



Irrigation Crop Diversification Corporation

ANNUAL REPORT 2003/04

Delivering “value for money R&D” to Saskatchewan irrigators

Irrigation Crop Diversification Corporation

Objects and Purposes of ICDC – The Irrigation Act, 1996

The objects and purposes of ICDC are the following:

- to research and demonstrate to producers and irrigation districts profitable agronomic practices for irrigated crops;
- to develop or assist in developing varieties of crops suitable for irrigated conditions;
- to provide land, facilities and technical support to researchers to conduct research into irrigation technology, cropping systems and soil and water conservation measures under irrigation and to provide information respecting that research to district consumers, irrigation districts and the public;
- to co-operate with SIPA and the minister in promoting and developing sustainable irrigation in Saskatchewan.

Delivering “value for money R&D” to Saskatchewan irrigators



Irrigation Crop Diversification Corporation

Board of Directors

The following served as Directors of ICDC in 2003/04:

				Election Year (#terms)
Carl Siemens	Chairman	Rush Lake ID	SWDA	'05 (2)
John Kónst	Vice Chair	SSRID	LDDA	'05 (2)
Gordon Kent	Alt. Vice Chair	Riverhurst ID	SIPA	app.
Ken Plummer	EMC Co-Chair	Moon Lake ID	NDA	'03 (2)
Darryl MacGregor	Director	Consul-Nashlyn ID	SWDA	'04 (2)
Dale Ewen	Director	Riverhurst ID	LDDA	'04 (2)
Don Fox	Director	Baildon ID	SEDA/SIPA	'03 (2)
Francis Kinzie	Director	Pike Lake	Non-District	app. (0)
Scott Wright	Director		SAFRR rep.	app.
John Linsley	Director		SAFRR rep.	app.

The Four Development Areas are: Northern (NDA), South Western (SWDA), South Eastern (SEDA) and Lake Diefenbaker (LDDA) as defined in ICDC's bylaws.

ICDC Directors are elected by District Delegates to the Annual Meeting. Each Irrigation District is entitled to send on ICDC Delegater per 5,000 irrigated acres or part thereof. Two Directors are elected from LDDA, two from SWDA, and one each from NDA and SEDA. The Saskatchewan Irrigation Porjects Association (SIPA) and Sask. Ag, Food and Rural Revitalization (SAFRR) are allowed two directors each on the ICDC board. The ICDC board must, by law, have irrigators in the majority.

Staff 2003/04

By agreement, agrologist and administrative services are seconded to ICDC by SAFRR.

Les Bohrson PAg	ICDC Senior Agrologist	Swift Current
Korvin Olfert PAg	ICDC Agrologist	Swift Current
Lana Shaw PAg	ICDC Agrologist	Outlook (maternity leave)
Clint Ringdal AAg	ICDC Agrologist	Outlook
Amanda WalkerAAG	ICDC Agronomy Assistant	Swift Current
Marlene Knopp	ICDC Administration	Outlook

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Letter of Transmittal

Outlook, Saskatchewan
December 1st 2003
To Her Honour
The Honourable Linda Haverstock
Lieutenant-Governor of the Province of Saskatchewan

Your Honour:

I have the honor to submit herewith the Annual Report of ICDC (Irrigation Crop Diversification Corporation) for the year 2003/04, including the financial statement audited by Lois A. Johnson CMA, all in accordance with *The Irrigation Act, 1996*.

Respectfully submitted by

Carl Siemens
Chairman
ICDC



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2003/04 ICDC Highlights

Annual Irrigation Conference 2003 in Outlook

ICDC co-hosts The Annual Irrigation Conference with SIPA. This year marks the first-ever meeting of the three prairie province Irrigation Associations: The Alberta Irrigation Projects Association (AIPA), Association of Irrigators in Manitoba (AIM) & The Saskatchewan Irrigation Projects Association (SIPA). The federal & Saskatchewan provincial governments were also part of the session. Significant irrigation development opportunities were discussed and a keynote address was: "Why in the heck would you move from Alberta to Saskatchewan?" delivered by B.J Boot of Boot Hay Producers, Outlook.

The Push for Provincial Irrigation Policy Continues...

