

COVER STORY



THE THRILL OF THE CHASE

Photo courtesy Greg Johnson/gjphotos.com

A recent storm in Kelvington filled the sky with a colourful array of clouds and the accompanying lightning.

For some, weather watching has turned from a hobby to a passion

By BARB PACHOLIK
Leader-Post

Greg Johnson eagerly awaits “six o’clock magic.” It’s the time of day when a severe storm is most likely to hit. And for storm chasers like Johnson, if everything falls into place — and that’s a big if — the effect in the sky can be magical.

The professional Regina photographer says he’s not so different than many Canadians who shush the kids during weather reports or gather with co-workers to peer out their office window as the rain pounds against it.

“I think everyone’s fascinated by severe weather,” he says.

Dean Mitchell most certainly is.

On one stormy night this summer — and there’s been plenty to choose from this year — Mitchell drove to the edge of the city to witness firsthand what he knew from the data filling a computer inside his Regina home.

He watched a captivating show of raw power and natural force that lit up the night sky. Mitchell, the creator of two Regina weather websites, had seen the thunderstorm coming from the data collected by his backyard weather station, and had a pretty good idea of the scene he would find northwest of the city. But what he hadn’t expected was the half-dozen or so other vehicles parked at the side of the road, the occupants vying for the best views.

“I was blown away,” he says. (He means that figuratively, not literally.) “I was out there probably an hour, and I didn’t see anyone leaving.”

Mitchell’s websites are among those used by another weather lover, Notanee Bourassa. Like Johnson, when other people are trying to get out of the path of a nasty storm, Bourassa is heading for it. He tries to relay what he’s seeing to Environment Canada (EC), in hopes of providing real-time information for a weather warning that could potentially save a life or spare property.

But the Regina man, who hosts a show called *Hardwired* at community radio station CJTR, wants to be clear:

“I am not an official spotter (for EC) — but a fanatic.”

In a summer when this province has certainly lived up to its official slogan “Land of the Living Skies,” the *Leader-Post* spoke with three avid weather watchers, whose enthusiasm has grown from hobby to fervor.

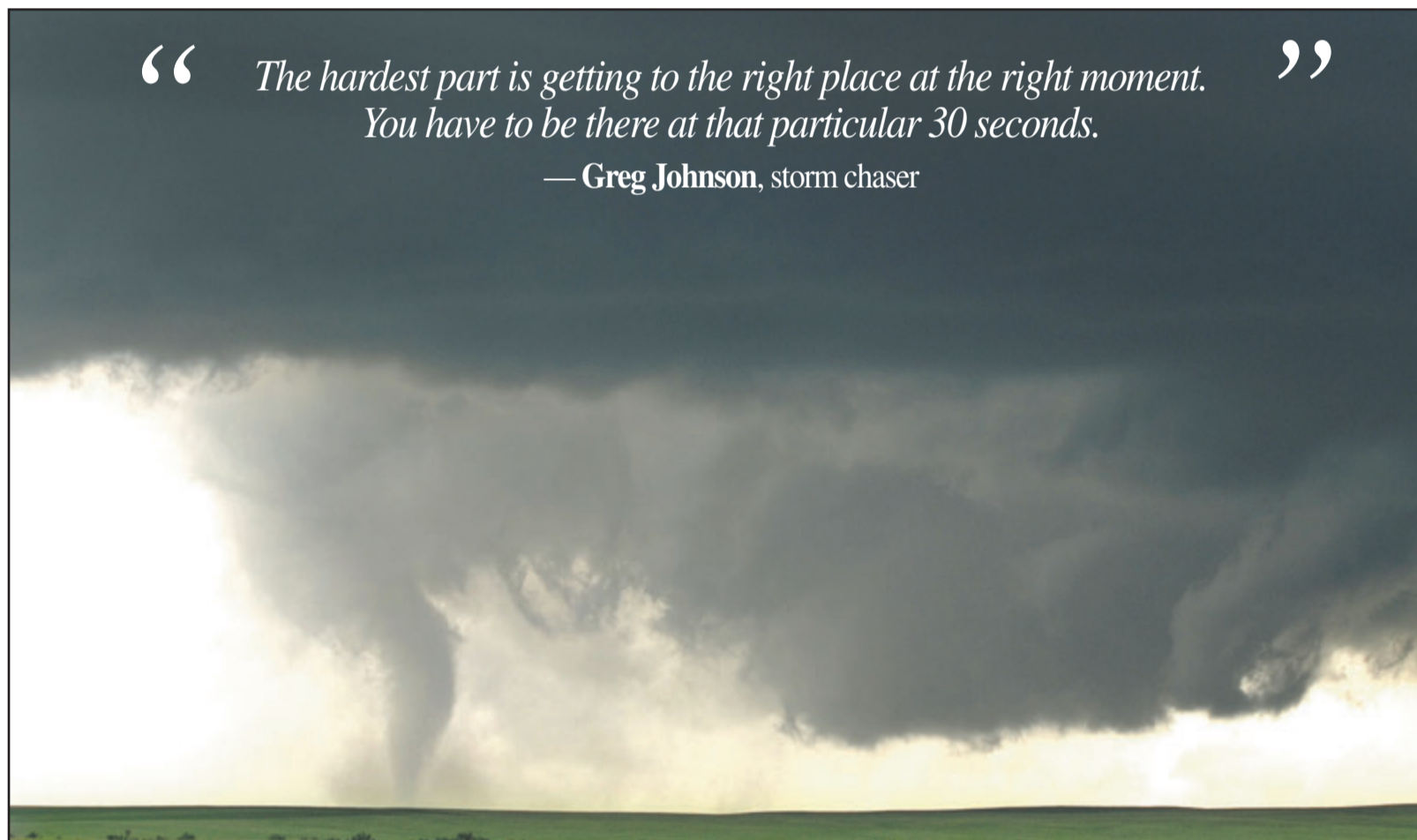
Heavy rain pummeled the windshield of the compact car — then abruptly stopped.

