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WOMEN IN CONSTRUCTION

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Operating big yellow dozers not just for the boys

IAN HARVEY
CORRESPONDENT

They used to say the big yellow machines were Tonka Toys for big boys but they can't say that anymore: move over gentlemen, the ladies are in the cab.

Meet Megan Morley and Lily Sabutsch, both members of Operating Engineers Local 793, and the proud operators of some pretty heavy equipment, who both say their favourite machine is the bulldozer.

"Absolutely, love the dozer," says Sabutsch, who is an apprentice out of Belle River working in the Windsor, Ont. area. "I'm totally happy driving the dozer. One day I'm aiming for the crane because I don't have a problem with heights but love the dozer."

Similarly, Morley also loves the dozer. "It's like a tank," says Morley, 31, of Williamsburg, Ont. who works at Northern Mat and Bridge. "Really, I love the machines. I'm up in the cab, it's like I'm on vacation. I really don't feel it is work sometimes."

Morley says it was her stepfather, also an operator, who suggested she look at getting into the trade.

"I'd worked in the tattoo and piercing industry for a while, worked in government retail-type operation, drove a forklift in a warehouse, but every time I drove by a site and saw those machines I thought, that looks like fun," she says. "I've always been mechanically inclined and I was always the one hanging

outside with the guys, so I thought, why not, and applied."

She wrote the exam in 2015, got called for the interview in 2016 and entered trade school in Morrisburg, Ont. that spring.

The three-and-a-half month course was tough in that she was juggling her life but had an income through Employment Insurance Canada and there were other grants.

"When I graduated it was difficult because it was a bit slow in construction but after about six weeks I was hired out of the hall and I've been going ever since," she says.

Working in a cab on a machine is probably the best part, but like most operators, she feels the extreme cold in the depths of winter and isn't thrilled with the sticky muds of spring.

"It's not just operating, of course, you have to clean your tracks, maintain the machines," she says.

So far, she says, she is still in the honeymoon phase with her career choice.

"I can honestly say there's nothing I hate about my job, but maybe I'm too new to answer that," Morley says.

As for being a woman in a male-dominated sector — it is not an issue.

"I'm 5'11" so I look most guys in the eye, I can lift as much as they can so personally it's been no issue working with guys," she says. "In fact some of them say they like working with a female operator because we're more accurate and pay attention to details, which is true for me because I am very meticulous."

At 20 years old Sabutsch is just on the first steps of a career



SUBMITTED PHOTO

Megan Morley is an operator for Northern Mat and Bridge.

and is an apprentice operator at Amico Infrastructures working on some of the site prep for the new Gordie Howe bridge connecting Windsor to Detroit.

"Right now I'm operating a small rock truck and sometimes I get to go on the dozer which I love," she says. "What I like is that it's a constant learning curve. People are always helping and showing me how to do things which is great."

Like Morley she's not thrilled with the weather extremes onsite.

"Yeah, those hot August day and then in the winter when it drops to -20 C or more but you dress for it," she says.

And like Morley she hasn't had any issues as a woman onsite.

"No issues with the guys, everyone has been professional," she says.

"I'm a medium build and 5'8" so I have that going for me. I think the expectation was that sites are a scary place and no place for a women but that hasn't been the case and I've never had any pushback. This is a great path and there are so many opportunities. I'd recommend it to anyone."

Economic Snapshot

Outlook for Newfoundland and Labrador: dim in 2018 brighter in 2019



John Clinkard

The combination of a -8.9% retreat in capital spending in 2016 followed by a -9.2% drop in 2017 and the prospect of a further projected -27.8% decline in 2018, will probably cause Newfoundland and Labrador to grow in the range of 0.0% to 0.5% in 2018, following back-to-back gains of 1.9% and 2.1% in the previous two years.

As noted in our last update on the Rock's economy, this sharp contraction in CAPEX is largely the result of a projected 31.2% drop in spending on oil and gas projects, specifically on the Hebron offshore oil platform, which started producing oil in late 2017, and a concomitant slowdown in spending on the Muskrat Falls hydro electric project. Two projects which will help to partially offset this drop in investment are the Huskey White Rose expansion and the start of work on Voisey's Bay underground mining.

Although the direct impact of the reduction in energy-project-related employment occurred in mid-2017, service-producing industries have continued to downsize well into 2018. As a result, total employment year to date is down by -1%.

Reflecting the protracted slowdown in hiring, the province's job vacancy rate fell to a twelve year low of 1.6% in Q1/2018. Given the hostile hiring climate which has existed over the past year, it is not surprising that 3,400 Newfoundlanders have moved to other provinces, more than offsetting a net inflow of 1,200 international migrants. Despite this net outflow of individuals to other provinces and a corresponding shrinkage in the labour force, Newfoundland's unemployment rate, currently 14.5%, has edged higher since the beginning of the year.

Consistent with the weak pattern of hiring and the rising unemployment rate noted above, Newfoundlanders spent less in the first quarter of this year than they did during the comparable period in 2016.

Driven (pun intended) by a 5% y/y decline in sales of motor vehicles and parts, retail sales contracted -1.4% y/y in the quarter compared to a 1.9% y/y gain in Q1/2017. Despite the weak pattern of employment and the exodus of individuals to other provinces, year to date sales of existing homes are up by 2.3% while the months' supply of homes for sale, currently at 14.5, has retreated from the record high 17.9 it reached in April.

