

# gizmo

THE TETRA SOCIETY OF NORTH AMERICA: CUSTOM ASSISTIVE DEVICES



BABY TALK: JENNI GARVIE AND FOUR-WEEK-OLD CALLUM

## ADAPTED CRIB BRINGS PARENTHOOD IN REACH

**HAMILTON and GUELPH:** Sitting alongside her newborn, Jenni Garvie told how the crib modified by Tetra volunteers makes her feel just like any other new mom.

In a previous era, Jenni's spinal cord injury would have ruled out parenthood. But things are a little different these days, thanks to changing views and, in particular, a little engineering knowhow.

As she spoke about her comeback from injury, four-week-old baby Callum lay alongside, cooing and gurgling. Jenni, 38, was looking out for his first smile.

"I have two incomplete spinal cord injuries, at T3 and another at L3," she said. "I was originally in a wheelchair. Then, after a while, I was able to walk with leg braces. Now I'm able to walk unaided, although I have to be careful because I fall easily.

"At one point I wasn't sure if I would be able to have a baby. People have worried it would be too much for me—I have chronic pain,

don't sleep well and my legs are weak. But when I was pregnant I was delighted. It was the most wonderful thing.

"At first it was intimidating to think about the accommodations I would need, but I just had to plan ahead. For a start, I knew I'd be unable to use a conventional crib."

So Jenni, from Guelph, contacted the Tetra Society of North America, and was referred to Sylvia Baliko, who runs the Hamilton chapter.

Baby Callum's is the sixth adaptive crib produced in Hamilton in recent years, and the fourth for volunteer Jim Rennie—who, incidentally, is currently working on another crib!

"Every crib I've modified has been different," he said. "Every client has different requirements. The similarity is that the doors open outwards, but sometimes the crib is raised for a wheelchair to roll under, or the crib itself might have the legs removed.

"For Jenni I also made a change table, which is a separate unit to the crib. We worked

through three or four proposals for the design before I began. I delivered this crib at Easter, and the baby was going to be born the following week."

Sylvia Baliko is as pleased as anyone to see such demand for adaptive cribs, saying it shows increasing opportunities for people with disabilities.

"People with disabilities are getting on with life," she said. "They are carrying on like anyone else, getting married, working, having families and being fully integrated into the community. That's what Tetra is all about—getting people healthier, happier and more integrated into society.

"Requests for adapted cribs are like a beacon of how many more options there are now."

Jenni meanwhile is getting on with family life—husband Marcus has two children, 16-year-old Beren, and Leah, 13, from a previous marriage—with a few low-key modifications. She finds it safer to move baby Callum round the house in a wagon, and uses a stool on castors when moving him between crib and change table.

In a few months, when he is a toddler, she will ask Tetra to build a stair barrier—a regular one won't fit around their stair lift.

Jenni said: "The crib and change table have been wonderful. The crib door fits snugly and is held secure by three latches, so I've no worries about it springing open

"I'm so grateful for the service from Tetra. Jim, the volunteer who built it, worked to get the crib perfect for us. We can even use it as a toddler bed when we get to that phase.

"It's such a relief to see Callum in it safe and secure," she added.

"If you do not feel things are safe it's really stressful. To know you have something with modifications to make it safe for you to look after your child feels great—it makes you feel more comfortable about what you are doing."





**INSPIRATION:** SHARON LUMSDEN, RIGHT.

## A LIFE OF SERVICE REMEMBERED

**WINDSOR:** Long-time Tetra coordinator Sharon Lumsden is being remembered for her compassion.

Sharon, coordinator of Tetra's Windsor, Ontario chapter for more than 10 years, passed away in January after a brief illness. She was 67.

She lived in the town's Apartments for Living for Physically Handicapped Association (ALPHA) complex, and, in addition to Tetra, volunteered for her tenant action committee and the advocacy group Concerned Citizens for Access and Equality.

"Sharon was a very motherly figure to everyone who knew her," said newly appointed Windsor coordinator David Harshaw, who had known her for 25 years. "She lived in a building that was full of independent people with disabilities, and was always there for everyone. If you needed something you would go to Sharon.

"When I was young I used to be at ALPHA every weekend, and Sharon would put on Sunday dinners and feed everyone. She'd put on Christmas dinners for us!

"From Sharon I learned that, in life, you get what you give."

David, who ran a wheelchair repair business for 12 years and worked as a computer techie, has created custom assistive devices of his own. He built his girlfriend a folding canopy for her wheelchair that also includes solar panels. He also built a roll-under kitchen counter.

"A couple of years ago, Sharon asked me if I could volunteer for the chapter, but I was working three jobs at the time and had to say no," he said. "It turns out that a good friend of hers recommended me as a good fit to take over after her passing."

