Armbruster has become SSCA’s full-time secretary. Pearse, Dean Smith, Garth Patterson, Juanita Polegi and Yvette Crane.

The Barrier Strip is a success in Saskatchewan. For more information on the videos or the cheque for $15 (single video $10).

The two new seats on the Board are open to any SSCA Member. The SSCA will be opening one seat for elections in the fall of 1992 and the other in the fall of 1993. Nominations must be submitted to the SSCA before Sept. 30th. If you are interested in becoming a member of the SSCA Board of Directors contact the Chairman of the Elections and Nominations Committee (Sheree Bucclatt 799-2352) or the SSCA Executive Manager at 787-0136.

By presenting such a diverse range of speakers, committee's efforts resulted in a crowd that exceeded their expectations and poured in total support. As part of the organizing committee, the Saskatchewan Soil Conservation Association took this opportunity to publicly thank everyone who participated in the conference. A special thank you is extended to Schnaar Nja, Stewart Adams, Ray of Many, Sid Zitell and Barry Wilmot for their input in making the conference a success.

On the Monday morning of the conference, we had about 200 people pre-registered for the conference and by the time the conference started, we were well-to-do with people standing room only”, said organizing committee member Barry Swansen of Sask. Rural Development personnel and the Prince Albert ADD Board personnel, was overwhelmed to see such a large number of producers show up for each of the sections.

"It was gratifying to see so many producers show such an interest in direct seeding,” added Maker. “Our objective was to show producers that direct seeding is a viable alternative to conventional seeding and tillage and we believe that this accomplished.”

A report on each of the topics presented at the conference is included in this issue of the Prairie Steward.

The 1993 SSCA Annual Meeting’s Conference is slated to be held in June just prior to the Farm Progress Show and will consist of field demonstrations and a one-day workshop.

A special thank you goes to all of the people who helped make the conference a success it was. Organizers hope that all those who attended realized a greater understanding of direct seeding and what it could mean for their farming operation.

The Newsletter of the Saskatchewan Soil Conservation Association Inc.

As of March 2nd, Cheryl Ambrosetti has become SSCA’s full-time secretary-receptionist.

Howard Fox (SSCA’s new media) has relocated to the PIRL, St. Vital Centre in Winnipeg.
The secret to success with any animal is good wood control. When many of us think of wood control in shelterbelts, we think back to the time we spent hand pulling trees as children. These “bad” memories of hand pulling are one of the main reasons why more shelterbelts are not used. There are now several herbicides that can be used in shelterbelts.

Applying trifluralin before planting the tree row is one of the most effective ways to control weeds for first two years after planting. This application will control most annual graminoids and many annual broadleaf weeds.

There are several annual weeds not controlled by trifluralin. Certain species of thistles, hawkweed, buttercup, and few others are not controlled by trifluralin. There are some new herbicides that can be used in shelterbelts.

Field shelterbelts won’t solve all erosion problems. They are a part of a total soil conservation package. Five serveral Committees and/or ADD Boards who choose to focus their attention on a few soil conservation practices and fail to promote the planting of field are failing producers in their area.

The Parkland Zone is well suited to the growing of trees. Well-planned and maintained shelterbelts do much for our soil and environment. Shelterbelts are not “just for the south.”

By: Janita Poggi

Recently I attended a meeting of Parkland farmers and the topic of shelterbelts came up. I was dismayed when one producer asked at the need for shelterbelts. While he believed that shelterbelts were important for his land, he didn’t think they would make any difference to his farm. The presence of this species of trees of they plant in a belt. A type of belt that might be beneficial in one part of the province may either be beneficial or be a burden to a producer elsewhere in the province. Choosing the right combination of species can determine the success or failure of any shelterbelt system.

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Bill Boyd explains his modified spraying system.

By: Garth Patterson
E.C. Soil Conservationist

Until eight years ago, Bill and Lynn Boyd had a problem on their 2100 acre farm just south of太大. "Our farm was not erosion-proof" says Bill. "Our 50/50 system using tines and harrow wasrrs was causing wind erosion and reducing the quality of the land. We wanted a system that would leave more residue on the surface."

Zinc-alkaline conservation till proved to be the answer.

Economics was also an important factor. "When we came time to replace their tractor back in the mid '80s, the Twenty was wide enough to do it. We had to lower our draft requirements," says Boyd. "As we move with the acra plant operators, we are able to use a 200 H.P. tractor to pull 27 feet of seeding equipment. This is our only tractor, and it has over 6,000 hours on it." According to a recent Grainews article, the average prairie farm has equipment depreciation of 8.8% to $10 per bushel of crop produced. The Boyd's went with their depreciation down to $39 per bushel.

Their innovative seeding system includes an 82' 27 foot Mort's cultivator. They stripped the implement and the side of the machine covered the cost of the cultivator. Twenty four acre plant-opening were purchased in Kansas and mounted on 15' row spotters. A hydraulic delivery system was used.