While the market for existing homes is still quite weak, new residential construction has picked up in the last few months. Year to date, housing starts are up by 30% y/y largely due to a surge in starts of multiple units, the majority of which are located in St. John's which, in contrast to the rest of the province, has seen an inflow of population over the past year.

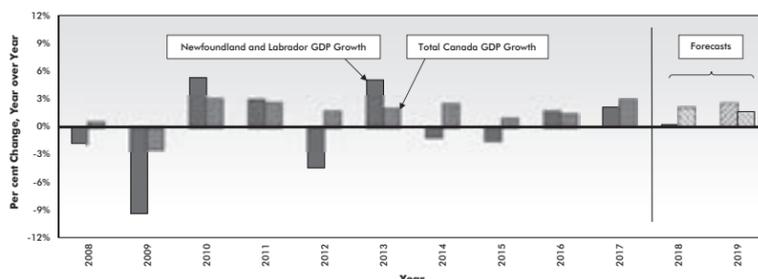
Looking ahead, the effects of the retreat in capital spending together with austerity measures announced in the province's March budget, will hobble Newfoundland's economy well into next year.

This view is reinforced by the Canadian Federation of Independent Business' most recent *Business Barometer* which has signalled slower growth since the beginning of the year. Moving into 2019, the province's prospects appear brighter as the combination of higher oil prices and increased production from the recently completed Hebron offshore oil platform fuel government revenue and give a further boost to the province's energy exports which year to date are up by 38%.

Assuming that oil prices remain in the range of \$60 to \$70 USD and the current trade dispute between the U.S. and Canada is resolved in a satisfactory fashion, we expect the Newfoundland and Labrador economy to expand in the range of 2% to 3% in 2019.

John Clinkard has over 35 years' experience as an economist in international, national and regional research and analysis with leading financial institutions and media outlets in Canada.

Real* Gross Domestic Product (GDP) Growth – Newfoundland and Labrador vs Canada



* "Real" is after adjustment for inflation.

Data Sources: Actuals – Statistics Canada; Forecasts – CanaData.
Chart: ConstructConnect – CanaData.

Steffler gives back to the industry she is passionate about through OCCA

NATHAN MEDCALF
CORRESPONDENT

In an industry that is dominated by men, one woman has taken on the responsibility of informing people of, and attracting them to, careers in the construction industry.

As the director of career promotions at the Ontario Construction Careers Alliance (OCCA) for 10 years, Jessica Steffler has helped many people find careers in the field of construction.

"In 2008, when I was offered the position at the OCCA, the organization didn't exist except in name. That first year, I conducted a lot of research and helped with the design of the organization's website, finding resources and building connections with educators across Ontario," says Steffler.

She is now responsible for the general day-to-day administration of the OCCA, as well as communications functions and systems, staff management, financial man-

agement and development and delivery of core programs. She is also responsible for developing positive working relationships with the various relevant public and private stakeholders to further OCCA objectives.

Steffler also provides high school teachers and school boards with information and assistance to encourage promotion of construction as a positive career path within their schools/boards, as well as organize and attend career fairs, trade shows and construction events for students that take place at a local construction company.

Steffler's interest in construction developed as a young adult. When she was 18 years old, she was confident she would go to college for civil engineering technology.

Her father worked in the construction industry, and she was raised with an exposure to it. Her father persuaded her to consider a career in construction.

See STEFFLER Pg. W-4

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CCAT's female instructors hammer their way to leadership roles

DON PROCTER
CORRESPONDENT

In the male-dominated construction industry, a carpenters' apprenticeship training centre in suburban Toronto is proving you don't need testosterone to get in the game.

Of the 20 to 25 full- and part-time instructors at the College of Carpenters and Allied Trades (CCAT), five are women, teaching classes ranging from basic carpentry to health and safety. And those women come with experience in the industry.

Two instructors have extensive

work histories in scaffolding and formwork — fields regarded as the most physically demanding.

Alexandra Kelloway, one of the first Ontario Youth Apprenticeship Program (OYAP) students to train in the field, instructs scaffolding — a field she worked in for about a decade.

"She's a great role model because she has been successful in a male-dominated (scaffolding) trade," says Cristina Selva, CCAT's executive director.

Kerry Hill also breaks the mould. Among the classes she teaches is one on formwork, notes Selva.

"She started her apprenticeship with us through the formwork apprenticeship program, which, like scaffolding, is the trade you would least expect to see women."

But Hill, who might be one of the first women in formwork won't be among the last and, Selva says, others have been successful in the trade.

Jane Davis, who teaches health and safety courses at the training centre, recently got a technology teaching certificate through Brock University, qualifying her to teach in high schools.



CCAT

Female CCAT instructors include, from left, Jane Davis, Laura Butchers and Kathryn Trickett.



CCAT

Among the classes Kerry Hill teaches at the College of Carpenters and Allied Trades (CCAT) is one on formwork. She currently is one of five female CCAT instructors.

"Men and women are like right and left hands: It doesn't make sense not to use them both,"

Cristina Selva
CCAT

Kathryn Trickett is one of the longest reigning female instructors, having taught at the training centre since 2012.

Selva paraphrases an American politician who saw how essential women can be to an industry like construction.

"Men and women are like right and left hands: It doesn't make sense not to use them both."