ICDC has again been actively pursuing irrigation policy development. ICDC has made two formal irrigation funding requests to both Federal and Provincial governments in March 1997 and again in April 2000. Both have been unsuccessful to this point. Meanwhile the existing PAWBED agreement ended in 2000 and so did irrigation program funding. ICDC has operated on their member's levy money (\$0.35/acre) ever since.

Both SIPA & ICDC were represented at a March 26th meeting in Outlook with The Hon. Clay Serby, Deputy Premier & Minister of SAFRR. The Minister had the opportunity for a quick tour of irrigation-based processing in SSRID & was impressed with the amount of value-added activity in the area.

A credit to the efforts of both ICDC & SIPA was the inclusion of irrigation in both the NDP & Sask Party platforms in the 2003 provincial election. Irrigation has subsequently featured prominently in Minister Serby's comments on his agenda as Minister of SAFRR in the new provincial government.

ICDC met with the new PFRA Director General, Carl Neggers on March 14th. ICDC is a co-chair alongside PFRA & SAFRR at The Irrigation Centre in Outlook.

ICDC has been invited to the consultations regarding amendments to *The Irrigation Act, 1996*.

ICDC's Irrigation Education Initiative

The ICDC Board has been an advocate for improved irrigation education opportunities in Saskatchewan. The Irrigator, July 2002, documented the existing options for irrigation education and training:

School system
SIASST Moose Jaw
Green Certificate Farm Training Program
ICDC & The Irrigation Centre
University of Saskatchewan

Project WET, Ag In The Classroom
Irrigation course
Irrigated Crop Production Technician
Extension, field days, website, newsletters, etc.
Work Experience, some irrigation course content.

ICDC has been active in the development of Ag In The Classroom irrigation material. ICDC is working through The Irrigation Centre to promote The Green Certificate Program. Work by ICDC on irrigation curriculum at the U of S continues. ICDC has mentored seven coop students over five years from the College of Agriculture working on irrigation R&D projects for the past four years.

ICDC was involved in hosting SAFRR's Dutch consultant in Outlook July 3rd. Hopes are for an expanded exchange program between students from Holland & Canada.

Water: The Economic Driver of the Future

ICDC was pleased to sponsor & be an organizer of this Saskatchewan Agrivision Corporation (SAC) conference held in Saskatoon on March 20th. The conference brought together a broad spectrum of vested interests in water & highlighted Saskatchewan's golden opportunity for water-based economic development. The conference significantly raised water's profile in the public eye. Follow-up included a proposal for developing a 50 year Water Development Strategy for Saskatchewan which awaits funding approval. The Conference proceedings are available on SAC's website: www.agrivision.sk.ca.

Irrigation R&D Projects

ICDC runs a "*value for money R&D*" program using levy money raised from irrigators. The projects were selected from a long list supplied by all Irrigation Districts in 1999 and published by ICDC. Each year Irrigation District delegates are asked to approve the R&D program and the use of their funds. In 2003 the following projects were conducted by the ICDC staff seconded from SAFRR in partnership with cooperating irrigators, commodity groups, agri-business & other governments.

ICDC Irrigated Forage Centres

1) Friesen's Marksvew Farms at Warman & Peter J. Fehr's at Osler, **Dairy Quality Forage Centre**.

14 alfalfas & 14 grass varieties in 4 replications were seeded in 2003 at Fehr's. SeCan Cereal selection and silage quality trials were also on display. The July 21st ICDC Field Day attracted irrigators and dairy producers.

2) **SPARC**, Forage and Cereal Crop Scientists, Swift Current

SPARC operated 300 acres of unrestricted irrigation in 2003.

ICDC coordinated the SeCan Cereal selection and silage quality trials at SPARC. SPARC Research Scientist, Dr Grant McLeod, ran 64 plots of winter & spring irrigated annual forages. Jeff Wiebe has a demonstration of six new alfalfa varieties to compare with his previous ICDC on-farm demonstration's winning variety: Absolute.

The July 29th the SPARC Irrigated Forage & Grazing Tour was hosted in cooperation with SAFRR, SeCan, CWB & the Southwest Forage Association. ICDC maintains a solid working relationship with SPARC, and will work to increase these productive linkages with SPARC. An annual review is held with ICDC & SPARC staff participating.

