

Alberta FIRE NEWS

August 2000

Vol. 21 Number 2

Fire departments working with businesses to eliminate fire hazards

Partners when it comes to making hay

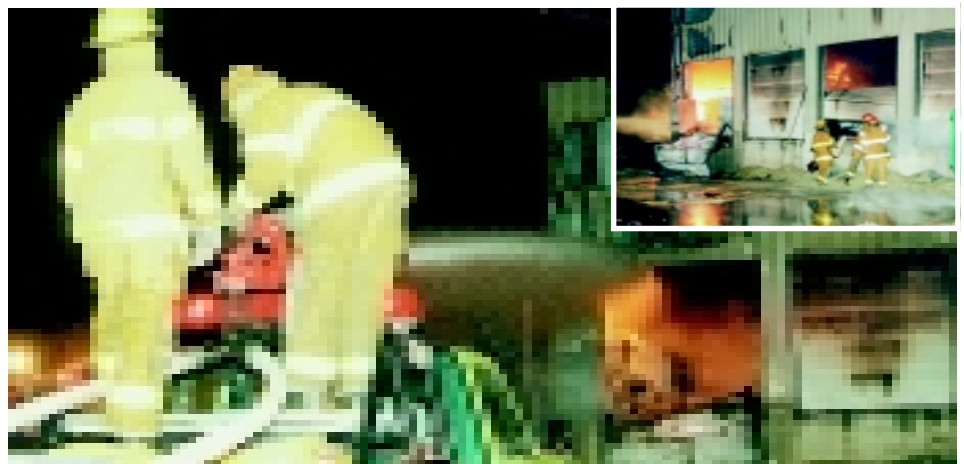
Coaldale and Magrath Fire Departments have reduced the fires in local forage plants by working with businesses to eliminate fire hazards. Here's how they reduced the risk of fire in their communities.

Coaldale

Andy Van Rijn knows firsthand the kind of damage fire can do to forage product processing plants. He's been Fire Chief of Coaldale and District Emergency Services for 13 years. The first fire his 20-member department handled at a hay compressor plant took place November 29, 1998, at the Green Prairie Products Plant. Damage was valued at \$1.5 million.

The fire started in a 30-metre wide by 60-metre long storage building with an exposed steel frame and non-combustible metal-clad walls. Van Rijn says it was the walls, though ultimately warped and distorted by the fire, which kept the flames inside the storage building. The building had no windows and all doors were closed.

The plant owner and three firefighters drove by, but it was not until an overhead door failed that the fire was



Firefighting operations at the Green Prairie Products Ltd. hay processing plant south of Coaldale. The fire destroyed a compressing plant, its equipment and a load of hay ready to be shipped to Asian markets.

revealed. The fire had been burning two to three hours before it was detected. Says Van Rijn, "The whole loss occurred before we even got on the scene."

The department battled the blaze for 30 hours straight, returning three or four times to put out hot spots. Finally, firefighters dug a hole and buried the remaining hay to smother the fire.

Van Rijn and his department were also concerned about sparks igniting another storage building, worth \$2 million in structure and stored product, located about 50 metres north of the main blaze. Firefighters

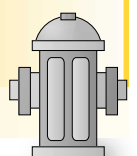
continued on page 15

In this issue

What's happening at AFTS	2
Camrose Fire Department emphasizes training	4
Get ready for Fire Prevention Week	6
Fire deaths rise in 1999	7
Reaching out to create a safer community	9
Residential sprinklers discussed at conference	10
Dealing with juvenile firesetters	11
Need for bigger fire department in Biggar	12
Common fire code questions answered	13

Upcoming Events

Fire Prevention Week, Oct. 8 - 14 and Holiday Hazards - Wrap them up!, Dec. 15 - 31 (see page 6)



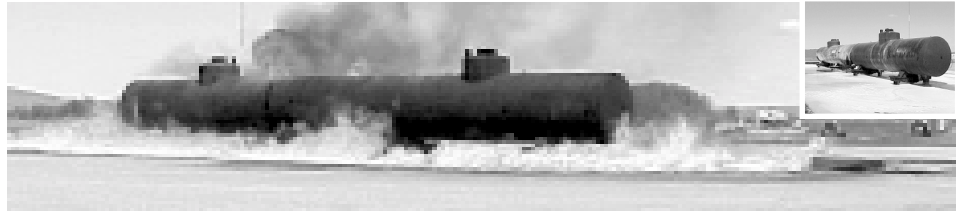
What's happening at the AFTS

Emergency preparedness training

The Alberta Fire Training School (AFTS) launched a comprehensive Emergency Preparedness Training Program in April to help municipal officials learn more about managing major emergencies. Heading up the new program is George Roddick, Manager, Emergency Preparedness. Roddick has been a disaster services officer with Alberta Municipal Affairs for the past five years and has worked with more than 50 Alberta communities in emergency planning.

“There is a very definite need for this sort of thing. There’s been a void for five years — ever since the Disaster Services Training School in Edmonton shut down. This program will help fill the void,” says Roddick.

Initial course offerings include Emergency Site Management, Emergency Planning for Elected Municipal Officials, Emergency Operation Centre Management and Basic Emergency Preparedness. The host municipality contracts the AFTS to teach the program and the cost for the course is covered by a Municipal 2000 Sponsorship Program Grant to the municipality. Course content and length can be tailored to the specific needs of a municipality and delivered at locations throughout the province. The first course was held for 24



participants in Canmore from June 13 to 15, 2000. AFTS has more than 18 courses scheduled for this year.

Airport crash rescue training prop

The AFTS is now training airport firefighters. Yellowknife airport fire

personnel were the first to train on the aircraft crash rescue prop on June 11, 2000, followed by Victoria airport fire personnel from June 12 to 15.

Initial planning for the course, which cost less than a million dollars, began two years ago.

Instructor Bob Fisher says the training was

developed because of a need for aircraft crash training in Canada. Instructor Corey Schram says many airport emergency response personnel have been travelling to the United States for training. “Our prop is different than what other centres have to offer ... they only use propane. We continue to use diesel and gasoline in combination with propane, which gives participants a more realistic fire.”

AFTS airport firefighter training complies with Canadian Aviation Regulations and National Fire

A railroad tank car serves as an aircraft crash prop for fire-fighting exercises. Flames at the base simulate a fire consistent with an aircraft crash site. Inset: A blanket of foam covers the craft, ground and any residual fuel that's burning.



