WEATHER HIGH 7 C | MOSTLY SUNNY | MAP S8

SATURDAY, MARCH 26, 2016

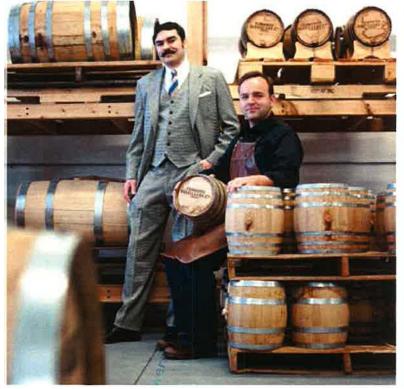
### Toronto Distillery Co.

**Owners Jesse** Razaqpur, left, and Charles Benoit make organic gin, singlegrain whisky, beet spiri and applejack at their certified organic distillery in the Junction,

The two stylish high school buddies launched their venture in 2012, the first new distillery to be licensed in Toronto since 1933.

Their wheat and rye grain spirits don't rely on barrel aging, but derive their flavour straight from the distillation run itself.

The two are awaiting the outcome of a lawsuit they launched against the LCBO, claiming the monopoly's markup on each bottle of booze sold is "unconstitutional." More craft distillery profiles, A4



COLE BURSTON/TORONTO STAR

With tight restrictions due to be loosened soon, Ontario's tiny craft liquor industry is hoping to uncork a boom in business

### LISA WRIGHT

Whenlongtime friends Rocco Panacci and John-Paul Sacco visited some Kentucky bourbon distilleries a few years ago, they dreamt of taking their passion for whisky to the next level, and figured they could just set up shop in Toronto.

The software developer and the construction contractor wondered whythere weren't more small-scale spirit makers in Ontario considering the explosion on the craft brewery scene.

Then their research really got them woozy.

"We quickly figured out that all of the restrictions and very little profit margins make it really difficult to sustain as a business here," Panacci said.

Canada is famous around the world for its whisky. It's the home of Crown Royal, Canadian Club and

SPIRITS continued on A4



BERNARD WEIL/TORONTOSTAR

Rocco Panacci, left, and John-Paul Sacco plan to open Yongehurst Distillery in April, "We both grew up in homes where making things . . . was just a way of life," Panacci says.

# **Few satisfied** with revised carding rules

Activists and police troubled by province's new street-check policy

### BETSY POWELL CITY HALL BUREAU

Organizers of the Black Lives Matter protest outside Toronto police headquarters were quick to condemn the province's new regulations on carding after they were announced this week.

The Canadian Civil Liberties Association was also less than pleased, calling the changes a "mixed bag.

"It is certainly not the end of the debate around carding because, on our read of it, carding can continue under these new regulations," said Noa Mendelsohn Aviv,

director of the CCLA's equality program.
"Ontario chooses band-aid instead of banning carding," the African Canadian Legal Clinic declared in a news release Thursday.

The police union also cast a dubious eye. Toronto Police Association president Mike McCormack predicts the regulation, which takes effect Jan. 1, will prevent officers from gathering the intelligence they need to solve crimes.

No hardened "gangbanger" is going to hang around and talk to police after being told "you don't have to provide any in-

formation," he said.
"Our officers will still engage (with the public) and still be professional, but I don't know if this is going to meet the requirements of specialty units (guns and gangs, the holdup squad, etc.) to gather intelligence, to investigate crimes.

## >INSIDE

New carding rules reveal a sad perspective

COMPAGISING

After years of

Toronto police, the

province revealed

its plan to ban

carding last fall.

debate and stonewalling by

CARDING continued on A2

## No justice for anyone with Ghomeshi verdict

For whom is the justice system just? After Ontario Court of Justice Judge William Horkins delivered a not-guilty verdict in Jian Ghomeshi's sexual assault trial, it's a question that lingers: Is this a result that provides "justice" for anyone? If so, who? Was anything at all resolved to anyone's satisfaction by that trial? Anything at all accomplished by it?

I suppose it inspired still more fear and loathing of lawyer Marie Henein - a set of emotions, perhaps, it is useful for a defence attorney to be known for provoking

But beyond Henein, it is hard to see anyone who was delivered a victory here - or who might feel justice was delivered to them.

Let's start with Ghomeshi himself. If he is indeed innocent of the things he stood accused of - and the many related offences he is publicly reported to have been accused of outside this proceeding — then surely the not-guilty verdict is

KEENAN continued on A6

good news for him?

Manatee magic Up close with nature's gentle giants, T



>INSIDE

Ghomeshi's allure hard to fathom. Rosie DiManno. A2

How the judge missed the point. Heather Mallick,

## A theme park based on 4,300-year-old plans

Kentucky creationists are spending \$200 million on an attraction meant to rival Universal Studios: a lifesize recreation of Noah's Ark

KATE ALLEN
SCIENCE & TECHNOLOGY REPORTER

WILLIAMSTOWN, KY. A shallow sea once covered this state. On that point, the advocates of evolution and the defenders of creationism agree

A geologist at the University of Kentucky wouldpoint to overwhelming rock and fossil evidence to conclude that tropical seas covered the region for millions of years.