3) CSIDC Forage Centre at Outlook

The Sask Forage Council in partnership with ICDC completed harvest on 14 varieties of alfalfa & 14 varieties of grass all under irrigation. The alfalfa plots topped 8 tons/acre. Hay, grazing & export-opportunity varieties are being demonstrated and may be compared directly to ICDC's Warman Dairy Quality Forage Centre. These ICDC plots are adjacent to AAFC Saskatoon's forage plots at CSIDC and make for a comprehensive irrigated forage demonstration at CSIDC.

HayWatch Saskatchewan

ICDC Agrologist, Korvin Olfert, successfully completed an M Sc on the subject of Infield Prediction of Alfalfa Quality. As a result an ICDC stock stick has been produced & calibrated to measure Total Digestible Nutrients and Relative Feed Value based upon the stick-measured height of alfalfa in the field. Here's a simple, accurate quality control method for irrigated hay producers.

Timothy Production for Export Markets

ICDC Agrologists have assisted The Canadian Hay Association (CHA) in compiling its Timothy Production Handbook. Saskatchewan Timothy Field Days were hosted in Outlook in cooperation with CHA & ICDC. Growers from across the prairies viewed both irrigated production and processing.

A Matching Investments Initiative project was approved between ICDC and Dr Bruce Coulman, AAFC Saskatoon.

ICDC's Timothy work currently underway includes: timing of N application, timing of 1st cut, P requirements & seeding rate & date (at CSIDC). Emphasis in all these trials is not only on yield but also on market quality.

Pocket Gopher Control

A pocket gopher control report was widely distributed. Approximately 3,000 acres of pocket gopher baiting were done in 2003 by two private practitioners charging \$3.50/acre/season & by ICDC staff. ICDC hosted another pocket gopher control demonstration field day on October 6th. ICDC had a third party evaluate this program by surveying participants: 600 reports "Pocket Gopher Management Program Evaluation" were widely distributed in February, 2004 to clients and participants in extension events.

Optimum Ryegrass for Grazing & Forage

ICDC is working with irrigators to hone the production package for this relatively new, productive, flexible forage crop. ICDC is helping irrigators to manage their mixed annual & Italian ryegrass fields for optimum yield & quality. Establishment success has been variable & so ICDC got Grant McLeod, Research Scientist at SPARC, to add ryegrass to his research on forage establishment using cereal cover crops.

Irrigated Grain Corn/Silage

ICDC's irrigated corn database is already in its 4th year and is providing key evidence for top yield & quality management techniques.

ICDC was pleased to have the Alberta Corn Committee (ACC) variety tests at The Irrigation Centre, Outlook. The Outlook site (2300 CHU) was added to Bow Island (2400 CHU), Vauxhall (2300 CHU), Brooks (2250 CHU) & Lethbridge (2100 CHU). 6 of the 9 major Canadian corn companies paid to enter their varieties.

The ICDC Saskatchewan Corn Selection & Silage Field Day, September 11th attracted a prairie-wide audience of 130 people. On October 14th Baildon irrigator Rick Swenson hosted a corn grain harvesting field demonstration at which he pulled off an impressive 127 bu/acre of dry grain.

ICDC's corn management program will be featured at the 2004 Crop Production Show & has been covered by Top Crop Manager, FarmGate, The Western Producer & other media.

Bean Agronomy

Irrigated dry bean yields over 3000lb/ac were reported in 2003. Disease pressure was lower due to the hot, dry conditions in July & August. ICDC's blight control demonstrations using copper bactericide did not, therefore, show a yield or quality advantage. ICDC is the Saskatchewan participant in a national bean blight control trial.

ICDC held a Bean Production, Selection & Pedigreed Seed field day on August 7th in cooperation with the Crop Development Centre, CSIDC, AAFC Lethbridge & SAFRR. Dr. Henning Mundel, bean breeder at AAFC Lethbridge, was very impressed with a field of his AC Redbond which ultimately yielded over 3600lb/ac.

Fusarium Prevention, Management & Awareness

ICDC participated in the SAFRR Fusarium Head Blight (FHB) survey to determine the prevalence & severity of FHB in irrigated crops. This survey also monitors the disease movement in Irrigation Districts and determines the disease species. ICDC also participated in the Cereal Leaf Disease survey. Irrigated conditions lend themselves to higher crop disease pressure. Disease levels were lower in 2003 due to a hot, dry Summer. Results & recommendations will be disseminated by ICDC to irrigators.