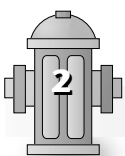
Crash truck spraying foam to extinguish the fire and clear an escape route for any passengers within the craft.

Protection Association (NFPA) standards. The Canadian Aviation Regulations require airport firefighters to extinguish a 460-square-metre fire annually to maintain their certification. The NFPA standards require understanding of aircraft construction and hands-on firefighting with flammable liquids. Some participants may need extra training in firefighting, foamlines, and duel agents (foam and dry chemical).

The prop is situated in a 520-square-metre pit and is currently unique in the world, because it uses tri-fuel: propane (for its cost-effectiveness), diesel (for its residual factor) and gasoline for realism. The fuel feeding a fire is controlled and carefully monitored by instructors. Flames in excess of 30 to 40 feet in height simulate an aircraft fire.



George Roddick, coordinator of emergency preparedness training at the Alberta Fire Training School.



Instructors Schram, Riley, and Fisher train airport firefighters in the practical components of airport fires such as turret operation from the crash truck, foam application for quick knock-down, and how to set up a fire-free evacuation area. Other practical components that can be taught include how to handle:

- technical fires
- engine fires
- spill fires
- wheel-brake assembly fires and dry chemical operations
- a "3D" fire resembling a ruptured fuel line
- a dripping or running fuel fire
- auxiliary power units
- fuels under pressure

AFTS is currently upgrading a second airport rescue prop that should be ready for full training use by early next year.

This prop will simulate the interior of an aircraft and will be located on the main AFTS site. The fuselage will be about two metres from the ground, a jet wing will be a little more than two metres above ground, and a turbo-prop will be about three and a half metres above ground.

This prop will allow airport firefighters to train for fires in jet engines, seats, overhead luggage compartments, galleys, lavatories, wheel assemblies and auxiliary power units. Eventually, the prop will have a cockpit with a throttle, levers for the extinguishing systems, and a DC-10 tail engine (six to seven metres above ground).

For more information about Airport Crash Rescue Training please contact:

Brunetta Mariani
 Telephone: (780) 853-5800
 Toll free: 1-888-863-AFTS
 Email: aftsinfo@afts.ab.ca

Combat Challenge

Firefighters from Alberta, Saskatchewan and Manitoba met to compete at the Prairie Region Combat Challenge Saturday, June 17, 2000. Hosted by the AFTS, the competition includes two parts: the combat challenge and the tag-team relay. Individuals and teams must complete five combat challenge tasks: stair climb with high-rise pack, hose hoist, forcible entry, hose advance and victim rescue. Firefighters don full turn-out gear. The five tasks are timed.

Individual participants with a time of three minutes or less received a Combat Challenge Gold Award lapel pin. Teams with a time of nine minutes or less qualified to advance to



The final few yards of the body-drag event.

the national championships. Final team times consist of the top three competitors' times.

AFTS grads get jobs

The employment rate for graduates of the AFTS Emergency Services Technician Program is running at approximately 85 per cent, says Randy Segboer, Fire Service Instructor. This program covers NFPA 1001 Level II Firefighter, Emergency



The firefighter combat challenge June 17, 2000. Inset: Total exhaustion at the end of the run.

Medical Technician-Ambulance, and other skills such as computer operation and public speaking. "A big focus of the program is on team work and instilling a positive attitude toward the fire service and public service sector," says Segboer.

Top finishers - 2000

Team results

- 1 Swift Current Emergency Services**
Steve Seymour, Pete L'Heureux, Darren McClelland, Ryan Hunter, Rod Smith
- 2 Edmonton Fire Department**
Travis Merrier, Pat Beaulieu, Kevin Tarkowski, Chuck Cartier, Bud McCarthy
- 3 Red - Saskatoon**
Eron McCormick, Todd Young, Mark Smail, Chad Ward
- 4 Grande Prairie Fire Department**
Matthew Mann, Jason Mazerkewich, James Kostuk, Blaine Worobetz, Ben Sargeant
- 5 Winnipeg Fire Department**
Darrin Pawlak, Lee Timchuk, Scott Achison, Jeff Wilgosh, Rick Friesen

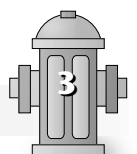
Individual results

- 1 Steve Seymour, Swift Current**
- 2 Pete L'Heureux, Swift Current**
- 3 Eron McCormick, Red - Saskatoon**
- 4 Chad Hills, Blue - Saskatoon**
- 5 Darren McClelland, Swift Current**

Over 40 results

- 1 Travis Merrier, Edmonton Fire Department**
- 2 Tim Stewart, St. Albert Fire Department**
- 3 Rick Friesen, Winnipeg Fire Department**
- 4 Denis Cunningham, Brooks Fire Rescue**
- 5 Kevin Bowie, Parkland County**

continued on page 7



Camrose Fire Department emphasizes training

Peter Krich, Fire Chief of the Camrose Fire Department, says multi-faceted training has become necessary as the role of the firefighter broadens. "The knowledge base of the department has to be much higher — medical, CPR, first-aid, dangerous goods. The field is changing in terms of responsibilities throughout the province," says Krich, who's been chief since April 1, 2000, and with the department for 20 years.

The Camrose Fire Department assists the Camrose Emergency Medical Services (EMS) with 9-1-1 calls, when necessary, contacting both EMS and the fire service. "We're responding to different calls than just fires. We're looking more on the medical side now," said Krich, who moved up through the ranks from part-time volunteer, to full-time training officer, to his present position as chief.

The department responds to approximately 85 calls per year ranging from false alarms and motor vehicle accidents to actual fires, the majority of which are grass or bush fires. In 1999, there were 24 city fires and 33 non-fire related calls in the city.

The department also covers a 16-kilometre radius around the city. Last year it responded to 15 calls outside the city — four of which were motor vehicle accidents. Highways 13, 21 and 56 are within the department's area of responsibility. "Traffic has increased on these highways in the last five years — more cars, more accidents," said Krich.



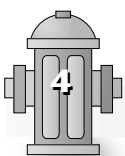
Don Rosland and Al Majeski demonstrating turn-out gear and self-contained breathing apparatus to a group of students from the Hughenden School.

The department responds to calls with four pumpers, one 1999 GMC 1250 gal/min, one 1993 Volvo 1050 gal/min, one 1989 International 840 gal/min, one 1975 Ford 840 gal/min, and one 1962 Ford 625 gal/min. It also has one 1999 International Heavy Duty Rescue Unit that carries all the extra equipment to fire calls including the jaws of life, vehicle extrication equipment and small quantities of medical aid equipment. Two fire prevention vehicles — a 1991 Ford half-ton and 1996 GMC van — round out the response fleet.