But does having more female instructors translate to improving the odds that women will see the trade as a viable career option? Probably, says Selva.

Female instructors can be the difference in a young female apprentice's desire to stick to the trade. She points out that female instructors play a significant support role and that is important when the ratio of women to men is tiny in classes or on the job.

A few years ago the CCAT established a mentorship program which helps struggling female apprentices in class or at a jobsite move past their troubles.

Selva says male instructors also play a vital role in mentoring female students but there are some challenges women face that a female instructor will better understand.

The CCAT has been building a case for more women in the trades for over a decade in part because the traditional male labour pool is drying up.

"One of those ways was to seek out potential instructors from, at that time (a decade or so ago), our very small pool of female apprentices and carpenters," she says.

The five CCAT instructors were hired based on merit and Selva says there is always room for more women on staff.

The CCAT's executive director is not aware of any other carpenters union training centre with as much female representation on staff. Lots of centres talk the talk but few walk the walk, she says.

The industry can't ignore the recruitment of any demographic group that has traditionally been under-represented (women and various ethnic/racial groups) because skilled labour shortages are surging, says Selva.

"They are going to be the source of our future carpenters, floor covering installers and workers."

She says it is any training centre's social responsibility to be welcoming all people into the fold.

Selva says Tony Currie, program director of the CCAT, has been instrumental in getting more women into jobs teaching at the centre.

She adds retention is often more challenging than recruitment. To meet that end it can start with something as simple as hiring an apprentice as a peer tutor to students having trouble with classes.

As young apprentices move through the program towards Red Seal certification, the CCAT keeps an eye on any male or female with an aptitude for instruction.

"When we see that (through class time and work experience) we offer them opportunities to maybe do (teach) some part-time courses."

The best ones take further steps to become full-time instructors. Each instructor receives training at the United Brotherhood of Carpenters training facility in Las Vegas to meet requirements for various levels of instruction.

Steffler enjoys meeting students and sharing her construction experiences and guidance

Continued from Pg. W-2

However, she was determined to work in a daycare, as an early childhood educator.

"My mother pushed me to complete a volunteer placement at a local daycare to see what the job was about," says Steffler.

Two weeks into that four-month commitment, Steffler stepped away. Also, when she was eight years old, she wanted to be a doctor.

"This was due to my sister passing from cancer," says Steffler.

"It did not take me long to realize that job was not a good fit. As soon as I see blood, I faint."

Within five years of graduating from Conestoga College with a diploma in civil engineering, Steffler was hired by the OCCA.

"I enjoy meeting students and talking about my experiences of working in the industry, how I got involved in the industry. What I love about it is inspiring youth and providing guidance to individuals who have an interest in the careers in our industry," says Steffler.

"I have the freedom to make my schedule and work from home at times. And, working for a board means there are numerous individuals who can provide guidance and feedback, and the opportunity to take courses means I receive

continuous learning."

According to Steffler, to be good at her job, she needs excellent time management and communication skills, good math and presentation skills, a background in construction or engineering and work experience in various careers in construction.

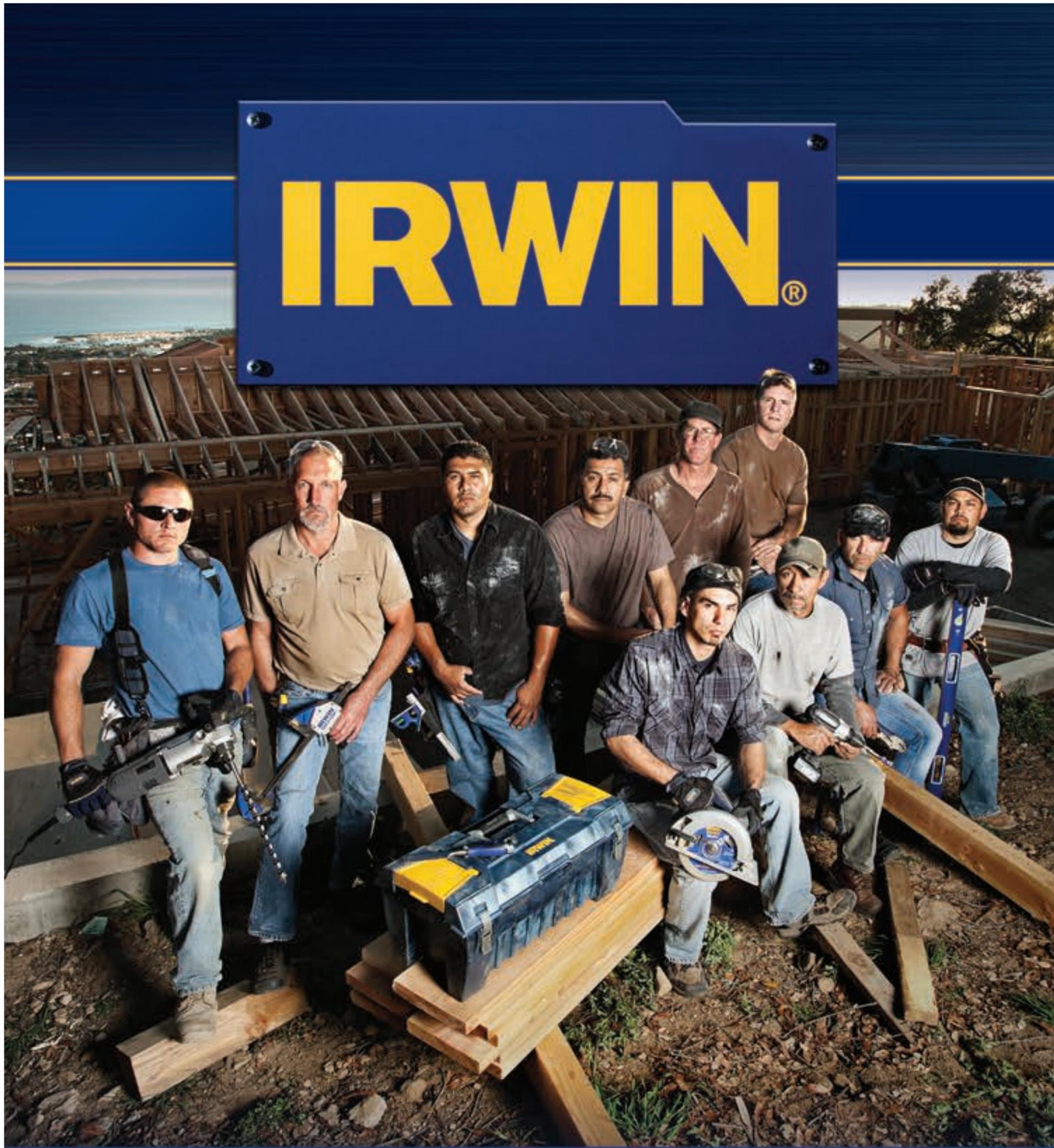
The career advice she gives young people is to "look at what your interests are now and see how they can fit into a future career. Find a career that provides a sense of accomplishment. Research opportunities in that field, and then complete co-operative learning to ensure you will enjoy the job."