Their system now consists of direct seeding into either standing stubble or conservation fallow, depending on moisture conditions. The follow-up operation is one pass of the sprayer with a combination of Grass, Sweeter and ammonium sulfate in 2 gal. of water. In 1992 Cham was replaced with another broadcast product. In crop weed control consisted of a broadcast product and Assert put down using a special 2 boom/n 2 tank sprayer that Boyd modified. "Our turn down opening in the crop allows us to spot spray crabgrass using our 2 boom sprayer."

Chemical costs have actually gone down from $200 acre to $157 per acre with their new system of seeding and weed control. The Boyd's total cost of durum production is now about $45 per acra. "Our strategy has been to reduce input costs as much as possible, since we can't control the price we get for our product. However, our biggest costs continue to be interest and depreciation."

Their crop rotation used to include wheat, durum, barley and kenoth, but in the past few years only Spring durum has been grown. Boyd admits that their rotation is the weak link in the system. "Our goal is to move towards a more sustainable system, which would include a great variety in the rotation."

They would also like to implement a calf collection system to reduce weed and volunteer crop growth. Bill is also confident that continued improvement in spraying and tillage will further reduce costs and improve efficiency.

The local crop club was one means Boyd used to share ideas and try new practices. "We have a good core of farmers that feel direct seeding with less disturbance is the way to go."

The talk is now about erosion proofing the farm, at a reasonable cost.

"Our farm used to be bled" says Boyd, "Our ditches used to be full. I even remember helping my father dig the hard out of a sand dance spring."

Now they can sleep with peace of mind. "We now have a lot better about our farm than we did a few years ago."

A recent membership incentive program annouced by Monsanto and the SCA seems to have caused a little confusion among a few SCA members. The program offers 5 year memberships for $50, with Monsanto contributing another $50 towards the cost of the membership. What some members don't realize, is that the advertisement made that this program is available to NEW SCA MEMBERS and does not obtain existing membership. The idea behind the program is to recruit new people to the Association and SCA is pleased that Monsanto has provided this incentive. Members at this time are provided that the SCA Membership Enhancement Program is still being offered. Members who recite it 6 new members in one year will receive an additional 3 year membership for the cost of the membership. Surf the SCA website and start recruiting new members so that you may qualify for your three year membership bonus. For more information on membership, contact the SCA office in Regina at 374-2319 or your regional soil conservationist.
A: We'd like to promote soil conservation and we receive from the stewards. We're doing that. I'm interested in wildlife and all those things that we can do with land stewardship. We're doing that through education and there's also the issue of knowing that we're part of an organization that is promoting in their thinking on soil conservation.

Q: As newly elected President of the SSCA, what direction do you see the Association going in the next year?

A: Well, first of all I'd like to say that I'd like the Association to consider themselves as a great entity in soil conservation, that we are one of the players that there is greater coordination needed. We have a lot of interest in the cooperation programs that have been set in the States, by farmers, and I have a feeling that eventually the Government is going to have to demand that there is more cooperation, and if they're going to pay for it through levies, farmers are going to have to comply.

Q: So you think that our government should force farmers to practice conservation?

A: I don't like to really use the word forced. But, if we want to have the benefits of existing programs, we should also help to promote something, in return, I don't think, that it had. If it's not our benefit.

Q: Tell us about some of the benefits of joining the Association.

A: One of the biggest benefits that you receive from being a member of the Association is that you are helping to promote soil conservation and we do that through many things. We offer support for good soil stewardship. First of all we show our neighbors that we are interested in good management. We're doing that through education and there's also the issue of knowing that we're part of an organization that is promoting in their thinking on soil conservation.

Q: And for the future?

A: I think it would be good to practice something like this. We have come for this be very short time and we need to continue to promote soil conservation. Even without the contract, I think that we need to do a lot more than we are doing. We have to work harder at a membership drive, but I think that we are in a position now where the organization is better understood. I don't think you really want to stay away from an opportunity to join. It between the players in the soil conservation like PEFA, Ducks Unlimited and Agriculture and Food. So we're doing our best to be part of that group. It's interesting that the association is headed into it in more, and that's because of its nature.

Q: What's the future of the Association after the contract runs out?

A: I definitely think that we will still be functioning. We need an opportunity to do something like this. We have come for this very short time. We need to continue to promote soil conservation. Even without the contract, I think, that we need to do a lot more than we are doing. We have to work harder at a membership drive, but I think, that we are in a position now where the organization is better understood. I don't think you really want to stay away from an opportunity to join. It between the players in the soil conservation like PEFA, Ducks Unlimited and Agriculture and Food. So we're doing our best to be part of that group. It's interesting that the association is headed into it in more, and that's because of its nature.