The department has 30 part-time firefighters and a full-time fire chief and deputy fire chief. The average length of tenure in the department is 15 years or more. The typical member is an individual who wants to support the community. Most of the members are employed in Camrose. "Our members are enthusiastic — they want to be here. The turn-over rate is not very high at all," says Krich.

An energetic and enthusiastic training program keeps volunteers coming back every Tuesday night for hands-on activities, cross-training and multiple tasks. "The more you give them, the more they're willing to learn. We broke training up so that they cover as many tasks as possible," said Krich.

Members are also recognized on the "Wall of Fame" in the fire hall's recreation room. This is a wood-panelled wall that recognizes the firefighters who have come and gone through the ranks since the hall was built in 1954. "When firefighters have been with us for two years, they engrave their names, the years they started and any drawings or quotes they would like to be remembered for," said Krich. "Most of them started writing on the wood-panel board using wood burning kits. Now, a lot of it is being done using graphic techniques and computers."



The department has introduced *Learn Not to Burn* to the six elementary and junior high schools in the city. Krich sees the program as a success. “We have a lot of Kindergarten to Grade twos come through the hall on tours. Their knowledge base from the program is showing a positive attitude to fire safety,” said Krich.

The Camrose department enhances *Learn Not to Burn* with Gateway Publications *Fire Safety*, which comes out of Winnipeg. This program differs from *Learn Not to Burn* in that the department is “one-on-one” with students, while Krich feels *Learn Not to Burn* is more teacher oriented.



Camrose Fire Department hockey team at a community fundraiser for local boy scouts.

The department is beginning to promote *Risk Watch*, and Krich wants to continue to promote fire safety to Camrose and its surrounding areas. Because of the demographics of the city — large, stable population of seniors — Krich wants to direct attention to fire safety in seniors’ lodges and facilities. “We’re looking at working on evacuation procedures with residents and staff. The more knowledge within these facilities, the safer these facilities will become,” he says.

Krich believes that a good inspection program prevents fires before they happen. The department conducts an average of 40 inspections per month emphasizing hazard prevention in schools, service stations, businesses, apartments and other public buildings. Some inspections are unannounced and some aren’t. “The common goal is to eliminate fire hazards and prevent fires. If they’re going to spend the time to fix up the fire hazards before we get there, then we’re getting the job done,” he says. The Camrose department also works with businesses on fire extinguisher training.

Former Fire Chief retires


George McCrea retired as Fire Chief of the Camrose Fire Department May 24, 2000. He spent 43 years with the department joining the team as a volunteer after moving to Camrose in 1957. From 1964 to 1970, McCrea was volunteer assistant chief. He became full-time Chief Fire Prevention Officer in 1970, moved on to Deputy Chief in 1980 and became Fire Chief in 1996. McCrea stayed with the department for more than 40 years because of the fellowship and the opportunity to help the community.

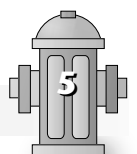
During his tenure, McCrea saw many changes in the firefighting industry and in the City of Camrose. When he started, the equipment available to the department was a 1947 Chev pumper and a 1952 Ford truck with a 200-gallon pump on the back. The Ford packed a hose and ladders and pulled a two-wheel pumper unit behind it.

Back then, houses and businesses were smaller. “Anything you dealt with was on a much smaller scale than what you deal with today.” The western outskirts of the city is now a mile further than when McCrea first arrived in Camrose.

Over the years, he says the department was always trying to attract more firefighters. The Camrose department fought fires as a team and selected firefighters as a team. The Fire Chief, six Captains and six Lieutenants initially screened applicants, and if an application made the first cut, it was put out to all the firefighters in the department. Says McCrea, “We were fortunate to take on more men and get to 30 volunteers. When you get more equipment you need more people to set it up. Camrose probably has the best equipment for a small city as anybody has.”

The Rose Haven Care Centre fire in the late 1980s stands out in McCrea’s mind. The department spent 12 hours extinguishing the fire and the structure suffered \$2.3 million in damage.

McCrea is enjoying his retirement but sometimes misses parts of the job. “You wonder what’s going on when you hear the sirens,” he said. Though he does not miss the phone on his hip or the fire phone in the house, he misses the team. “I liked the job from the start to finish,” he said. 




Get ready for Fire Prevention Week

This year marks the final year of a three-year campaign across North America to ensure every family is prepared to survive a fire at home. Fire Protection Week runs from October 8 to 14, 2000 and its theme is Fire Drills: The Great Escape! The National Fire Protection Association selected the theme based on the results of an attitude survey it conducted that revealed some interesting findings regarding fire safety attitudes. The survey found that:

- 58 per cent believed they had more than two minutes to escape a fire in their home. **FACT:** After a smoke alarm sounds, a typical living room fire can become deadly in two minutes or less.
- Only 4 per cent who had smoke alarms go off in their homes in the last year reacted as if there might really be a fire. **FACT:** Take every alarm seriously. Assuming every home alarm is a nuisance or dismissing the alarm could be a fatal error.
- More than 35 per cent of people in a public place did not leave the building when the fire alarm went off, and 39 per cent of the group that stayed assumed it was not a real fire. **FACT:** Assuming an alarm is false can be deadly.
- Only 16 per cent had developed and practised a home fire escape plan. Of those who had a plan but had not practised it, 33 per cent said they felt it was not necessary to practise. **FACT:** Practice does make perfect! Having an escape plan and practising it is the only way to learn how to react in the event of a fire.

Fire Commissioner's Office supports Fire Prevention Week

"People still hold many misconceptions about fire and their ability to safely escape in the event of a fire in their own home. We hope that Fire Prevention Week will help dispel some of those myths," says Tom Makey, Fire Commissioner.

The Fire Commissioner's Office is planning to assist fire departments throughout the province in getting the message out about Fire Drills: The Great Escape! 

The Fire Commissioner's Office:

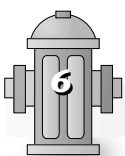
- distributed the campaign kit supplied by Fire Prevention Canada to all fire departments in the province in mid-June. The kit provides a national perspective and is also distributed throughout Canada
- will distribute a Fire Commissioner's Office Fire Prevention Week campaign kit focusing specifically on Alberta fire statistics and problems
- will distribute in early September, Fire Drills: The Great Escape! program materials from McDonald's Restaurants to all Alberta municipalities served by McDonald's and to fire departments that have agreed to run the program. The children's worksheet for this year's campaign is being revamped
- will provide radio/television interviews during Fire Prevention Week

Holiday Hazards

Wrap them up!