Potato Varieties

ICDC provides in-kind support for potato variety testing at CSIDC done by a “Consortium”. ICDC also paid the Saskatchewan Seed Potato Growers (SSPGA) annual membership for Consortium B, the industry group developing new novel trait varieties.

Crop Varieties for Irrigation

ICDC is a major contributor to the production of this publication which provides irrigators with independent testing under high input irrigated management. This publication will be printed by ICDC & available at the Crop Production Show, January 2004.

Manure Management

Irrigation Districts offer intensive livestock operations an ample, reliable source of good quality water & an opportunity for increased utilization of crop nutrients sourced from manure. ICDC, therefore, is involved in demonstrating optimum utilization of manure for environmentally sustainable, profitable, irrigated crop production. Site benchmarking & monitoring plus crop, soil & effluent measurements are providing the evidence for profitable & responsible management by both the supplier & the recipient.

Website: www.irrigationsaskatchewan.com (a joint ICDC/SIPA Project)

This farmer-friendly gateway to irrigation information and contacts on the prairies and around the world is being updated and gradually upgraded. The website is subject-driven following ICDC’s and SIPA’s philosophy that the website will take you to relevant information, wherever it is. This website is a work in progress as more relevant irrigation links as sources are discovered.

ICDC Winter Seminar Series

Each seminar applied the three major publications; 2003 ICDC Demonstration Report, 2004 Crop Varieties for Irrigation, and 2004 Irrigation Economics and Agronomics for Saskatchewan. One or two guest speakers at each seminar enabled local themes that addressed the concerns of local irrigators.

Swift Current and Riverhurst: “Irrigation Production and your 2004 Beef Enterprise”

Warman: “2004 Irrigation Crop Production, Economics & Development”

Outlook and Lucky Lake: “Making Irrigation Pay – Using Knowledge and Networking to build your Farm”

This series attracted interest and partnering from local Agri-business.

Publications

The Irrigator, Saskatchewan’s irrigation newsletter from ICDC to all irrigators.

Irrigation Economics and Agronomics, Saskatchewan 2004.

Crop Varieties For Irrigation (mailed out to all irrigators).

ICDC R&D Annual Report (R&D results & recommendations to irrigators).

Water Use Efficiency

The ultimate in water use efficiency in Saskatchewan is demonstrated each year at Treasure Valley Market Garden, Cadillac. The Irrigated Market Garden & Fruit Crop Field Day was held July 8th & again attracted a large crowd. ICDC combines with SAFRR to host this event.

The Saskatchewan Vegetable Grower Field Day featured irrigation at Moon Lake, along Valley Road southwest of Saskatoon on June 27th.

Options for upgrading irrigation project technology in Southwest Saskatchewan continue & were featured at the Annual Irrigation Conference. Increases in water use efficiency of over 400% have been consistently demonstrated by ICDC & PFRA & almost 900 acres were converted from gravity to sprinkler irrigation at Maple Creek as a result.

ICDC assists in water & effluent quality monitoring work done by SAFRR for irrigation sustainability & management purposes. ICDC also assisted the Swift Current Creek Stewardship Group with articles on irrigated forage production, water quality, effluent irrigation & sustainability.

CSIDC Support

ICDC, Industry co-Chair of The Irrigation Centre, Outlook

ICDC appoints one of its Directors as the industry's co-chair of The Irrigation Centre's Executive Management Committee. Initiatives pursued by this group include co-locating provincial irrigation staff at The Centre in 2004 for improved client service, promoting irrigation education opportunities, integrating the Green Certificate requirements into summer student activities, developing Capital replacement and R&D workplans including ICDC's R&D Priorities, and the establishment of an irrigation publications review team.

CSIDC Field Day

ICDC assisted in the organization of the July 9th annual field day and trade show. ICDC organized a forage & a pulse specialty tour in the afternoon. This event is summer's irrigation focal point for irrigators, commodity groups, media, agri-business, government, international visitors & the general public. CBC's Bob McDonald was there taping information for an upcoming documentary on water.

ICDC wishes to thank SAFRR for their continued support, the producer cooperators for committing themselves to the extra work and effort to get results and all the many agri-business partners who provide product and services to make ICDC's program "*value for money R&D*". Thank you all very much for supporting Saskatchewan's irrigation industry.

**CALL ICDC (306) 867-5527 FOR YOUR COPY OF 2003/04 ICDC
*DEMONSTRATION PROGRAM FINAL REPORT***