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Girls Can Too a practical intro to construction for young females

DAN O'REILLY
CORRESPONDENT

For decades the Bolton Camp offered a brief respite from the city's heat for low-income Toronto families. Now the approximately 254-acre conservation area is the setting for a unique program introducing construction skills to female high school students.

"It's a very practical program," says Nadia Zanardi, project lead of Girls Can Too, which is operated by the Toronto Region Conservation Authority (TRCA) with the assistance and support of key members of the design, construction and related industries including E.R.A. Architects and Milwaukee Tools.

Since its implementation in 2015 participants in the summer volunteer program have built garden and pollinator boxes, gabion baskets, repaired cabin decks and stairs, and restored a section of a trail, says Zanardi, emphasizing the program is equally oriented to heightening environmental awareness and the area's ecology.

Their open air workshop is the camp which opened in 1922 as a fresh air retreat and still has approximately 50 cabins and other historic buildings. Located on the east side of Bolton, Ont. — hence the name — the former Family Service Toronto facility closed in 1999.

In 2011, however, it was purchased by the authority which is repurposing the property into a community cultural hub.

To help kick off a long-term multi-phase revitalization/transformation, several initiatives were undertaken in 2014 by young employees hired by the TRCA through its summer employment program. There were a number of different teams including ones focusing on arts and media, arts and design, ecology and a construction crew comprised, for the most part, of

young males, says Zanardi.

"But then we noticed the girls, or some of them, wanted to be part of the construction and ecology teams."

That observation was brought to the attention of senior TRCA staff and that eventually led to the creation of the Girls Can Too Program which has been offered every summer since its 2015 launch with the support of the Town of Caledon and various other partners, she says.

While there is no cost, prospective applicants have to register on the TRCA website. The sessions are only one week, but are offered for four weeks in July and August.

"Over the course of a week we notice a complete change in confidence in the girls, some of whom have little or no construction experience," says Zanardi, adding a critical component of the program is that all the guest instructors are females.

Included in that list is Milwaukee Tools sales representative Rozalyn Lewis who starts each session with a demonstration on the safe operation of tools. The manufacturer has also donated some tools.

In its role as design consultants and program mentors E.R.A. representatives talk about design and its application to construction.

And, in the summer of 2016, the firm conducted a special architectural model workshop specifically geared to Grade 7 to 8 students using an assortment of both purchased and found-on-site materials. It included a tour of the property after which the students drew diagrams, cross sections and 3-D perspective drawings of a building onsite, incorporating the terms and techniques they learned during the tour, says Janice Quieta, an associate with the firm.

Andrea Buikema, a registered Red Seal apprentice for general carpentry who was



TRCA
On the first day of each week of the Girls Can Too program the volunteers receive training in the safe operation of tools by Milwaukee Tools sales representative Rozalyn Lewis.

recommended by E.R.A., conducted three workshops last year where she and TRCA staff helped the girls build pollinator boxes and gabion benches that are now part of the camp's walking trails.

"My main goal is to ensure the girls have fun and learn some new skills. During our time together in the workshops," she says. "I try to have them do as much as possible. That way they feel as though they have actually built these projects themselves."

Although based in Prince Edward County, which is a "bit of hike," Buikema says she is prepared to make the drive to Bolton because she supports the program's goals.

"The Girls Can Too program is a collaboration between many different partners and

supporters. We have various program components that different partners participate in from hands-on-workshops to Lunch N' Learn sessions," says Bolton Camp redevelopment program manager Lucia Piccinni.