Fire hazards are not only a concern during the winter festive season, but all year-round. So it's not too early to start planning how your fire department can get the holiday fire safety message out to the community.

The theme of this year's holiday fire safety campaign is *Holiday Hazards: Wrap Them Up!* Look for more information on the campaign, which runs December 15 to 31, in late November.



Fire deaths rise in 1999

More than twice as many people died in Alberta fires in 1999 than in 1998. Most of these deaths happened at home and smoking caused more deadly fires than anything else.

As of June 23, 2000, a total of 6,198 fires resulting in 48 deaths, 367 injuries, and \$133,053,431 in property damage were recorded for 1999 in the Fire Statistics Information System at

Alberta Municipal Affairs. The most significant change compared to 1998 was in fire deaths, which increased by 140% (Table 1).

The total of 48 civilian fire deaths included 14 females and 34 males. The largest group (10) of fatalities was between 36 and 45 years of age. Eleven children under 16 also died in fires in 1999. There were 10 fatalities

in the over 55 years age group. One multiple fatality fire involving a motor vehicle crash killed a family of three (male, 47 years; female, 44 years; male, 10 years).

Fire losses by major property classes are shown in Table 2. The special property-transportation equipment category, including mainly ground transport vehicles and outdoor properties, accounted for the largest number of fires (49%) followed by residential properties (28%). The majority of fire deaths (32), injuries (227) and property losses (\$47 million) occurred in residential properties. Homes, representing one/two family dwellings, apartments and mobile homes, accounted for 1,582 or 91% of

Table 1. Fire Losses in Alberta, 1998 - 1999

Year	Fires	Deaths	Injuries	Property Loss \$
1998	6,570	20	427	138,905,506
1999	6,198	48	352	133,053,431
% change from 1998	-6	+140	-18	-4

What's happening at AFTS

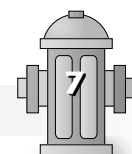
continued from page 3

New board member

The Lakeland College Board of Governors appointed Kelly O'Shea of Edmonton to the AFTS Board of Directors on July 6, 2000, for a three-year term. A 32-year veteran with the Alberta Forest Service, O'Shea moved up the ranks from forest ranger/officer to forest protection officer responsible for wildland and forest fires. He was director of the province's Forest Protection Division for six years before leaving the public sector in December 1999, to become forest protection consultant to Alberta Pacific Forest Industries Inc. 

Table 2. Fire Losses in Alberta by Major Property Classes, 1999

Major Property Class	No. of Fires	% of Fires	Fire Deaths	Fire Injuries	Property Loss \$
Special Property - Transportation Equipment	3,051	49	7	48	24,304,882
Residential	1,740	28	32	227	47,171,749
Miscellaneous Property	620	10	2	17	12,871,166
Storage Properties	327	5	2	15	10,271,556
Assembly	154	2	1	13	6,376,870
Mercantile	127	2	2	13	16,860,145
Industrial Manufacturing	104	2	1	14	13,646,589
Business and Personal Service	48	1	0	2	1,329,213
Institutional	27	0	1	3	221,261
Total	6,198	100	48	352	133,053,431



residential properties (Table 3), and these fires are further analyzed below.

The major causes of home fires in Alberta for 1999 are presented in Table 4. The top three known causes of home fires were related to cooking, smoking and arson/set fires. Fires related to cooking comprised the majority (24%) of the known causes of home fires. These fires inflicted the greatest number of injuries (26%), and ranked fourth in the known causes of fatal fires. Forty-five per cent of incidents

and 60% of injuries from cooking fires involved the ignition of overheated cooking oil.

Smoking ranked second in home fire causes but accounted for the majority of fire deaths at 35% or 11 out of 31 fatalities. Smoking-related fires ignited mainly upholstered furniture (24%), bedding/mattress/pillow (17%), agricultural/forestry products (17%), trash (13%) and paper/cardboard (5%).

Arson/set fires ranked as the third known major cause of home fires in Alberta during 1999. Of these fires, the act or omission was unknown (40%) or determined as suspected arson (36%); vandalism (11%); and arson for vengeance (11%).

The total of 48 fire deaths in 1999 included 30 fire deaths and 18 deaths involving fire. In Alberta homes there were 31 deaths (27 fire deaths and four deaths involving fire). Thus, it can be concluded that 90% (27 out of 30) of fire deaths in Alberta occurred in homes during 1999. However, home fire deaths (31) as a percentage of all fire deaths (48) in Alberta is 65%.


Smoke alarms were installed in only 57% of the homes that experienced fires in 1999. Of these, only 36% activated during fires. Those that did not activate (34%) were primarily due to lack of a power source — no battery (19%), dead battery (6%), electricity off (3%) and electricity not connected (6%). 

Table 3. Fire Losses in Alberta Homes, 1999

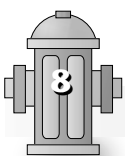
Type of Home	Fires	Deaths	Injuries	Property Loss \$
One/two family dwellings	1,092	23	118	35,088,237
Apartments	385	3	81	5,265,635
Mobile Homes	105	5	19	2,969,182
Total	1,582	31	218	43,323,054

Table 4. Major Causes of Home Fires in Alberta, 1999

Fire Causes	Fires	% of Fires	Deaths	% of Deaths	Injuries	% of Injuries	Property Loss \$	% of Losses
Cooking	374	24	2	7	57	26	4,882,451	11
Smoking	202	13	11	35	53	24	4,671,316	11
Arson/Set Fire	166	11	4	13	16	7	4,656,499	11
Electrical	153	10	2	7	14	6	6,929,945	16
Home Heating	134	9	3	10	9	4	3,576,266	8
Candles	85	5	2	7	16	7	2,216,120	5
Child Fireplay	84	5	1	3	33	15	2,694,705	6
Clothes Dryer	58	4	0	0	1	0.5	511,186	1
Exposure Fire	52	3	0	0	0	0	1,121,060	3
Other Causes	274	17	6	19	19	9	12,063,503	28
Total	1,582	101	31	101	218	100	43,323,054	100

For more information about 1999 fire statistics please contact:

The Fire Commissioner's Office
 10808 - 99 Avenue, 6th Floor,
 Edmonton, Alberta T5K 0G5
 Phone: (780) 427-8392



Reaching out to create a safer community

By reaching out to the community, the Grande Prairie Fire Department has broadened its scope well beyond *Learn Not to Burn* and *Risk Watch*. Dennis Driver, shift captain of the Grande Prairie Fire Department says, “We started with a strong concern for the fire safety end of things. But after training in medical co-response and ice water rescue, we realized that we were looking at some things that weren’t fire related.”