David is currently dealing with three requests for Tetra projects.



**CLASSIC ROCK:** DAVE SKELLY TALKS MUSIC WITH TETRA VOLUNTEER DAN TWAITES (LEFT). PHOTO CREDIT: APEGA.

## Let the music do THE TALKING

**EDMONTON:** Music has taken Dave Skelly across Canada, but now he needs it to guide his current journey—recovering from a traumatic brain injury.

Dave first picked up a guitar at age 14 and taught himself to play. He later switched over to bass to get out on the road with a succession of bands that played country rock in Edmonton and rock and blues at festivals from coast to coast.

He worked in the oilfield and music was not so much a hobby as a way of life.

It all changed one night in December 2013 when Dave was viciously assaulted, resulting in a traumatic brain injury.

Rehabilitation has been a lengthy process—and still continues, with regular sessions at Edmonton's Glenrose Rehab Hospital.

"It's coming back—it's remarkable what they are doing for me," said Dave, 58. "I've got my left hand but my right doesn't work.

"I was looking for ways to play guitar and keep up with my brother's band. I've been going to their shows and enjoying the sound, but I wanted to play again," he said.

"Watching isn't bad, but I want to part of it."

Dave also aims to return to acoustic guitar, figuring that a six-string would give him more scope for self-expression than a bass. However, he is hindered by the lack of function in his right hand—he cannot strum.

It came up in conversation with Glenrose physician, Dr. Shaun Grey, who then showed Dave a foot-operated guitar strummer created by Tetra volunteers in St. John's, NL, back in 2009. The project, detailed on the Tetra website, was for a musician who was unable to use his right hand following a brain aneurysm. Dave saw exactly what he wanted.

At his doctor's suggestion, Dave asked Tetra for help late last year and the project went to newly-appointed Edmonton coordinator Brittney Neunzig. Her first volunteer Dan Twaites picked up the challenge, designing a strummer that utilizes a drummer's hi-hat pedal.

The musician strums the guitar by operating the foot pedal, which connects, via a bicycle cable to a spring-loaded lever mounted on a metal plate attached to the body of the guitar. A guitar pick is attached to this lever.

Brittney approached Long & McQuade in Edmonton, which donated a hi-hat stand, and next secured support from Robert Lederer, a professor of industrial design at University of Alberta's Department of Art and Design.

"Robert is tweaking the design—his role is taking things that need to be functional and factoring in an aesthetic that makes them part of someone's life," said Brittney.

"I actually went there looking for student volunteers, and he asked what projects we were doing. We discussed the guitar strummer. Robert was really excited about the design, but he said that using a metal plate was not in keeping with the acoustics.

"He wanted to refine the project. It's about taking something functional and making it aesthetically pleasing."

The strummer project is still on-going, but Prof. Lederer has already recommended a potential new volunteer for the chapter, a retired neurologist—one of 10 volunteers recruited by Brittney so far this year.

Dave says that when he takes delivery of his guitar strummer he'll look into teaching guitar. "I have a friend who lives down the hallway who is starting to play guitar but doesn't really know how. I'd like to show him."



**LOOKING UP:** THE TETRA-ADAPTED WALKER, COMPLETE WITH MOTORIZED PLATFORM.

## MOTORIZED WALKER ALLOWS EYE CONTACT

**SALT LAKE CITY:** A motorized attachment added to a walker means a teen with spina bifida can make eye contact with people when he's out and about.

It was designed and built for an 18-year-old in Salt Lake City following an initial request from his physical therapist, said coordinator Kent Remund.

"We were initially asked if we could help by providing a second walker for this boy because he preferred to be in a lower position during some activities and in a higher position for others," said Kent.

"His spine is curved and he is more comfortable in a certain position when he's walking, but when he's stopped he wants to raise himself. He wanted to be able to look eye-to-eye with people—eye contact is very powerful.

"We thought it was counterproductive to introduce a new walker and more cost efficient to use his current walker and make it adjustable."

Tetra volunteers decided to modify the existing seat to create a raising platform. An organization that refurbishes wheelchairs provided a motor from a power wheelchair leg rest, to which they connected a six-volt battery along with an easy-to-reach switch, firmly attached to the walker.

All he has to do is lean his elbows on this platform and hit the switch to be raised to and from a more upright position, explained Kent. The adapted walker can still fold for transportation.

The Salt Lake City chapter currently has eight volunteers, bringing with them a wide range of skills. They are currently working on a project to create a mouth-operated piano foot pedal control for a musician with a lower level spinal cord injury.



