The Carlsens, like many other farmers, have noticed soil salinity problems on their land. Some years, two crop failures in a row could be expected. The Carlsens noted that their main concern was the need for a better iron belt every year. The use of a hydraulic rod cultivator has been part of their farming program since summer 1977. The rod cultivator can cut up to 12 inches per minute, and on an average, it provides a 30% savings in plowing time. The rod cultivator is especially useful in low wetlands, where the equipment can be used to cut around large rocks. The rod cultivator has been successful in cutting out salt-affected soils, and the Carlsens have noticed a significant increase in crop yields since the introduction of the rod cultivator.

The rod cultivator is a valuable tool for farmers looking to improve soil fertility and productivity. It is particularly effective in reducing soil compaction and improving water infiltration. By cutting into the subsoil, the rod cultivator helps to aerate the soil and redistribute moisture, which can lead to increased yields and improved crop health. The Carlsens have found that the rod cultivator is also useful in controlling weeds, as it can help to cut off weeds at the root level, preventing them from regrowing. Overall, the rod cultivator is a cost-effective and efficient tool for farmers looking to improve soil health and productivity.

By: Gerald Grodal
Saskatoon

Over the past several years, there have been some different ways of reducing the level of soil salinity. I'd like to talk about one of these, which is called "rod cultivator." The rod cultivator is a piece of farm equipment that is used to cut into the soil in order to improve water infiltration and reduce soil compaction. I've spent some time working with the rod cultivator, and I think it's a valuable tool for farmers who are looking to improve soil health and productivity.

There are some alternative approaches to reducing the level of soil salinity, but the rod cultivator is a particularly effective method. It's relatively simple to use, and it can be adapted to a wide range of soil conditions. In general, my approach to teaching young people about the rod cultivator has been to use simple analogies and examples. For example, I've used the analogy of a garden hose to explain how the rod cultivator works. The hose is used to apply water to the soil, and the rod cultivator is used to cut into the soil, allowing the water to penetrate deeper into the soil. This is a useful tool for farmers who are looking to improve soil health and productivity.

In general, the rod cultivator is a valuable tool for farmers who are looking to improve soil health and productivity. It's relatively simple to use, and it can be adapted to a wide range of soil conditions. For more information on the rod cultivator, please refer to "Saskatchewan's Rod Cultivator: A Farmer's Guide to Improving Soil Health and Productivity."
Annual barriers on ferral are useful for weeding and future agriculture. Timber, however, other crops (e.g. sugar beets) and pastas can be lost.

By Rick McClinton and James Lokken

Successful farming requires continuous attention to the relationship between seed rates and speed. Farmers should have the ability to control the setting on the original irrigation and field capacities.

The speed of tractor/seed planters is critical to the success of the production process. By the time the seed is in the ground, the crop has already been planted and the potential for injury has been reduced. Over-speeding the tractor can lead to poor seed placement, uneven seedling emergence, and reduced crop yields. It is important to use the right speed to ensure optimal seed placement and emergence.

In the past decade, we have seen a significant increase in the use of precision agriculture technologies that have improved the accuracy of seed placement and emergence. These technologies have helped farmers to optimize their planting operations by providing real-time feedback and monitoring. By using these technologies, farmers can adjust their speed and settings to ensure optimal seed placement.

In conclusion, the relationship between seed rates and speed is critical to successful farming. By using the right speed and settings, farmers can ensure optimal seed placement and emergence, resulting in higher crop yields and better profits.

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The Newsletter of the Saskatchewan Soil Conservation Association Inc.

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By Blair Mcllon and James Lokken

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TIME TO "GET SMART!"
By: Gerry Willerth and Bob Linnell

This is the beginning of a new season to "Get Smart" about soil conservation methods that you and I can use on our own farms, without spending a whole bunch of money, or adopting an entirely new way of life on and around the farm. We know that there are farmers near each of you that continue to use their traditional methods of farming with some degree of success, but there are a lot of those same farmers who are at a loss to know what to do when they are presented with a reality check of erosion on their own farm, and worse, don't know or realize what they may have done to cause the problem.

Every district in the southeast has had one or more opportunities to attend a demonstration or tour of the farms in their district. These tours have been real eye openers for many farmers, and have proved to their non-believer neighbors that what they have been doing for some time, does pay. Soil Conservation is in everyone's hands and that we have to use that knowledge and work effectively to continue to make it work for each of us in our own operation.

One of the most valuable and effective tools of learning is the producer information meeting, and we would like you to make a special effort to watch for the soil conservation meetings in your area, and attend those you can. We encourage you to tell people at those meetings about your experiences in conservation, and wherever possible, to take a couple of your neighbors to the meeting so they might benefit from the education of others.