As a result, the department began to look at ways it could support community agencies. Now it’s helping out by hosting child-restraint safety programs at the fire hall, photocopying or making rooms in the fire hall available for meetings, and assisting in the Candy Cane Checkstop where drivers are given a candy cane and urged not to drink and drive during the Christmas season.

Building partnerships to help build a safer community is now a top priority for the Grande Prairie Fire Department. One such partnership has been forged with Grande Prairie and Area Safe Communities. “The fire chief and fire prevention officer are major players in Safe Communities and are safety-oriented, looking to be proactive in injury prevention,” says Tina Hackett-Myles, Executive Director of the group. “I think that speaks to their commitment. Our focus is very closely aligned.”

Risk Watch was the first major project adopted by Grande Prairie and Area Safe Communities. The Grande Prairie Fire Department has been a member of the Safe Communities group since its 1997 inception in Grande Prairie, supporting *Risk Watch*

Van leased and donated to fire department by the Grande Prairie & Area Burn Society and Hansen Lincoln Mercury.

by sending Driver to Washington, D.C., three years ago for an initial symposium. Driver brought a solid knowledge base back to Grande Prairie and tapped the community for funds to do a *Risk Watch* pilot project in Montrose Junior High and Hillside Elementary schools in 1998 and 1999. *Risk Watch* hasn’t been introduced outside the city limits yet, but planning is in the works.


Firefighters in the Grande Prairie Department have also been bringing *Learn Not to Burn* to city schools for 15 years. In 1992-1993 (the first period statistics were compiled) 512 students graduated from the program within the city. In 1997-1998, there were 1,152 graduates from the city and 919 graduates from surrounding rural schools.

Mark Whelpton, the department’s fire prevention officer, says there has been a big expansion of the program in the area. The Grande Prairie & District Burn Society contracted the department to bring *Learn Not to Burn* to Kindergarten through Grade three classes in 22 additional schools in the county. The society also raised enough funds to provide all Kindergarten to Grade six teachers in Grande Prairie with a curriculum for their grades. It did the same for all Kindergarten to Grade three teachers in the County of Grande Prairie.



Grande Prairie’s Fire Department has also helped other departments and agencies that want to get *Learn Not to Burn* and *Risk Watch* programs started. It provided information sessions in Falher, Grimshaw and Peace River and is working with town officials in Grande Cache.

In addition, the department will present fire safety messages to the Sturgeon Lake Reserve in the next school year. The reserve will be the first Aboriginal community in Alberta to participate in the *Wisdom of Fire* program. Aimed specifically at Aboriginal communities, *Wisdom of Fire* was recently completed and made available by the National Fire Protection Association.

Driver says Fire Chief Bill Walker has been very supportive of all the firefighters’ work to improve community safety. “He’s made it a goal of the fire department to do more than just teach fire education and put out fires. We can move into these other areas and help make Grande Prairie a better community. Ultimately that’s what we’re being paid for — not just to be firefighters, but to make a safer community.” 



Residential sprinkler program discussed at conference


The Home Fire Sprinkler Coalition discussed its plans to promote installing sprinkler systems in Alberta homes at the Alberta Fire Chiefs Association (AFCA) Conference in Medicine Hat. In Alberta, the coalition includes co-chairs Tom Makey, Alberta's Fire Commissioner, and Pat Graham, President of the Alberta Fire Chiefs Association. Province-wide community representation will be provided by local regional spokespeople Sandy MacKenzie, Fire Marshal for the City of Calgary, and Tim Vandenbrink, Captain of the Edmonton Emergency Response Department.

One of the goals of the coalition is to foster a useful dialogue with home builders in Alberta. "We've had some discussions with the coalition about

meeting with home builders," says AFCA Executive Director, Bill MacKay. On the issue of residential sprinkler installation, home builders want public education, not mandatory installation, while the fire chiefs want another tool to provide fire protection to areas or

communities not being adequately served by the fire service.

The sprinkler coalition is currently promoting a public awareness program *Protect What you Value Most*. Alberta is the first province in Canada chosen to distribute the program, which consists of an information package with a video and brochures.

It is hoped that the Alberta Home Builders' Association will work with the sprinkler coalition and the AFCA to promote the voluntary installation of sprinklers in homes throughout the province. "AFCA has been pushing sprinklers for some time," says MacKay. Promoting public awareness is a good place for the coalition to begin to stress the importance of residential sprinklers. Says MacKay, "The coalition is not recommending or promoting the mandatory installation of sprinkler systems." 



New AFCA Officers Elected

Pat Graham, Fire Chief, Municipal District of Rockyview #44, was re-elected **President**

1st Vice-President, Laird Burton, Fire Chief, Strathcona County

2nd Vice-President, Fred Haight, Fire Chief, Banff

Secretary-Treasurer, Chris Bryant, (Retired) Fire Chief, Kananaskis

Directors-at-Large, Bill Purdy, Mayor, Wabamun; Ted Dillon, Fire Chief, Ponoka

Outgoing Director-at-Large, Jane Allen was replaced by Sandy MacKenzie, Fire Marshal, Calgary

Jack Bell, Sales, WFR Wholesale Fire and Rescue Ltd., Calgary, was re-elected **Trade Member Director** by AFCA Trade members

Regional Directors were elected for two-year terms in regions one, three and five. Next year, elections will be held for Regional Directors in regions two and four.

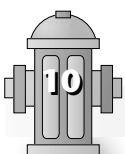
Region 1, Peace River Country - Denis Hamel, Fire Chief, Falher

Region 2, Edmonton Area (West) - Cammie Laird, Training Officer, Ma-Me-O Beach Fire Department

Region 3, Bonnyville - Brian McEvoy, Fire Chief, Bonnyville Regional Fire Authority

Region 4, Red Deer Area (Central) - Bill Garries, Fire Chief, Bentley

Region 5, Calgary Area (South) - Ernie Polsom, Fire Chief, Taber



Dealing with juvenile firesetters

Playing campfire can lead to some horrendous consequences, as a group of 30 Cold Lake youth found out earlier this spring. This large group was the first to be introduced to Cold Lake's new Juvenile Firesetter's Program says coordinator Coralee Braun, a programmer with Lakewood Family and Community Support Services (FCSS).