In addition to the Milwaukee donation of tools, local organizations such as The Udder Tournament, 100 Women That Care Caledon, Rotary Club of Bolton and the Bolton Kinsmen have provided financial support to cover material and supplies. Grants have also been obtained through the Laidlaw Foundation and TD Friends of the Environment, she says.

This year's project is the building of a trail kiosk and in 2019 the ambitious plan is to restore one of the cabins, says Piccinni.

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Crocker's career travelled the boots to the boardroom path

DAN O'REILLY
CORRESPONDENT

If one's life can be compared to a book, in the case of Melloul-Blamey site health and safety co-ordinator Clarice Crocker, the title might be *"From Boots to the Boardroom."*

"The tone can be very frank without being rude,"

Clarice Crocker
Melloul-Blamey

That may be the best way to describe her rise from a labourer to her present part-time volunteer position as vice-president/treasurer at the Canadian Association of Women in Construction (CAWIC).

Crocker's entry into construction began more than a decade ago when, at the age of 26, she left the hospitality industry and obtained a job as a labourer for an insurance restoration company tearing out and rebuilding fire- and flood-damaged houses.

"The work was filthy, the hours were long and I was often on-call in the middle of the night," she says.

Her objective was to take advantage of Conestoga College's Women in Skilled Trades program and within a year she became a carpenter's apprentice, a progression she credits to the program, her employer and her own strong work ethic.

Within a very short time she also became the onsite health and safety representative.

Citing numerous onsite safety concerns such as mould, asbestos, air quality and structural and electrical hazards, Crocker



JAY PARSON

Clarice Crocker is vice-president/treasurer at the Canadian Association of Women in Construction.

says she found the position "fascinating" and wanted to learn how to protect herself and her fellow workers.

In many smaller to mid-size companies the safety representative's role is simultaneously taken on with trades-related tasks. While acknowledging that dual role is not for everyone, she says it was a "tremendous opportunity" for her.

In 2010 she shifted from residential construction into the ICI sector, securing employment with Waterloo Region-based Melloul-Blamey Construction where she completed her carpentry apprenticeship and carried on as a health and safety representative.

In 2016 she accepted the company's offer to become a full-time site health and safety

co-ordinator for highrise. Even though it meant abandoning carpentry, she has never regretted that decision.

"Carpentry was a window into the hazards of the jobsite," says Crocker, noting trades are often used as a gateway into other roles such as construction management.

While there are some basic administrative duties which she has to undertake, the position is definitely not an administrative one.

"It does not drain my energy. it is the fuel,"

Clarice Crocker
Melloul-Blamey

In addition to chairing site safety meetings, it encompasses onsite orientations, jobsite inspections and making recommendations to site superintendents on how to mitigate risks. A very large portion of the job involves ensuring site personnel are following health and safety regulations.

On a highrise project, which can take one to two years to complete, with successive waves of different trades, literally hundreds of site orientations have to be conducted, she says.

"It (the project) is constantly changing."

Some health and safety co-ordinators might choose the route of ensuring compliance through company fines or getting superintendents involved. For Crocker the best approach is by developing mutual respect.

"That doesn't mean being soft. The tone can be very frank without being rude. Nobody likes to be treated badly. Site personnel will comply if they feel respected. That

respect can be shown by appreciating a person's experience and having a genuine conversation with them," she says.

Despite the demands of the job and an online University of Waterloo legal studies course, Crocker still finds the time and energy for her volunteer activities on behalf of CAWIC.

Two years ago she was asked to run for a seat on its board and that led to assuming the role of vice-president/treasurer, which involves overseeing its operational division and finances.

"Although we are a not-for-profit organization, we still function as a business."

The association's mission is to promote the advancement of women in construction, says Crocker, in explaining her reason for taking on the role. As an example, she refers to its participation in a government-funded research study.

Titled Level Best and developed for Status of Women Canada, the study revealed both women and employers alike have many challenges surrounding not only the hiring of women, but retaining and advancing women within the industry, she says.

Being the association's vice-president/treasurer comes with a considerable amount of responsibility including driving from Waterloo to Toronto for monthly board meetings. There are occasions that trip has to be made three to four times a month to attend various events and some association duties have to be completed on her own time at night and on weekends.

Asked how she juggles her various roles, Crocker says: "Career, volunteering and education are all extremely important to me. It does not drain my energy. It is the fuel. From time to time I shift percentages of time allotted for these endeavours, but they usually function simultaneously."



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KickAss Careers aims to give the boot to the skilled trades gap

PETER CAULFIELD
CORRESPONDENT

Jamie McMillan, a journeyman ironworker and apprentice boilermaker in Hamilton, Ont., is on a mission to encourage more young people, especially girls and young women, to enter the skilled trades.

"I tell everyone I meet about the great opportunities in the skilled trades," said McMillan.

"I encourage all young people, especially those who, like me, aren't academically inclined, to give it serious consideration. I didn't like school but I'm very mechanical, practical and good with my hands and I've found a career that I do well and that I enjoy."

Originally from Timmins, Ont., McMillan relocated to Hamilton, where she was employed — unhappily — as a personal support worker and part-time restaurant server.

"Many people prefer mechanical, practical and visual means of learning to academic programs,"

Jamie McMillan
KickAss Careers

"By chance I met an old high school classmate on the street one day," said McMillan. "I told her I was looking for a change and she told me she was a journeyman ironworker and that I should sign up as an apprentice."