The SSCA also encourages you to tell others of your "Good Ideas and Work" at these meetings. Many of you have good ideas that work for you and could work for others in your community, or your club, or a farmers group. If you wish to let others know of your ideas or even a theory, please, write to the SSCA and tell them, so everyone can, at least, try a new method in soil conservation.

Those fields that have had some soil trapping methods installed this fall will be closely watched this winter to see how well they work, as well that many have ridge building. Non-tillage fallow will also prove very valuable this winter as an effective method of preventing erosion, and combined with several direct seeding trials in the spring should bring even more results to show the positive benefits of plowed soil conservation.

We encourage you to try more conservation methods this year under the Save Our Soils Program. You can now contact your nearest district soil technician, for farm information, and we'd like you to contact them with any questions you have about conservation. Application forms are also normally available at your Rural Municipal Offices, as well as SSCA offices throughout the province.

There are many people in this Region of those of us interested in soil conservation in this region have a lot of work to do yet! The RCT is encouraging the districts to hold their members and discussed the role and ethics of the SSCA. The producer panel on innovative production techniques turned out to be the hit of the day! Bill Boyd from Eston described his crop - fallow rotation. His land doesn't see the cultivator, as he direct seeds using a planter, direct seeding using a Haybuster hoe drill. Darrell Lyons of Brock was tired of watching his soil blow and organized a shelterbelt club which has now planted over 200 km of trees. They also make extensive use of forages in their Crop rotation. Marc Loiseille of Vonda turned to organic farming in the mid 1980's because he was concerned about the health of the land. Trees have been planted to reduce soil erosion, conserve moisture and provide wildlife habitat. Forages are an integral part of the rotation, and weeds are now controlled through tillage and post seeding harrowing. The presentations by these producers created a lot of questions and resulted in lengthy discussions over lunch break.

Allan Patkau of Hanley gave a very interesting presentation about controlled grazing. He was able to convert 160 acres of saline, erodible land of low productivity into highly productive rangeland. Alfalfa and a variety of grasses were seeded, and the land was fenced off into small paddocks of 12 to 15 acres. By only allowing cattle in each area for a short period of time, and then rest. The area, Allan has been able to improve the health of his pasture and increase production.

Ken Sapsford, the SSCA's President for the Biggar District summarized the conservation program in their area. Residue management to control wind and water erosion is a key part of their program. Their three wide blast cultivators covered over 8,500 acres in 1990! Residue management also included a prescribed fallow program consisting of 4:3:8 followed by Rustler and a cultivation. More residue was conserved when the cultivation was performed at the beginning of the season (i.e. before the Rustler) compared to when Rustler was first applied and the cultivation later on more weathered stubble. Their district also has a successful shelterbelt program being run on a contract basis.

Gary Schwetzler, SSCA's President Elect then chaired a session on government programs affecting soil conservation. An excellent presentation was made by James Lokken, SSCA's economist. James summarized how the quota system, crop insurance, land assessment and soil programs affect soil conservation. The meeting then broke into small discussion groups and later regrouped to summarize opinions. There was not much agreement on how policies could be changed! On a survey filled out later, most participants indicated that they were more interested in gathering technical information than discussing government policy.

We hope to hold this kind of meeting on an annual basis, and look forward to your input.

INNOVATIVE TECHNIQUES
By: Dave Bueckert and Garth Patterson

The West Central SSCA meeting in Outlook on December 6 turned out to be a success. Ken Allport addressed members and discussed the role and ethics of the SSCA. The producer panel on innovative production techniques turned out to be the hit of the day! Bill Boyd from Eston described his crop - fallow rotation. His land doesn't see the cultivator, as he direct seeds using an air-planter double offset disc opener and has a cost effective chemfallow program. John Bennett from Biggar described how he increase the moisture retention, and allow extended cropping as an alternative to direct seeding. Non-tillage fallow will also prove very valuable this winter as an effective method of preventing erosion, and combined with several direct seeding trials in the spring should bring even more results to show the positive benefits of plowed soil conservation.

Save Our Soils Committee Meetings are being held in the districts to pay cooperators, prepare reports and plan this winter's extension program. Members of this RCT will be available to help resource some of the producer meetings.

In addition to attending District SOS Committee Meetings, Juanita has visited some rural schools, speaking to grades 5 and 6 students on the importance of soil conservation but also practice soil conservation but also practice soil conservation methods turned out to be the hit of the day! Bill Boyd from Eston described his crop - fallow rotation. His land doesn't see the cultivator, as he direct seeds using an air-planter double offset disc opener and has a cost effective chemfallow program. John Bennett from Biggar described how he increase the moisture retention, and allow extended cropping as an alternative to direct seeding. Non-tillage fallow will also prove very valuable this winter as an effective method of preventing erosion, and combined with several direct seeding trials in the spring should bring even more results to show the positive benefits of plowed soil conservation.