Coralee Braun from Lakewood Family & Community Support Services (FCSS) with Bryan Simpson, Fire Marshal, Cold Lake Fire Department.

"The Cold Lake Juvenile Firesetter's Program does not blame anyone," says Braun. "It assesses children involved in firesetting for level of risk, then refers them and their families to appropriate services in our community. This may range from fire education delivered by Cold Lake Fire Rescue, to community counselling services."

Abby Morris raves about the new program and its ability to meet the needs of the community. A mother of three children, she caught a group of youth playing campfire in a pile of old brush. While the group didn't manage to burn any of the wood, Morris wanted to educate the youth about the dangers of playing with fire. A major brush fire had just occurred near her subdivision and she was terrified it could happen again — with a potential loss of life. She contacted Braun and then organized parents and children in her neighbourhood to attend an evening session.

Assistant Deputy Chief Brent Stasuik and Braun, who is also a volunteer firefighter with Cold Lake North, presented the fire safety component of the firesetter's program to the group. They told the of the dangers of playing with matches and how quickly a small fire can get out of hand. They also took the group on a tour of the recent brush blaze,

describing how it was started carelessly and how hard and dangerous it was to extinguish. A local woman who had been badly burned in a fire also

explained what happened to her and how it has affected her life.

The course was well received. "It was totally awesome," Morris says. "They delivered on my request big time." She says every youth in the group was totally transfixed during the presentations and tour, and she feels they won't be fooling around with matches anymore.

The program was launched in March just as Cold Lake was facing an extended fire season because of dry spring weather. A series of blazes focused attention on the importance of fire safety and the program received an influx of referrals. Forty youth between four and 15 have been helped.


Once Lakewood FCSS receives a referral to the firesetter's program, parents or caregivers of the youth involved are asked to fill out a pre-assessment questionnaire regarding the incident of concern and they are given a Juvenile Firesetter's Program

information package. Children determined to be "low risk" are referred to the Cold Lake Rescue Fire Prevention Branch for fire safety education. The educational component of the firesetter's program is coordinated by Fire Marshal Bryan Simpson. Community counselling agencies provide services to youth (and their families) assessed as "definite" and "high risk."

"The pre-assessment determines the extent of the problem and gives an indication of what services the child should be directed to," Braun says. Referral forms and information packages are sent out to all local agencies that deal with youth.

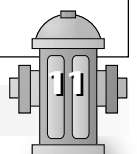
All information gathered by the firesetter's program is confidential. Parents or guardians must sign a consent form before a youth is admitted into the program.

Braun says the program works because of the partnership between the different community organizations such as Lakewood FCSS, Cold Lake Fire Rescue and counselling services. "It makes it simpler for families, children and firefighters because we are using highly skilled people trained in their area of expertise."

The Juvenile Firesetter's Program was developed with information from the Federal Emergency Management Agency and the Alberta Fire Commissioner's Office. Internet sites such as sosfires.com, a juvenile firesetting intervention resource site, were also invaluable in setting up the program. 

This article was written by:

Coralee Braun
Lakewood Family & Community Support Services
Phone: (780) 639-3626
Email: cbraun@coldlake.com.



Need for bigger fire department in Biggar

Alberta fire departments may want to consider Biggar, Saskatchewan's approach to recruiting new members for its fire service.

The Biggar Fire Department was getting smaller not bigger. "We were looking for membership and we couldn't get it," said Gerry Besse, training officer for the fire department in Biggar, a town located 100 km west of Saskatoon with a population of 2,600.

Four years ago, the department began a work experience project with Biggar Central School 2000. "It helped



Oil fire demonstration with Class of '97.

rejuvenate training with the fire department," says Besse. Prior to instituting the work experience program, the department had a roster of only 15 firefighters. "We decided we better start reaching out — our training was stagnant," said Besse. "Once we got the first group of kids in, the experiment took off and flourished. We now have a waiting list for the fire department for the first time in 20 years."

Vice Principal Mel Tryhuba welcomed the partnership because he says the school is always looking for new experiences for the students. The school's work experience program, which has been running



Class of 2000 practising firefighting skills on a burning house.

for 12 years, has had great success with local business partnerships and Tryhuba says the fire department has also been incredibly good.

The program is open to Grade 11 and 12 students who are 17 or 18. In the first and second years of the program, there were eight students. In the third year there were seven, and in 2000 there are six students. Tryhuba says students involved in the work experience program select where they want to go, so students placed with the fire department go there because they really want to. No student has ever been turned away, and one female student involved in the program last year has decided to pursue a career in firefighting.

Some of the students have already had real firefighting experience in a "major league" industrial fire that occurred at a local business three years ago. Two years ago there was a huge brush fire near the town involving 780 square kilometres of fire that endangered farms. "Those kids fought that fire for three days. That's what we train them to do," said Besse. "When you give adult training and adult responsibility with adult repercussions, these kids take it on in an adult way."

Tryhuba describes the partnership as a win-win situation. Students have a real-life learning experience and also help the community."

Not wanting to approach the content development in a haphazard way, Training Officer Gerry Besse, Vice Principal Tryhuba, Fire Chief Jim Besse, Deputy Fire Chief Mike Plysiuk, Instructor Doug Van Tassel and all senior staff worked together to create a program that offered students the essentials of firefighting. They decided each student could participate in 100 hours of training, with every class getting a live burn. This year's class, however, will get three live burns, courtesy of a donated two-story house.

Biggar Fire Department Facts

Equipment:

Pumpers (2), aerial apparatus, a tanker pumper truck, and plans to purchase a response truck for light-duty crew moving, carrying oxygen and basic first aid.

Facility:

Four-bay fire hall built in 1994

Area of responsibility:

2500 square miles



The training was video-taped the first year, then reviewed, altered and expanded. The basic program is now in place and includes a segment where work experience students complete a video-taped classroom presentation for students from Kindergarten to Grade 12.

“The kids set the standard. We do not,” says Besse. “And the first class that went through the program set an extraordinary example for classes that followed. The students take it to heart. They’re planning now for an aerial apparatus performance, and the peer pressure is on.”



Captain Gerry Besse coordinates the work experience program and is also an instructor.




Class of 2000 ready for the challenges ahead.