McMillan became an ironworker in 2002, and a few years later, an apprentice boilermaker.

In 2006, Skills Ontario, which pro-



KICKASS CAREERS

KickAss Careers is a school and community outreach program whose goal is to engage, educate and encourage young men and women to consider careers in the mechanical, industrial, technology, construction and advanced manufacturing industries.

motes the skilled trades and technologies in that province, asked McMillan to speak at a mentorship banquet for girls on the subject of career pathways.

That engagement was such a success that it led to more public speaking, as well as regular appearances on radio and television.

In 2014 McMillan and co-founder Pat Williams, a retired stationery operating engineer in Los Angeles, started KickAss Careers to promote the skilled trades.

The unusual and forthright name was chosen by some high school students who had particularly enjoyed one of McMillan's presentations.

KickAss is a school and community outreach program. Its goal is to engage, educate and encourage young men and women to consider careers in the mechanical, industrial, technology, construction (MITC) and advanced manufacturing industries.

In addition to McMillan and Williams, KickAss has nine ambassadors who take part in events to promote opportunities in the skilled trades in their respective cities and regions.

"I take six months off the tools every year to work on KickAss," said McMillan.

"The public speaking keeps me very busy. Between the beginning of April and the end of June this year, I will have made about 200 presentations at different venues across North America."

Spring and fall are the busi-

est times of the year for KickAss's public outreach.

"Our hope is that one day the WE Ribbon will be recognized globally as a simple statement,"

Jamie McMillan
KickAss Careers

"That's when the high schools want to promote opportunities in the skilled trades to their students," said McMillan. "It's also when the post-secondary institutions, where young people would do the academic part of their apprenticeships, want to make themselves known."

McMillan said KickAss Careers is performing an important service for the skilled trades in Canada.

"There is a huge shortage of skilled trades workers," McMillan said.

"The shortage has been caused by, in addition to the number of people retiring, the failure of many schools to promote the skilled trades to their students. And it (the skilled trades gap) won't be closed by bringing in foreign workers."

Not everybody wants to be a lawyer, doctor or a white-collar professional, she said.

"Many people prefer mechanical, practical and visual means of learning to academic programs in college and university," McMillan said.

KickAss Careers

is also creative at marketing and promotion. For example, its eco-friendly, paperless, do-it-yourself KickAss photo booth lets students dress up in authentic MITC work gear, using tools and personal protective equipment as props with a customized built-in frame. Students can immediately upload their photos to social media through the KickAss photo booth application, which automatically includes hashtags of its brand, partner brands, the event and all applicable sponsors.

The goal is to increase traffic to KickAss's social media pages (Facebook, Twitter, Instagram, Snapchat and LinkedIn) and the kickasscareers.org website, which provides a resource page for promoting careers in the MITC.

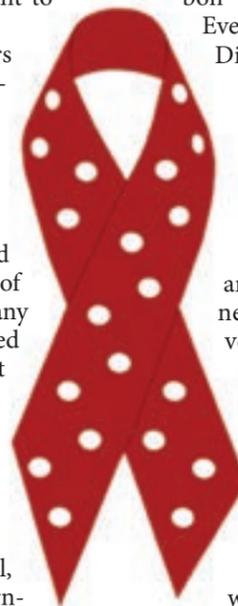
Another KickAss promotion is the Workplace Equality (WE) Awareness Ribbon Campaign. Its tagline is "Treat Everyone the Same Regardless of Differences."

The purpose of the WE campaign is to raise awareness of the challenges women face in occupations dominated by males and to help them fit in and be treated as equals.

The campaign features a red and white polka dot ribbon awareness piece that "supports the conversation about the importance of a diverse and equal workplace free from all types of harassment, bullying and discrimination regardless of differences."

"Our hope is that one day the WE Ribbon will be recognized globally as a simple statement, identifying an employer who supports integrating all the

core values of what a diverse, equal and inclusive workplace should embrace."



KICKASS CAREERS

The Workplace Equality Awareness Ribbon was launched by KickAss Careers to raise awareness about the challenges women face in male-dominated occupations.



KICKASS CAREERS

Jamie McMillan is a journeyman ironworker and apprentice boilermaker who is a tireless advocate for skilled trades careers.

Brick by brick Porter finds her way back to her roots



DAN O'REILLY

Apprentice stonemason Alicia Porter installs reclaimed brick on an old farmhouse.

DAN O'REILLY
CORRESPONDENT

At the age of 32 Alicia Porter is embarking on a new career as an apprentice stonemason and, in a sense, returning to her roots.

After studying theatre production at Ryerson University she found employment in the hospitality industry and worked in it for more than a decade, eventually rising up to be the manager of a restaurant. Her goal was to start a business where she could apply her knowledge and experience of both fields.

"I wanted to create a restaurant and music

venue that had a small theatre within the building — somewhere you could go for dinner, then head back for live music," she says.

That plan never materialized and eventually she became discouraged and missed working with her hands, especially since she had done a lot of stage carpentry at Ryerson and had a passion for woodworking.

A little more than a year ago she quit and was "doing a lot of soul searching" about what to do with her life when she had a chance encounter with Stone Angels Masonry owner Leigh Bamford, who she knew on casual basis.