Jack Bradleck (R) of the Western Producer presents Noel and Diane Sylvain with the Conservation Producer Award.

By: Blair McClintock

U.S. Conservation

Yellow toadflax (Linaria vulgaris) is a herbarious perennial that has become a serious range and will not potential annual crop weed in western Canada. This weed is increasing, in cultivated lands, and as a component of cover towards reduced tillage.

Toadflax first appeared in west Canada in 1918. It has infested 30,000 to 30,100,000 acres. Two insects that feed on toadflax, appeared in the late 1980s. Extensive introductions of toadflax in parts of its Natural range have reduced considerably. However, toadflax is a problem in an area near shelf just north of the Alberta border.

Toadflax spreads by lateral rootstocks and by seed. The average spread of toadflax from one plant to another is from 14 to 32 inches in one year. The importance of toadflax seed production is often underestimated. Toadflax can produce 1,000 seeds per flowering shoot. Germination, generally occurs from a shallow seed. The seed can remain viable for up to three years in the soil. Seed is sparse in spring, may be in water, and is not effective for all animals.

Toadflax is not as competitive as other perennials such as Canada thistle and quackgrass. Its root system is shallow, more aggressive and store fewer root reserves. The traditional method of control has been to deplete root reserves. The importance of management of soil erosion and to control weeds. Toadflax is a perennial, must be as persistent as the weed itself, without which production systems is being used.

By: Pat Flaten

S.W. Conservation

Doug Billiet, Provincial Weeds Specialist with Saskatchewan Agriculture News, described the issues relating weed control to direct seeding. Some of the highlights are as follows.

1. The commercial of direct seeding is the control of winter annuals. The big question is; fall or spring application? In a normal year, 80% of the winter annuals seed germinate in the fall. Billiet's general rule is to apply fall spray after Thanksgiving with 2,4-D ester or MCPA. If spring, you must ensure that you have before the end of April or it's too late.

2. So, if I spray with 2,4-D or 2,4-D plus, for winter annuals, I will have the following crop? Several factors affect the disappearance of rate of application, soil organic matter, matter, rainfall, soil characteristics, and crop sensitivity. Some broadleaf crops are affected, but are normally at a full application of 2,4-D. However, be careful with spring crops and be aware of the effect of mixing other herbicides with 2,4-D, such as Banvel.

3. If I direct seed, what effect will that have on the herbicide I want to use? Billiet dealt with post-emergent and grasses. Stubble stubble intolerant of 30% of the area is usually handled. There should be little if any effect of standing weeds, pre-emergent or post-emergent herbicides. If stubble is flat and rain, a tolerant, that could pose a problem. Grimm, on the other hand, are designed to work when the plant is young, not the pre-treatment yet outbbotul by Averas BW and Terban have been studied for efficiency in surface applications without incorporation. Ayvads BW works well with a plot of Treflan in showing some promise.

4. How do I control quackgrass and Canada Thistle? Quackgrass benefits from tillage, so a direct seeding system will normally benefit from some tillage. The newest recommendation is a made over harvest application, only on flats. But, there's some potential for management that registration to other crops. By the way, don't be tempted to use a registered of Roundup - there are legal implications!

5. Is it true that the first few weed have more weed control problems than the later ones? Some research has been done by Doug Dolk at Agriculture Canada. Less tolerance doesn't necessarily increase weed problems and any that may occur may be temporary. Location, weather, weed spectrum and other factors all affect the weeds. So, I will spray more or less. It depends on management.

By: James Kennon

Conservation Specialist

The Law of the 1992 SSCA conference was approaching and the hall was still full. Were all those farmers waiting to hear Roy Button talk about "Economics, The Glue That Holds It All Together" and waiting just waiting for the announcement of the fishing trip winner?

Many were waiting for the economics section. Exponent and research farmers wanted to compare the cost and yield figures from their own farms with Roy Button's many years of experience. A large group of "curious" farmers had gathered to hear the conference on cost comparisons. That was the estimate of what should be left in black and white.

Costs - Costs of production vary throughout Saskatchewan. In his presentation, Button examined the costs of copping chaffing wheat in the 90s black soil area. He found that costs probably increase as one goes further west. He suggested that the four areas bordered by the three different tiltage systems are likely to face these.

1. weed control chemical costs
2. fuel and repairs
3. costs of labour
4. costs of owning machinery

1. weed control chemical costs
- Reduced herbicide use for stubble may increase up to $5.00 per acre over conventional weed control costs, depending on whether a farmer falls 2,4-D and pre-emergent glyphosate in some years. Under zero-till, increased herbicide costs of $7.00 per acre over conventional systems. For direct seeding, especially when it comes to the application of phosphate. Copper and trace elements many be required to slightly more phosphate nutrients for the first year or two, to compensate for the cooler temperatures of the spring at time of seeding.