Training is provided by the department as well as by four qualified instructors supplied by the Saskatchewan Fire Commissioner’s Office. Students spend 75 hours in the workplace and 25 hours in class per semester (school years are divided into two semesters).

Students know that when they commit to work experience at the fire department they will put in 150 to 200 hours of their own time in the evenings because Monday night is fire department training night. But Tryhuba says the students have made this commitment because they want to have a good learning experience.

“These students have all done three to four times what’s required for them to do,” says Tryhuba. “They’re not in there to put in time. They’re there to learn. It’s making them responsible community citizens. They see the seriousness and importance of the fire department. That success can’t be measured.”

Gerry Besse says a partnership between the school and fire department is a positive thing in rural areas. The question of how to shield the students from the grief of firefighting did arise and has not proved to be a concern. “Whatever we get, they get. We don’t shelter them from anything. They handle it extraordinarily well,” says Besse. 

For more information contact:

Biggar Fire Department
 Box 1486, Biggar, Saskatchewan
 S0K 0M0
 Phone: (306) 948-3697 (Gerry)
 Fire hall: (306) 948-3453

Expert advice from our two Rays

Common fire code questions answered

1. I would like to start up a fire extinguisher recharge shop. What qualifications do I need and are there licences or other requirements for the shop?

To establish a fire extinguisher recharge facility you must:

- take fire extinguisher training at a post-secondary institution such as the Alberta Fire Training School, or the Southern Alberta Institute of Technology, and
- get your facilities certified by an approved fire-testing agency such as Underwriters’ Laboratories of

Canada or Intertek Testing Services (formerly Warnock Hersey) and Transport Canada for high-pressure hydrostatic testing equipment.

Reference the Alberta Fire Code 1997 Article 6.1.1.6 for qualifications and Sentence 6.2.4.1(2) for shop certification.

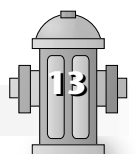
2. I have an underground gasoline storage tank that I do not use any more . I would like to abandon it in place, as it will be difficult to remove. How do I go about doing that?

Underground storage tanks may be abandoned in place under certain circumstances. The authority having jurisdiction (usually the



Ray Cox, Edmonton & Ray Ligenza, Calgary

local fire department) uses certain tests and criteria to determine if the storage tank is acceptable to abandon in place. Generally, storage tanks with evidence of leakage



cannot be abandoned. Full details of the requirements can be found in Article 4.10.3.2 of the Alberta Fire Code.

3. My house was constructed in 1959, well before smoke alarms were available. Do I need to install a smoke alarm and, if so, how many should I install and where do I put them? Can I use a battery-powered smoke alarm?

All residential properties must have smoke alarms. Battery-powered smoke alarms are permitted in residential properties constructed before July 5, 1977. Dwellings constructed after this date must have hardwired smoke alarms. Where more than one alarm is required, they must be interconnected. Alterations such as a basement sleeping area require hardwired smoke alarms. In an existing dwelling, the new smoke alarm does not need to be interconnected unless more than one new smoke alarm is added.

Smoke alarms should be located as follows:

- Each floor level requires at least one smoke alarm including the basement
- On each floor, there must be one smoke alarm within 15 metres of any point on the floor, measured following corridors and doorways
- Each bedroom must be protected by having a smoke alarm inside it or within five metres outside the bedroom measured following the corridor

4. How often do smoke alarms need to be tested to make sure they work?

Smoke alarms should be tested at least every month with smoke from an extinguished candle or match. Batteries should be changed annually on battery-operated smoke alarms or when the low-battery “chirp” is heard. Follow the manufacturer’s recommendations for maintaining your smoke alarm.

5. I just moved into an apartment and found the electrical wires to the smoke alarm had been disconnected. Whose responsibility is it to see that the smoke alarm is working?

It is the building owner’s responsibility to ensure that smoke alarms are cleaned, tested, and operating before you move in. The owner should also tell you what to do to clean and test the smoke alarm while you are a tenant. Reference Article 6.3.1.9 of the Alberta Fire Code for further details.


6. I saw a program on TV saying that ionization smoke alarms are no good. Is that correct? Are there other types of smoke alarms available?

There are two types of smoke alarms used in Alberta: ionization and photoelectric. A number of concerns have been raised regarding ionization smoke alarms. In response to these concerns, Underwriters’ Laboratories of Canada (ULC) conducted fire tests on ionization and photoelectric smoke alarms and found both types worked properly. These tests were witnessed by individuals from Health Canada; the Standards Council of Canada; the Canadian Association of Fire Chiefs; the Consumers Association of Canada;

the Council of Canadian Fire Marshals and Fire Commissioners; and numerous fire service officials.

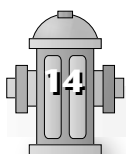
A total of 96 smoke box tests confirmed the sensitivity of each of the smoke alarms was well within the limits specified in the test standard. In addition, 96 fire tests confirmed that each model sounded an alarm within the time limits specified in the standard. Mr. John Roberts, President and Chief Executive Officer of ULC stated, “The investigation supports what fire officials throughout Canada report each day and every day. Lives are being saved when smoke alarms are used, installed and maintained properly, regardless of the technology.”

7. I live in a high-rise apartment and am concerned that the fire alarm cannot be heard in the bedroom. It is barely audible in the other rooms, even when I am awake. Shouldn’t the fire alarm be loud enough to wake a sleeping person? What can I do to correct this situation?

If you are concerned about not hearing the fire alarm within your suite, you should contact the building owner and discuss having the audibility level tested. The building owner should confirm if the fire alarm system is operating according to the original building design standards. If the building owner is not willing to cooperate, you can file a complaint with the local fire department. 

These questions and answers were prepared by:

Technical Advisors Ray Cox (780) 415-0508, Edmonton and Ray Ligenza (403) 297-5797, Calgary, of Technical Services, Building and Fire Safety in the Public Safety and Information Management Division of Alberta Municipal Affairs.



Partners when it comes to making hay

continued from page 1

hung tarps on the front of the building to stop sparks from jumping into the stored product.

Though the exact cause of the fire was never determined due to the extensive damage, the most likely cause was an electric heater in the main floor workshop/coffee shop of the processing plant building.

The challenge of extinguishing forage product fires is monumental. "There's not enough water in the world to put one of these fires out," Van Rijn says. The compressed alfalfa hay bales measure 38 by 38 by 45 centimetres and weigh between 60 and 90 kilograms. The hay is compressed to help reduce shipping costs. "It has the same density as wood — you could drive a nail into it. It takes a long time to burn," says Van Rijn.