"Leigh said 'why don't you come and work

for me until you decide what you can do.' The very next day I was on the job and it all started from there. I did not expect to fall in love with masonry, but the more I laboured the more questions I asked and found myself in an unofficial apprenticeship."

Since that first day she has acquired many of techniques of the trade and occasionally manages crews on her own when Bamford is picking up supplies or managing other projects. But it has been a learning curve.

As Stone Angels Masonry specializes in historic restoration and 'creative' modern construction, each project is different and on each one she gains new skills.

Besides learning how to preserve and lay brick, match mortar by creating the proper mix and sometimes using pigmentation, Porter says she also has learned to create structurally sound drystone walls and has mastered the art of installing stones for window wells and doorways by hand.

"Using power tools is not always an option or gives the desired effect. The true craft is doing things the old way," she states.

Despite her carpentry experience, work with stone and brick is a very different experience. Even hammers and chisels are used much differently in masonry, she explains.

Although she may eventually enter a formal apprenticeship program, for now she is content with her on-the-job training.

"I am currently learning on the job in an environment where I am not lost in a crew. We are a small company and I have the opportunity to work beside my boss and mentor all day, every day."

Asked what skills and attributes a person needs to be a successful mason, she cites a whole list including proficiency in measuring, reading and understanding

architectural drawings, being comfortable with working at heights, and good hand and eye co-ordination. There is definitely an artistic nature to any project and having an artistic eye for patterns, shapes and colours also helps.

"It is also a very physical line of work so staying healthy and active is very important," says Porter, who has injured her back four times, broken her wrists, and suffered any number of cuts, scrapes and bruises.

"The cuts, scapes and bruises will never go away when working with stone," she says.

Those mishaps are offset by the rewards, chief of which is: "leaving a project knowing we have improved and restored life to the architecture or landscapes of a property that will continue to serve a purpose for generations to come."

Porter is following in the footsteps of, and draws inspiration from, her grandfather Malcolm Danks, a former Canadian Home Builders' Association director and the 1958 Hamilton-Halton Home Builders' Association (HHHBA) president.

Owner of Stoney Creek-based Malcolm Construction Limited, Danks was awarded the first honorary life membership in the HHHBA in 1978 and in 1990 was inducted into the Hamilton Home Builders' Association Hall of Fame for outstanding and long lasting contribution to the association.

"He suffered a stroke which affected his speech and mobility, so it was hard for me to always understand him. But I knew the man he was and he was someone to look up to. He taught me honesty, integrity, hard work ethic and moral decency. He passed at 96 years old when I was 17. I was fortunate to have had his influence in my life," she says.

Arts living her electrical dream

IAN HARVEY
CORRESPONDENT

She weighs less than some coils of cable, but Danielle Arts is well on her way to earning her ticket as an electrician and is loving every step.

"I need 9,000 hours," says the 31-year-old mother of two from Brampton, Ont.

"And, boy, those hours add up slowly. I'm in my third year of the five-year apprenticeship and I really do love it."

Arts always knew she wanted to get into a trade and tried her hand at interlocking brick work, HVAC and solar panel installation before spotting a call for applications to a trade school program.

Perhaps it's not surprising she started gravitating to electrical since it's the number one trade registered at the Ontario College of Trades for women.

"The YMCA was offering free trade school to 20 girls," she says. "So I applied along with 400 others. We all wrote the test and I came out on top of the 20."

Her strong ability in math carried her through and after two months of basic training she also got a job placement with an electrical contractor.

"They were all Korean and English was a bit of a problem

but we all found out we could communicate around electrical design using pictures," she says.



Danielle Arts

After that it was a struggle with odd jobs and Arts knew she needed to get into the IBEW but their apprenticeship programs are tightly controlled and she didn't have the prerequisite sciences.

Arts had never done well in physics and sciences at high school but on learning she would need some sciences to qualify for the IBEW she started trying to learn physics at home.

"I bought a book and started studying, which wasn't easy with two kids running around and you don't have anyone explaining things to you," she says.

More recently she landed a job with DSK Electric where she's joined the Chris-

tian Labour Association of Canada trade union.

"I'm lucky to get in," she says. "And it's been great. I see electrical as the glamorous trade because it's a lot less physical than say, brick work which is good for me."

There were some physical challenges at first, given her petite size but she soon overcame them.

"I got tennis elbow when I first got on the job," she says laughing.

"I had a special brace but that's all cleared up now. What I love about it — and I like ICI more than residential, which I'm doing both right now — is that I get to problem solve every day. I get a problem and I figure it out. I really enjoy that."

Arts's determination to get into a trade had to overcome some hurdles even back in high school.

"I went to an academic school where they say, 'if you're dumb, learn a trade,' but of course now they say 'if you're smart, learn a trade,' because after five years you're caking it, earning all kinds of money," Arts says.

"At first I thought my being a girl would make it harder to get a job but every time I've been out of work, by the time I hand out five resumes, all five will call me back."

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What will it take to draw women to the skilled trades?

IAN HARVEY
CORRESPONDENT

Getting women into the construction trades hasn't been an easy task, and the latest numbers from the Ontario College of Trades (OCOT) suggest there's lots of room to grow.

As it stands, some 13 per cent of the College's total membership are women but that is skewed because of trades such as hair-dressing which primarily attracts women.

Drill deeper and only 1.2 per cent of the total members in the ICI trades are women, according to OCOT.