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There are many people in this Region who know that soil conservation measures should be undertaken. Encouraging those people to not only think about soil conservation but also practice conservation will be a task for all of us who are already committed to the soil conservation philosophy in the months ahead.

RECIPES NEEDED
By: Fred D. Phillips and Juanita Poleg

Snow falling in early December covered up eroded fields. Prior to the heavy snowfall, the ditches along every highway in all parts of the region were dusted with toppled. Worked stubble and summerfallow fields offered little defense against the relentless wind. It appears that those of us interested in soil conservation in this region have a lot of work to do yet!

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The RCT is encouraging the districts in the southeast to host a Soil Conservation Course in December. The Technicians attended a Conservation Course in December. The Technicians attended a Conservation Course in December. Organized by the RCT, presentations were made to the Technicians on a variety of topics including programs offered by Ducks Unlimited; salinity and its management; forages; the effectiveness of shelterbelts; under-standing wind and soil conservation. The students have been a great group to work with to make the project possible. The presentations by these producers created a lot of questions and resulted in lengthy discussions over lunch break.

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SSCA Policy Meeting in Outlook.
Mowing Crop Residues to Minimize Tillage

By: Blair McClinton
Regional Soil Conservationist

The 1990 crop was one of the largest in Saskatchewan’s history. This large crop also produced large amounts of crop residues. Many producers could have problems managing residues this spring. Stubble burning is one traditional way to deal with heavy residues, however, valuable nutrients are lost forever when stubble is burned. Tillage is the other traditional method to manage residues. Excess tillage to bury residue can leave the soil prone to erosion. It can also dry the soil out resulting in uneven germination.

Some producers have found mowing crop residues to be an effective way to manage large amounts of residue. Producers who mow their residues are eliminating at least two tillage operations under heavy trash conditions. In the Nampi district in northern Alberta, it was estimated that mowing residues prevented 4000 acres from being burned last spring. Those farmers rented rotary mowers from the local municipality.

The best time to mow residues is in the spring. Mowing residues in the spring gives producers the benefits of snow management while helping eliminate trash clearance problems during seeding. Most hoe drills and air seeders can direct seed into mowed residues. Producers using disc drills can prepare the seedbed in fewer operations helping to maintain residues and soil moisture.

Snow Ridging for Moisture Conservation

By: Gerry Meiler
Regional Soil Conservationist

Trapping snow by creating ridges with a tractor plow to try and consolidate our soil moisture reserves in our Saskatchewan fields is not a new idea. It is a practice that has been tried on a sporadic basis for many years by farmers. Our very dry soils over much of Saskatchewan after the 1990 crop has again renewed interest in this practice. With many farmers facing very tight operating budgets, farmers must also assess the economics of such an operation.

Unfortunately research data is scarce on the topic. Understanding the mechanics of snow ridging and its ability to replenish moisture reserves through infiltration into the soil is essential if the farmer is to make an informed decision about the merits of snow ridging. Research has shown that if there is inadequate snow cover on a field to enable the farmer to develop an effective snow ridge, snow ridging can increase the amount of water available for next year’s crop. However, there are a few points that a farmer should consider before he goes to the expense of ridging his fields.

Researchers have found that snow ridging on fallow fields generally is very difficult because of uneven snow cover. Ridging of snow has also proven uneconomical on fields that are fairly moist into the winter. Most fields do not generally have the ability to store any additional moisture that may be trapped by snow ridging.

Research has also shown at least 2 ridging operations are needed to establish effective ridges. Snow ridges only effectively trap snow on an area equal to twice the height. With this in mind, your first ridging operation should be undertaken shortly after there is sufficient snow cover on the field. If conditions permit, in late January or early February.

It is a good practice to avoid covering the soil surface when ridging. This is possible only when the previous crop stubble has been left standing. Soil that is cropped into the snow ridge causes the snow to melt earlier thus destroying its usefulness at trapping snow. Relatively bare ground beside the ridge also allows the frost to penetrate deeper into the soil. This area then takes longer to thaw in the spring thereby reducing the soils ability to absorb the water from the trapped snow.

The cost of developing effective snow ridges in the field, per pass is about equal to a cultivation per pass. After that, the trees have to fend for themselves.

The Bengough Shelterbelt Club will have to wait for 5-6 years before they’ll really start to see the impact of their work. For now, that vision and the commodity of this barn-raising project will keep them coming back to the tree planter in the spring.