John Van Hierden, President of Green Prairie Products International, has been in business since 1988. When he began Green Prairie Products some 15 years ago, it was one of the first forage processing plants in Alberta. (Van Hierden owns a second forage processing plant in Crossfield.) His plants compress timothy hay and he's always made a point of keeping everything very clean during and after every eight hour shift. This is a necessity when trying to prevent fire while working with hay, which can be messy when loose.

Another potential fire hazard is the moisture content in hay, and each bale is tested to make sure its moisture content is 10 per cent or lower before it is accepted. Higher moisture content can start both microbial and plant enzyme activity within the bale that leads to heat and fire.

The 1998 fire cost Van Hierden time and money. "We had to haul to our other facility in Crossfield, add in extra freight and extra transport. Then we lost quite a bit of market because we couldn't get the product produced fast enough. We had to sell that product pretty cheap — basically at a loss to our company," he said.

But like a phoenix rising from the ashes, the new Green Prairie Products plant was up and running by March 1999. Van Rijn and Van Hierden consulted when rebuilding began. "Any recommendations we made, he took to heart," Van Rijn says. "I had a lot of input."

The new plant is constructed of concrete. A below-ground vault now houses all the plant's equipment. No

loose hay or dust accumulates anywhere in the new plant — all walls are smooth and overhead doors slide upward into the attic, so dust cannot collect. A dry hydrant system with a pipe to a nearby dugout allows the fire department easier access. There is also security on site 24 hours a day with staff working two shifts at night making the main work area a priority.

Now the basement power unit is encased in 15 centimetres of concrete and anything that generates heat is stored there. Gone are open, free-standing or small electrical heaters, replaced by heated floors. Van Hierden also ensures staff are committed to fire prevention with quality control personnel overseeing safety programs at all his plants.

Alberta forage industry stats at a glance

These statistics demonstrate the importance of the forage industry to Alberta's economy and the major impact fire has on its bottom line.

There are 24 forage processing plants in southern Alberta producing a variety of hay products — such as pellets (dehydrated and sun-cured), cubes and bales. According to Jeff Ward at Alberta Agriculture, the compressed hay industry in Alberta is expanding, while alfalfa processing plants are currently struggling to survive due to changes in the market.

In Alberta, from June, 1998 - May 31, 1999:

A total of 274,759 tonnes of alfalfa pellets and cubes were produced and the estimated total value of alfalfa pellets, cubes/mini and other was \$34.1 million.

In 1998 in Alberta:

The export value of hay, clover and other types of forage (pelleted or not) was \$59,678,698. Total export tonnage was 199,346.

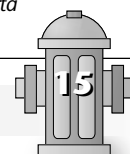
The export value of other hay was \$37,208,658. Total export tonnage was 109,290.

The export value of alfalfa cubes (dehydrated) was \$13,112,325. Total export tonnage was 59,660.

The export value of alfalfa meal and pellets was \$14,827,974. Total export tonnage was 78,045.

The export value of alfalfa (loose or in bales) was \$7,245,668. Total export tonnage was 23,602.

Sources: Canadian Processed Forage Industry Report prepared by Alberta Agriculture, Markets and Economics, Market Analysis Unit. Statistics Canada, CTA. Prepared by Production Economics and Statistics Branch, Alberta Agriculture. (These export figures are estimates.)



Alberta Fire News is published three times a year, by the Fire Commissioner's Office of Alberta Municipal Affairs, for the information of the fire service and others with related interest in fire protection. Opinions expressed in this publication are those of the contributors, and do not necessarily reflect the views or policies of Alberta Municipal Affairs or the Government of Alberta. Your comments and suggestions are encouraged. The contents of *Alberta Fire News* may be reproduced with the appropriate credit to the source. The editorial office of *Alberta Fire News* is located at:

10808 - 99 Avenue, 6th Floor,
Edmonton, Alberta T5K 0G5
Phone: (780) 427-8392
Fax: (780) 427-5898
Website: www.gov.ab.ca/ma

Wendy McGrath
Writer

Jack Born
*Graphic Design Service
Design Quarry*

Editorial Board

Lyle Birnie
*Fire Chief
Westlock Fire Department*

Bob Galloway
*Fire Chief
County of Leduc*

Alberta Municipal Affairs:

Tom Makey
Fire Commissioner

Wayne Girven
Assistant Fire Commissioner

Mahendra Wijayasinghe
Research Officer

Jay O'Neill
*Acting Assistant Director
Communications*

Karen Sigurdson
Public Affairs Officer

Magrath

Craig Bennett also has experience with fire and forage. He is Magrath's Fire Chief and he's also the Director of Disaster Services, and a Fire Investigator and Inspector. His 24-member department has an alfalfa products facility, Welling Alfalfa Cube Plant, in its jurisdiction.



Hay storage and processing buildings were destroyed in an early morning fire at the Welling alfalfa-cubing plant. The white spots are snowflakes.

During the plant's first year of operation, some 10 years ago, there were 12 fires. Fast forward to 2000 when there has been only one fire so far, that took 18 hours to extinguish. "It's the nature of the storage of large bales of hay. The fire is not easy to put out," says Bennett.

Bennett who's been with the department for 30 years, recalls that when the plant first began operating, contaminated bales (bales with foreign objects in them) were often the cause of fire. These objects would spark against crushing machinery igniting a fire. "Most of our fires were in the initial grinding operation. A bale doesn't start on fire by itself. Something has to get hot to make it go," he said. Now, there are detectors used in the compressing process that alert operators to the presence of foreign objects in the bales.

Bennett describes the administration of the Welling plant as very receptive to recommendations regarding fire prevention. When the plant first opened, five per cent of the fires the Magrath Fire Department fought were at the alfalfa plant. Since the fire department and plant management have been working together to reduce fire hazards, there has not been a fire

at the plant in three years, except for the recent fire in January.

These kinds of statistics underscore the importance of fire departments and businesses working together to reduce the risk of fire. Both Van Rijn and Bennet know the importance of fire departments forming partnerships with businesses in their areas. "Green Prairie

Products stayed in the area. They're a proud member of the community," said Van Rijn.



Wooden supporting poles and metal sheets, which were the walls, remain after a fire destroyed a flax-bale storage building and adjacent buildings.

Plant owner Van Hierden agrees that these partnerships are valuable. "Businesses should remember to take advantage of the services and input of the local fire department. It only has to save one fire." 