“All the wind on one side of my vehicle is blowing the grass in one direction, and all the grass on the other side of the vehicle is blowing in the other direction. I realized I was probably underneath the mesocyclone,” says Greg Johnson, explaining that he was beneath the rain-free base of a cloud from which a tornado was likely to develop.

A tornado dropped down on the road about 300 yards in front of him. Johnson quickly threw his vehicle into reverse, driving backwards down the highway. The twister lasted about 30 seconds, before

“The hardest part is getting to the right place at the right moment. You have to be there at that particular 30 seconds.”

— Greg Johnson, storm chaser



A tornado touched down outside Faith, N.D., on May 24.

Photo courtesy Greg Johnson/gjphotos.com



A recent storm near Strasbourg spawned an impressive lightning show.

Photo courtesy Greg Johnson/gjphotos.com

lifting back into the clouds, then dropped into the field to his left.

“It was a little too close for comfort for me,” he admits.

It was one of six tornadoes he witnessed — the other five at a safer distance — on just one day, May 24, while storm chasing in North Dakota.

Johnson is part of a rare breed who plan vacations to optimize their chances of bad weather.

“Some guys like to go fishing ... It’s just a hobby,” he says, then adds with a chuckle, “a whacked-out obsession.” Curiosity is at the core of his interest, but he’s also driven, as a photographer, to capture that

elusive, ultimate, stunning photo of a tornado.

Ever since he was caught 11 years ago in an intense, tornado-spawning thunderstorm that almost blew him off the road near Carlyle, Johnson has been fascinated by weather. When he began a photography business, his two interests dovetailed nicely.

He began to actually seek out the storms about five years ago — and then got even more serious three years later, investing money in radar equipment and travel. Last year he and two friends became “Canado” (for Canadian tornado) as they travelled through the States

collecting footage for a documentary, still in the works, on storm chasing.

Johnson went back to the U.S. this year, teaming up on one of the trips with a Texan, who likes hurricanes, for a week-long journey through Oklahoma. Next year, he’s hoping to take a group of weather enthusiasts on a storm-chasing trip south of the border for about a week to 10 days.

But Johnson hasn’t ignored the weather happening in his own backyard this summer. He chased tornadoes around Gravelbourg and Avonlea, among other thunderstorms, and watched on the satellite weather station in his van as the July 2 Raymore-area storm

developed a “tornado signature,” with the radar showing a “hook echo.”

“On the bottom of the storm that I’m looking at on the radar, it has a little hook that comes off. That is a classic sign of there’s a tornado on the ground there somewhere.” However, he couldn’t pursue it because he was travelling at the time with his family. Johnson recalls turning to his wife and telling her, “Raymore is getting hammered right now,” I said. “I hope people are taking cover because ... there’s a tornado on the ground there. Guaranteed.” His assertion was confirmed by the subsequent news reports of the devastating F-3 tornado, with windspeeds reaching upwards of 300 km-h.

Johnson, a partner in the marketing and communications firm Look Matters, stresses that he is not a forecaster, and much of his education has come from the Internet, experience, and the storm-chasing community itself.