A creationist at the Kentucky-based

Christian ministry Answers in Genesis would speak the phrase "millions of years" as if it were a ludicrous impossibility. They believe Kentucky's ancient sea was the deluge of Noah, a flood of 40 days and 40 nights that occurred just 4,300 years ago.

Only one of these groups is spending \$200 million on a theme park designed to attract 14 million visitors annually.

ARK continued on A16

>Full Index Page A20N0 V2

Eye for high society T.O. pro reflects on decades of star-studded photography, E1

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# Exhibit draws on 'real observational science'

Answers in Genesis last drew international attention in 2014 when its president and CEO. Ken Ham debated the merits of evolution with TV personality Bill Nye "The Science Guy." That event took place at the Creation Museum, a slick, modern facility that Answers in Genesis built to rival big-city natural history museums where evolution is accepted as fact.

Now Answers in Genesis is broadening its reach. On 324 hectares next to the heavily trafficked highway between Lexington and Cincinnati, it is building a 156-metre-long Noah's Ark — the equivalent of the biblical 300 cubits — that will stand as the largest timber-frame building in the world. It will be filled with dozens of lifelike animal pairs and 45 exhibits. Amidst family-friendly fun like a petting zoo and themed restaurants, "Ark Encounter" will promote the idea that the Flood occurred as it is literally described in the first book of the Bible, and that life on Earth can be traced back to that very recent

Ham is a former public high school science teacher, and everything Answers in Genesis does is imbued with the desire to educate. The ministry employs half a dozen staff with advanced degrees in biology, physics,

geology and medicine.
"We have these scientists to show people that we do real observational science in the present," Ham told the Star on a recent tour of the Ark. "We can show you that the science of genetics confirms the Bible's account of kinds, not an evolutionary process. We can show from the fossil record that it confirms catastrophism consistent with the flood of Noah's day, not slow processes over millions of years."

To dismiss the group as kooks would be a grave error. Ham and his colleagues are media savvy and wellspoken, and Ark Encounterwill have the same sophisticated production values as the Creation Museum. The theme park's lead designer produced the Jaws and King Kong attractions at Universal Studios.

Young-Earth creationism also en-



Patrick Marsh, Ark Encounter's vice-president of attractions design, is busy creating dozens of lifelike animal pairs for the Kentucky theme park. Marsh built the King Kong and Jaws attractions at Universal Studios.

joys widespread support. The number of Americans who believe that humans were created in their present form within the last 10,000 years has hovered above 40 per cent for more than 30 years, and was slightly higher in 2012 than 1982, according to a long-running Gallup poll. Americans who believe in naturally driven evolution are in the minority. Neither is creationism an American phenomenon: one in five Canadians shares the same beliefs, and creationism is even popular in some Latin American, Middle Eastern and African countries.

In the battle for hearts and minds. both sides believe they are losing. Those who affirm the reality of evolution see the stubbornly high support for a 10,000-year-old Earth and despair. Some states continue to fight for language in classrooms that questions the validity of evolution. Ted Cruz, the only Republican presidential contender with the possibility of overtaking Donald Trump, announced his nomination bid at a Christian university that endorses creationism.

On the other hand, those who believe God created the Earth as described in the Bible are equally despaining over the ever-growing number of Americans who have left the church. And while young-Earth creationism support holds steady, the fraction of the U.S. public that believes evolution occurred over millions of years, but that God guided it, is continually bleeding believers into the secular group.

One side believes the scientific literacy of the next generation, and therefore innovation in America, is at stake. The other thinks that when the authority of God's word is un dermined, morality begins to erode.

These groups can barely even hold a

"It's a total impasse," said James Bielo, a professor of anthropology at Miami University and the author of a forthcoming book on Ark Encounter. "There's no middle ground

This places us at a remarkable juncture in religious and scientific history. For decades after Darwin, even those who held deep religious objections to his theories allowed for an Earth that was millions of years old, and for an ancient human history.

Answers in Genesis is uniquely poised to take advantage of this moment. When Ark Encounter opens on July 7 — a date chosen for Genesis 7:7 when Noah enters the Ark - its message, and its underlying questioning of scientific consensus, will be spread to hundreds of thousands, if not millions of people.

"I am a science teacher. I want to see kids taught science. I love science," Ham told the audience at the Nve debate.

### Populating the Ark

Ark Encounter marketing emphasizes that visitors will "experience being taken out of the modern world and emerge into Noah's world." In late February, though, the Ark was still more 21st-century construction site. Tyvek sheathing was visible beneath the structure's timber exterior and plywood covered the concrete floors. "We had to do a lot of things for

code that I'm sure Noah didn't have to do," Ham joked to reporters on a tour of the site.