He also presented data to show experience gained in the early days of deep banding. Deep placement was not found to be particularly beneficial in spring placement situations.

Harapiak cautioned producers to be careful in both nitrogen and phosphorus-placed quantities with the seed, in direct seeding situations. Large amounts of nutrients placed with the seed can have a detrimental effect on the germination of crops. Recognized limits for in-placement of nutrients are reflected in the spacing design of many seeding systems.

Harapiak noted the growing trend in the use of air seeder and quoted figures of 60-70% in the larger soil zones in Saskatchewan. He also noted that it's a key in deciding what's going the air seeder as a technique to move from conventional tillage to direct seeding systems.

Chairmen Farmer introduced panel members (R to L) Roy Button, Doug Billiet (Sask. Ag and Food), and John Harapiak (Sask. Rural Development). In summarizing his remarks, Harapiak noted a number of factors that a producer should consider when planning for placement of fertilizer in a direct seeding situation:

1. Soil type - if the soil is heavier, you may apply more of some nutrients with the seed.
2. Organic matter content of your soil - the feasibility of quantity and placement of the seed with the on seeded knobs and high live rates of seeds.
3. Equipment - avoid or spacing affects the seed broadcast percentage in use as this limits the amount of nutrient that can be placed with the seed. This even applies to disc seeders and some air seeder.
4. Saline areas and high lime areas.
5. Potash may be considered if the producer is a continuous winter rotation, because of possible disease incidence.
6. Sulphur can usually be placed without restrictions, but amounts must be controlled if the elemental form is used.
7. Timing of fertilizer application can affect such things as protein content of wheat and acceptance of barley for malting.
At first glance, forests and farmland might seem to be in competition in Saskatchewan. An estimated seven million acres of former farmland is left fallowed, 50,000 forests are grazed, and the land for growing trees also helps to the agricultural land in the province. But Michael Spithill showed there are a number of advantages to using the land in the best way possible.

The trend of development can benefit livestock in many ways. Trees can be harvested and sold to forestry or to the wood industry. They also provide both aesthetic benefits and a microclimate for wildlife habitat. Trees and bush is a natural barrier to fire, and temperature both of which are vital to soil conservation efforts. Also, trees add to an excellent aesthetic for farming or planting small businesses.

Michael Spithill went on to explain that sustainable forest management is an advantage of the Farm Wood Alliance to producers of deciduous and coniferous trees. A Farm Wood Alliance provides a library and extension services of the University of Alberta and New Brunswick to advise and address the needs of the producers. The group is also available to assist with the preparation of a financial and management plan for the forest. It is also worth considering and taking advantage of the help offered to preserve or plant trees on your farm.

Many of the steps that you can take in your forest can be integrated with your farm. The result will be a diversified economy, which is good for both the forest and the farm. The Farm Wood Alliance is a great source of information on forest management.

For more information contact Michael Spithill at the Farm Wood Alliance.

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The Direct Seeding Tag has been held in the East Central Region. All districts in this region will be making available to producers one or more pieces of equipment that will enable the producers to gain experience with direct seeding. The types of equipment available range from Conserva Fiske to Frontier 500’s to modified John Deere tractors.

Further evidence of the interest in direct seeding was reflected in the large number of producers attending the Seed Day in Prince Albert and the Mani-Quot-Zell Association in Minto.

A series of radio ads that ran in early November generated many enquiries about direct seeding. In 1981, over 200 miles of field seeding were planted in this region through the OS Program. We’re anticipating at least another 200 miles of trees will be planted in 1982.

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Hi! This is a new section for young Prairie Steward readers.

In the Soil Smart section, you’ll find puzzles, pictures to colour, games, things to try, and much more, all related to farming and soil conservation.

Write to us! Send us your letters, stories, poems, puzzles, jokes, riddles and drawings about your farm and what your family does to conserve soil.

We will print as many of our young conservationists’ submissions as we can and . . .

You could win a PRIZE!

Send your submissions to:
Soil Smart
SSCA
Room 132
3085 Albert Street
Regina, Sask.
S4S 0B1

People who read this newsletter are interested in soil conservation.

We need soil to grow the food we eat. If we don’t take good care of our soil, it can be eroded - blown away by the wind or washed away by rain.

What are you doing on your farm to help save your soil?

How much do you know about soil conservation?

Try and find the ten soil conservation words hidden in this word search and find out if you’re Soil Smart!

Just For Fun Prairie Expressions

Can you match the word on the left with its definition on the right? See if you can find an adult who knows these!

Spits
Barnyard polka
Whisky Jack
Road allowance
Hay burner
Big blue bin

Sidestepping manure in the barnyard
Horse
Sky
Canada Jay
Strip of land between sections
Sunflower seeds

Adapted from material by Saskatchewan Education and the Western Development Museum, Saskatoon