Admittedly, in Saskatchewan, that community is still relatively small as compared to the storm-chaser traffic jams Johnson has experienced south of the border in Tornado Alley. “It was probably more dangerous than the tornado,” he says, noting that one day he counted about 600 storm-chasing vehicles when there was an “outbreak” of tornadoes.

As storm chasing goes, the Canadian Prairies don’t have the same draw as the U.S. While the Prairies see about 40 to 50 tornadoes annually, Johnson was chasing 75 tornadoes in one day in Oklahoma.

“Although this (summer in Saskatchewan) is pretty severe weather for us here, it’s still pretty random and sporadic, compared to what storm chasers experience in places like Oklahoma in May, and Kansas and Nebraska and Missouri and Iowa,” says Johnson.

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A series of lightning strikes filled the sky recently near a farm 20 kilometres south of Moose Jaw.

Photo courtesy Greg Johnson/gjphotos.com

Storm Chasers

Continued from Page G1

As for actually coming upon the devastation wrought by a tornado, Johnson says he would never photograph that for gain and notes, "It's going to happen whether I'm there or not."

"Every one of the chasers has the same philosophy: If you come upon that, you stop and you see if you can help somebody," he adds.

For a chaser, "the hardest part is getting to the right place at the right moment," says Johnson, who relies heavily in the U.S. on the Storm Prediction Centre, which includes information on its website from spotters on the ground and narrows down the likelihood of a tornado in a particular area to days and percentages.

Asked about the danger, Johnson doesn't dwell on it, given a tornado's elusiveness and usually short duration. "You have to be there at that particular 30 seconds," he says.

"My biggest fear is, when I go down there, that I waste five days of my life, driving around eating junk food."

Raised on a farm in the Battleford area where every turn in the weather is vigilantly monitored, looking skyward is a part of Dean Mitchell's heritage.

"My dad kept meticulous weather records, particularly rainfall, of course," he says. It was his interest, and Mitchell studied meteorology for two years, but ultimately settled on a career in the information technology sector.

With the growth of the Internet, more weather data became available, and Mitchell was able to fulfill both interests.

"I enjoy it. And my eyes are always to the sky ... I've always done that. The Internet and the technology has come to the point where it's affordable that you can do it right out of your house."

He began connecting with other weather keepers online. "It seems like everyone's an armchair weather forecaster," he says.

Mitchell created the website saskweather.ca, pulling together links from a number of sources so information was readily accessible in one place.

He went a step further after buying a personal weather station in 2002 and created a new, far more

detailed website, nwrweather.com, with information specific to Regina.

The data he collects from the station — including temperature, rainfall, and windspeed — is also used by other websites, such as the U.S.-based weatherbug.com.

"From a storm side, bring it on as long as no one's getting hurt. Everyday, there's something to talk about," says Mitchell.

He notes the attraction of his website is that it provides "real-time" weather for the city. "Some of it does upload every four or five seconds." It also consolidates a variety of sources in one site.

"What do people want to see — they like webcams, they like to see the radar where the rain is coming from, and they want to see warnings." He notes the real-time data is collected within the city, unlike Environment Canada, which takes its readings from the Regina airport. "I know we're not that big of a city, and we're not that far from the airport, but things are a little different in the city. It's a little warmer in the city. It's not as windy."

His most recent addition is a lightning detection system. "It's picking up the radio frequencies that your AM radio picks up when you hear a storm coming close ... You hear that crackling," he explains. He'll send out alerts about thunderstorms to those who request them. Storm chasers and photographers are among his subscribers.

"If one of those shows up within 80 kilometres of the city, there's software that will send an alert to say this is within the area, and the direction ... and the distance in kilometres, and how many strikes per minute, and the peak and if it's a severe storm," he says. "The idea isn't that that is a perfect match for what's out there, but ... at least when you get that, I try to tell people, is that now maybe I need to go to the Internet and take a look, take a look outside."

Mitchell and the warnings on his website are clear, he is not a forecaster, nor a replacement for officials sources like Environment Canada. "It is all for personal use. No one is making any guarantees."

Most of his own storm chasing occurs indoors, where he monitors the data and radar.

"I'm making sure my system is running, making sure everything is

current ... because I know people are looking at it. The hits on the website go way up on a stormy day, whether that be winter or summer." Sometimes as a storm is approaching, he and his son will sit with a laptop computer in the back of the family van and track lightning with radar and maps on the computer screen, as it unfolds simultaneously in the sky.

As for those watching Mitchell's websites, he's had inquiries from farmers, storm chasers, a rowing club and even the manager of a scaffolding business who expressed an interest in getting the lightning alerts. One of Mitchell's co-workers who likes to fly kites consults with him on wind conditions and also gets the thunderstorm alerts for his photography hobby.