**KITCHEN CONFIDENTIAL:** TETRA COORDINATOR NADINE LINDSTROM (RIGHT) WITH STEPHANIE DIX.

## HUNGRY FOR A CHANGE

**PRINCE GEORGE:** Helping out at a Tetra display booth led a lady to realizing her ambition to cook for herself.

Back in December, Stephanie Dix, 45, offered to keep an eye on Tetra's display at the Handy Circle Christmas Craft Fair while Prince George coordinator Nadine Lindstrom took a break.

Stephanie, who has cerebral palsy and has been volunteering with Handy Circle for five years, was intrigued by a picture in a binder of previous projects—an oven loader.

"I told Nadine that something like that would work great for me," said Stephanie. "I used to be able to cook for myself but, because of balance problems I've not been able to use my oven at all for a couple of years."

Nadine asked volunteer Bruce Cox, an instructor at Prince George Regional Correction Centre, to build the oven loader. It has lockable castors and a shelf that can be winched with a power tool.

Cooking really means independence to Stephanie, who says she has made great use of her Tetra oven loader in the couple of months since it was completed and handed over to her.



**HONOURED:** HARRY HARDY, WHO FLEW 96 COMBAT MISSIONS DURING THE LIBERATION OF FRANCE.

## INTERNATIONAL HONOUR FOR HARRY HARDY

**VANCOUVER:** Tetra volunteer Harry Hardy has received one of France's highest awards—the Legion of Honour medal.

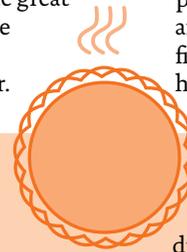
Harry, 92, has been a Tetra volunteer since the early 1990s during which time he has completed more than 350 devices for people with disabilities, and is currently working on two more: a wheelchair backpack retriever and a hoist system to help a man in a wheelchair access a steep driveway.

But the award is for his service 70 years ago, when Harry flew a Typhoon ground attack aircraft during the D-Day invasion and subsequent liberation of France.

Originally from Timmins, Ontario, Harry enlisted in the Royal Canadian Air Force at age 21. Having completed basic flight training on Vancouver Island, he was sent to England in January 1944.

Over a span of seven months he flew 96 combat missions.

"The Typhoon was a close army support plane, you attacked all the trucks and tanks and everything on the ground, you didn't fight in the air—that was the Spitfire's job," he said.



## Pie in the sky pays for projects

**REGINA:** Students raised \$3,500 for Tetra by throwing custard pies at people.

The Regina Engineering Students' Society (RESS) raised the money through its annual Pie-in-The-Eye fundraiser, during which participants donate \$10 to have pies thrown at friends across the city. In turn, their 'victims' can donate to have the pie thrown at someone else, or to not be used at all.

Organizer Marten Fidler, RESS charity director said anyone on the receiving end of a pie has the option of "wearing a garbage bag and possibly a shower cap."

Regina chapter coordinator Terri Sleva said that the funds could help towards Tetra devices "that remove barriers which prevent people from enjoying a higher quality of life."

She added: "Without extra funding, our volunteers would have to pay for workshop space, utilities, tools, etc. out of their own pockets."



**BULLS-EYE:** TESTING TETRA'S PORTABLE ARCHERY STAND—PROVING THE CONCEPT RATHER THAN SHOOTING ARROWS.

## TETRA ON TARGET

**ST. JOHN'S:** Tetra volunteers made a wheelchair bow-holder so young archers could get on target.

The lightweight aluminum device was created by Tetra's St. John's chapter for participants at Easter Seal's Newfoundland and Labrador camps—it holds the bow firmly in place for people with limited arm mobility or stability.

“The portable archery stand is for budding wheelchair archers,” said chapter coordinator Dr. Leonard Lye. “This is a partnership between Easter Seals and Tetra.”

## Tetra *thanks!*

- Arcangelo Rea Family Foundation
- Bergeron Clifford LLP
- Charles H. Ivey Foundation
- City of Vancouver
- Community Foundation of Ottawa
- Crabtree Foundation
- Grayross Foundation
- Hamilton Community Foundation - Edith H. Turner Fund
- Jack and Barbara Hay Foundation
- K + S Potash Canada
- KRG Children's Charitable Foundation
- Medicine Hat Family & Community Support Services
- Province of British Columbia
- Shoppers Drug Mart Life Foundation
- Sifton Family Foundation
- Telus

“The Tetra Society of North America would like to thank the above groups for their recent support, and extend our sincere appreciation to all supporters for helping our caring, dedicated volunteers to create custom assistive devices for people with a disability,” said executive director Duane Geddes. “Your generosity is greatly appreciated.”

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