the history of the Board of Supervisors that has and are currently serving :

Kenneth Holum	1949-1952	James Sperry	1971-1978
Max Haeft	1949-1952	William Hurrell	1973-1976
C. B. Quam	1949-1952	Ernest Nilsson	1977-1984
August Grieben	1949-1982	Robert E. Schuelke	1979-2008
Ernest Nilsson	1949-1972	Dale Washnok	1983-1984
Leo S. Hansen	1952-2007	Randy Bauer	1985-1991
Francis Evelo	1954-1968	Dale Washnok	1985-1994
Orville Smith	1954-1961	Robert Knickrehm	1985-2001
Alfred Locken	1956-1959	Scott Sperry	1991-Current
Laverne Swensen	1961-1970	Tim Heilman	1995-2006
Gwynne Jones	1963-1968	Dale Washnok	2002-Current
Robert Ristau	1965-1966	Allen D. Ryckman	2007-Current
Alvin Ristau	1967-1972	Lee Thompson	2008-Current
Robert Knickrehm	1969-1984	Randy Wiedebush	2008-Current

The Conservation District offers two agricultural scholarships. In 2005, the Robert Knickrehm \$500 Agricultural Scholarship was established in memory of the long term supervisor from the Groton area. The qualifications include pursuing a future in an Ag related field and attending an in-state facility. The second scholarship, started in 2007, is the Upper Grades Ag Scholarship, which has similar requirements, but does not have a set dollar amount. The number of scholarships awarded each year is determined by the number of qualified applicants.

The Conservation District also promotes the Arbor Day Essay Contest, the Speech Contest, Land and Range Contest, Northern Prairie Water Festival and other conservation related activities.

By the fall of 2002, construction for a new tree shed began. The original tree shed was given to the Brown County Highway Department to be moved. By the spring of 2003, the new 50 x 80' building, with a 50' x 30' tree cooler was completed. Since that time, the vehicles have also

been gradually replaced. The 1949 tree planter was retired in the summer of 2011. Presently the Conservation District is self-supporting, with no county funds being received.

The Conservation District currently provides services for tree planting, weed barrier installation, hand plants and a no-till drill for crops and grasses.



**South Brown Conservation District's tree shed built in 2003**