Mitchell occasionally gets requests for historical information as his data is archived every 15 minutes and recorded for the past eight years. So if you want to know how hard it rained at 1:30 p.m. on July 22, Mitchell can find the answer. He recalls a request a couple years ago from the City of Regina about annual rainfall data for a study on storm sewer capacity. The city wanted to supplement the information from its own rain gauges.

When he's not monitoring his websites, Mitchell is looking at other weather blogs, chatting on weather forums, and learning what's new in the wacky world of weather.

"There's always people out there wanting to have more information. I don't think you can have too much."

As a toddler, Notanee Bourassa covered at the sound the thunder, especially when it was really loud.

"One evening my parents explained to me the simple trick of counting from the lightning flash until you hear the thunder to assure me the storm was moving away," he says.

His fear turned to awe after witnessing firsthand the power of a tornado in 1979 that left damage mere blocks from where he lived.

As a Grade 2 student at Herchmer School, Bourassa borrowed books from the school library to explore clouds sequences and the weather they spawn.

"I made a few predictions at that time and happened to be right more often than not," says

Bourassa, adding that it served to bolster his confidence and interest.

He went from being glued to the windows to watch "a good thunderstorm" to actively pursuing it, wanting to witness up close the "terrible beauty, and respect the awesome power of our atmosphere."

"It's a humbling experience," says Bourassa, who calls himself as an "amateur storm chaser."

In an e-mail, Bourassa describes the attraction of running after what others are trying to steer clear of: "The adrenaline rush of the potential danger; the raw beauty of powerful lightning against the dark, raging sky accentuated with a strange bluish-green glow; the smashing clap of thunder as atoms flee from the heat and collapse again; the punishing downpours of rain and hail, complimented by winds strong enough to remove the most stout tree — only fools dare to venture to capture the experience with their minds and cameras."

He's better organized today than two years ago when he intercepted a tornado near Craik.

"I have Environment Canada on speed-dial now, just in case, and always carry a good camera." He posts videos and pictures of his adventures on the Internet.

"I've witnessed some excellent storms this year ... in contrast to predictions I've heard that this summer was supposed to be drier," notes Bourassa. Juggling a full-time job, his volunteer work at the radio station, and his responsibilities as a father of three, Bourassa admits he can't always get out on the "good storm days."

But he keeps his camera handy — just in case.

Bourassa believes that as more people have the technology to track and, therefore, report severe weather, people are more likely to hear about it and can prepare. "That makes our province safer when everyone networks together and uses the system and improves on it."

He relies on a variety of sources of information, from Environment Canada to private sites like Mitchell's.

"I say, use all sources of information, make an informed decision for yourself," says Bourassa. "And decide how important weather really is in your life."

ARCHAEOLOGY

Mayan dynasty revealed

By THOMAS H. MAUGH II
Los Angeles Times

LOS ANGELES — U.S. and Guatemalan archaeologists have found an unusually well-preserved burial chamber that they believe is the tomb of the founder of a Maya dynasty, a find that promises new information about the empire's formative period.

Archaeologist Stephen Houston of Brown University said the tomb was so tightly sealed that the team found remains of textiles, wood carvings and other organic objects that normally disappear in the humid tropics. Even after 1,600 years, the smell of decay was still present when the team broke through the walls of the tomb, Houston said.

Enclosed with the remains of what the team believes to be an early king were the bodies of six infants, who may have been sacrificed and sent to the afterlife with the king. Blood-red bowls surrounding the tomb contained human fingers and teeth wrapped in decaying organic matter, perhaps leaves, that may have been symbolic meal offerings, Houston said. Sacramental breads are still prepared in that manner today in the region, he said.

"If (Houston) is right and this is a dynastic founder ... it would be one of the only times we've found one of these people," said archaeologist Simon Martin of the University of Pennsylvania, who was not involved in the research. It is also "uncommon to find sacrifices in the tomb ... That is one of the things that marks it out as pretty special."

The tomb was found at a site called El Zotz, located about six miles from the city of Tikal in the Peten region of northern Guatemala. Tikal was one of the largest and most powerful urban centers in the Maya civilization and El Zotz apparently flourished on its border, even though a variety of evidence suggests that relations between the two cities were not good.

El Zotz was previously known as a small-time tourist destination because of a large population of bats, "zotz" is Mayan for "bat." Houston's team began mapping the site five years ago and excavating two years later. It had not been much explored by archaeologists, but was heavily looted.