The top five ICI trades with OCOT members are, in order: electrician, general carpenter, plumber, industrial mechanic millwright and sheet metal worker.

That's not for want of trying, but construction trades are not always at the top of many women's career choices — until they realize their earning power and benefits, especially if they come in as a union apprentice.

"The College has been proactively promoting diversity in the trades," says OCOT CEO and registrar, George Gritziotis.

"In part, that's due to the increased need for skilled workers in the province because of retirements, but also because of the gender discrepancy in the skilled trades in the province. Engaging youth in discussions about the potential and rewards of the skilled trades as a stable and rewarding career path needs to start at an early age."

It is all the more pressing, he says, with more than 20 per cent of the labour force set to retire over the next decade.

As such, the OCOT invests in promoting the concept of trades as a career with parents and educators but it is an uphill battle, more so recently because of the realization that a university degree doesn't guarantee a good job and the trades have gained a toe hold as an option across the board.

If getting young men to look at trades and convincing their parents it is a good option, getting that message across to women is



SUMMER PHOTOGRAPHER/SHUTTERSTOCK

Improved personal protective equipment, debunking myths about the physical strength of women and ensuring workplace harassment is not tolerated are among the issues facing those looking to promote the skilled trades to women.

still a challenge.

"Guiding women into the trades will be an important part of replenishing our future workforce," says Gritziotis.

However, as women do enter the construction sector there is a more ominous side.

suggests young workers and new workers in construction have a higher risk of injury in the workplace. That's also shifting as the labour force ages with more workers 55 to 64 also suffering more injuries, according to at least one 2016 Alberta report.

data yet to suggest women are more cautious, more likely to follow the rules and more aware given that construction is a novel environment for most of them.

The Ontario Women's Directorate, however, has flagged some concerns, specifically around personal protective equipment (PPE).

PPE is often designed for men and often doesn't fit women properly.

"In many cases, women requiring PPE are forced to 'make do' and wear equipment designed for men," the report noted. "Some women, particularly those who work in all-male sites, are reluctant to draw attention to their special needs."

This includes gloves, goggles, helmets and even work boots, though specially designed boots for women are now widely available from Moxie Trades, an Ontario company selling through many retail locations.

Clarice Crocker, vice-president and treasurer of the Canadian Association of Women in Construction (CAWIC), says their research has turned up similar issues.

A report entitled Level Best, a three-year research project by CAWIC for Status of Women Canada, delivered in early 2017, looked at the challenges faced by women entering the trades as well as why they didn't seem interested in that path.

"PPE was one of the issues, though I never had that issue myself working for 11 years on sites," says Crocker. "But some of the more petite women did because often the equipment is too big."

However, there were other myths the report dismissed, such as women's physical strength versus men.

"A pervasive notion exists that

physical strength is a requirement in certain types of careers," the report found.

"These ideas often suggest that women are incapable of taking up roles such as construction workers."

However, she says, a report on women in construction, filed with the Quebec parliamentary commission on gender equality in 2011, found 20 per cent of women are stronger than 50 per cent of men.

"There are weak women and strong men but in between there are women who are stronger and men who are weaker," she says.

One of the big issues dissuading women from construction trades is that they anticipate workplace harassment, she says.

"Every site and crew are different and a lot of the culture onsite is set by the site superintendent," she says, noting construction sites generally do have more colourful language than bank offices and that sometimes is an issue because the nature of the work often involves yelling.

Some crews like women members because there's more attention to detail generally. In other crews, the more important work sometimes gets assigned to men while women can find themselves on the broom, frustrated they aren't getting more challenging jobs. But, again, it varies, she says.

Pregnancy is one area where women can't avoid being treated differently onsite.

"Having just gone through a pregnancy and working up to my seventh month, I didn't want to be seen as a burden," she says.

"But they were great. Towards the end I was cleaning all the windows in the highrise we were working on, so it was inside work. I was joking with the guys that I planned to work right up to the point where I dropped the baby onsite. Their jaws just dropped."

The United States' Occupational Safety and Health Administration (OSHA) adds their own issue, that of hydration on the job for women.

Dehydrated workers are more likely to make mistakes as their thought processes slow and their reaction times are also affected.

However, the OSHA notes, sanitation facilities often fall short on construction sites in that they are unisex and used mostly by men who aren't always accurate with their aim.

The result is portable toilets that are "over-used and ill-maintained." Because of this, OSHA finds, female workers tend to avoid both drinking water and using the facilities as much as possible.

"This results in multiple problems," the OSHA says.

"For one, a worker who isn't properly hydrated, especially in hotter months, risks a higher potential for heat-related illness. Secondly, a worker who is not using sanitation facilities as often as might be necessary, risks possible bladder and kidney infections. Additionally, facilities that aren't properly maintained put all workers at higher risk of disease."

"Some women, particularly those who work in all-male sites, are reluctant to draw attention to their special needs,"

Ontario Women's Directorate

Jobsites can be dangerous places and because the data sample of women in construction is so small, there's been little information about whether women face any unique risks male workers don't.

Industry data, for example,

However, there's scant details about women in construction and injuries, mostly because the data is so thin. While young males often exhibit risky behaviour, misjudging jumps, not tying off, or being oblivious, there's no

BuildForce National Summary construction/maintenance workforce forecast (2018-2027)