"The pyramids looked like Swiss cheese," he said.

Occupation at the site began about 500 BC and was marked by "rapid-fire periods of intense building, pauses, then other periods," he said. "It had a highly episodic quality, what I would have predicted in a frontier zone, periodically buffeted by Tikal and getting caught in the political turbulences of the time."

The city originally lay in the valley due west of Tikal. But about AD 350, the population went into a dramatic decline and moved to more defensible positions on the escarpment on the sides of the valley.

"I suspect they needed to skedaddle because of the increasingly fragile political position," Houston said.

The new tomb is in a pyramid called El Diablo in "a supremely defensive position" at the top of a steep slope that is difficult to climb. The pyramids of Tikal are visible in the distance. The tomb is at the base of the pyramid and others, most now looted, were built on top — a chronology that supports the idea that the occupant was the founder of a dynasty.

The tomb was large by Maya standards, about nine feet deep and four and a half feet high. It is sealed with alternating layers of mud and rock, which helped preserve the contents.

The primary occupant, originally installed on a green bier, was arrayed like a dancer, with bell-like ornaments made of shells and "clappers" made of canine teeth. It appears he was wearing an elaborate headdress with small glyphs on it, and his teeth were embedded with jewels.

"We have known from the '90s on that a big role of kings was to be a ritual dancer," Houston said. "This is the clearest instance I have seen of the king being put in a tomb in that role."

Dancing was probably associated with the maize god "and is linked to fecundity, growth of the Earth and sprouts of new seeds," Martin said. "It was a soulful, powerful thing" that emulated the swaying of maize from side to side.

Researchers are not sure if the infants were specifically sacrificed to join the king, but they think that might be the case because of what Houston called "a gruesome-looking obsidian blade gunked up with some red substance" found nearby. They haven't yet tested to see if it is blood.

Other treasures in the tomb included shells imported from the Pacific coast, colorful bowls, remnants of textiles and ingots of a brilliant red pigment called specular hematite, similar to the bronze ingots in Mediterranean shipwrecks.

"This guy is taking his riches with him," Houston said.

"They speak to the vast divide that separates the king from the people who supported him."

HEALTH ISSUES

Focus on the family medical tree

By JOEY HOLLEMAN
McClatchy Newspapers

As families gather for reunions this summer and fall, they should consider sharing something more important than Aunt Martha's macaroni salad recipe.

It's important to know your family medical history, and large family gatherings are the best place to gather the details, according to health officials.

"Knowing your family medical history can save your life," said Karen Brooks, a genetic counsellor and assistant professor at the University of South Carolina School of Medicine.

There's a reason doctors always ask about your family's health history. Cancer, diabetes, heart disease and many other disorders have genetic factors passed down through the generations. Knowing if your family has a history for any

of these conditions allows you and your physician to take steps to prevent you from becoming part of an unwanted family tradition.

A survey cited by the U.S. Department of Health and Human Services noted that 96 per cent of Americans believe knowing their family health history is important, but less than a third of Americans have gathered to discuss and write down those histories.

Reunions are a great place to start because family elders have a depth of knowledge about medical problems. Brooks suggests checking in with family members before a reunion to let them know you will be asking medical history questions. That way they can do a little research to jog their memories.

Here are some other tips: ■ Start with the biggies — major birth defects, cancer, stroke and cardiovascular problems. Discussion of disorders such as

mental illness and learning disabilities might be a little touchier, but you should try to delve into those matters, too.

■ Look at both sides of your family. If your reunion is almost exclusively members of your mother's side of the family, try to do the same thing at the next get-together of the folks in your father's family. Most diseases can be inherited from either side.

■ Start with your immediate family and try to get at least three generations of information. Then build from that nucleus, creating a medical family tree.

■ Share the information once it's compiled. If someone in your family isn't interested, they can throw it away. It might be more detailed information that a doctor needs, but too much information is better than too little.

■ Don't stop after the initial information is compiled. Family medical histories, like families,

grow through the years.

One instance of a disease might not mean much. Health officials go by the 3-2-1 rule. It's worth special attention if three relatives on the same side of the family have had the same disorder, at least two of those are closely related (sibling, parent, child) or at least one was affected at a young age (before 50 for most cancers).

In the past, some families might have treated talk of mental illness as taboo or prudishly avoided talk about cancer involving sexual organs. Some of that reluctance has broken down in recent years, Brooks said.

"I've had examples in my practice where a family member across the country had a genetic test done, found they had an inherited trait, and contacted a family member here," Brooks said. "Then they call me and say they want to come in and be tested for this trait."