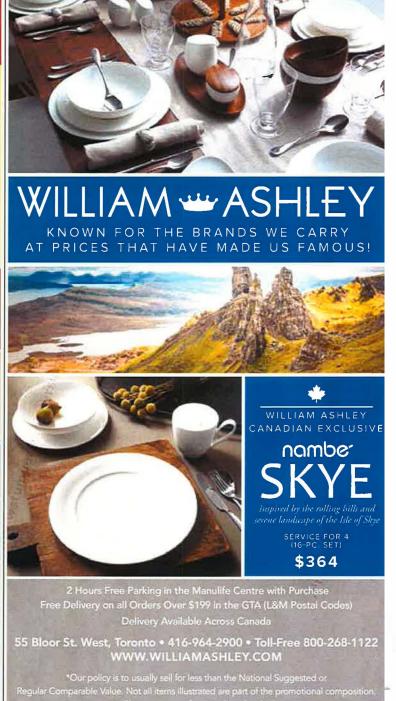
Even partially built, the Ark is an astonishing hulk of a structure. But the meat of the theme park isn't here yet. That workis underway in a nondescript industrial park 40 minutes north: the Ark Encounter design studio. Its head and vice-president of attractions design is Patrick Marsh, who came to Answers in Genesis after 30 years in the world of secular entertainment, including Universal Studios in Florida, the 1984 Olympic Games, and the refurbished Statue of Liberty. He was originally hired to build the Creation Museum.

"I told the people at Answers in Genesis we really had to make it a very high-quality thing. There wouldn't be any favours done by a bunch of Christians who thought. 'Yeah, that's good enough.' It had to rival Universal Studios," Marsh said.

Ark Encounter brings the same modern production values to a distinctly unmodern message. The 1,400-square-metre studio is populated by creative types whose desks are decorated with both jokes about font kerning and favourite psalms. On the Friday I visited, one designer was absorbed in a high-definition graphics tablet - retail \$3,000 - as he touched up a digital model of a woman in first-century garb. To test the model, he made a miniature using a desktop 3D printer. When it is ready for construction he will send the file to a computerized mill the size of a small room.

Continued on next page





God's word on creation Plenty of devout Christians have no problem with evolution, a geologically ancient Earth, or other theories backed by scientific consensus. The ideas below are espoused by a narrow brand of young-Earth biblical creationism that includes Answers in Genesis.



of teachers spent an hour or more

classroom time presenting creation-

ism in a positive light. In further

studies of the remaining "cautious"

60 per cent, the researchers found

many future biology teachers lacked

the knowledge and confidence to

teach evolution properly, and labelled them "enablers of doubt."

"Science education sucks," Num-

bers said, adding he had tried for

decades to convince his science fac-

ulty colleagues to create a general-

level university course on evolution.

"In my opinion, they abdicate their

Creationists don't reject science,

Bielo said. They see elitism in what

counts as science and who gets to be

a scientist. "They feel excluded. It's

not entirely a class problem, but

On the other hand, some scientists

and public figures have adopted the

opposite attitude: seizing on cre-

"For them, being mocked, that ful-

fils the biblical template. Noah was

mocked, so they're going to get

mocked." The New Testament is full

of stories in which Christians' faith is tested by nonbelieving authority fig-

"Being mocked helps their move-

ment," added Bielo. "Being ignored

would be far worse.

there's a class element to it."

ationism in order to mock it.

responsibility there.'

The 156-metre-long Noah's Ark — the equivalent of the biblical 300 cubits — will be the largest timber-frame building in the world, its builders say,

# Being mocked helps their movement

Two by two, the animal models are being created with the same digital tools. After the mill carves their basic form from foam, artists bring the creatures to life with clays, furs and

The team is fabricating about 86 animals. The vast number of species in the world was one of the earliest challenges science posed to literal Bible interpretations: two of each would sink any ark. Answers in Genesis, and most other young-Earth creationists, believe that the term found in the Bible, "kinds," refers to the taxonomic rank of family (for example Felidae, the family that includes all cats, from roaring big cats to domestic pets).

 $Marsh\,said\,that\,Answer\,sin\,Genesis$ had commissioned a "study by half a dozen scientists" to determine which animal families would have been aboard Noah's Ark. Since, according to their gospel, the incredible variety of life on earth derived from what was aboard Noah's Ark just 4,300 years ago - a date calculated from Genesis genealogies visitors to Ark Encounter will see a selection of mostly extinct species bearing a wide selection of traits, including Thylacosmilus atrox, a sabretoothed marsupial. Trigonias osborni, a hornless rhinoceros, and several

Answers in Genesis is not unique among creationist groups in positioning itself as supporters of science. How the ministry sets itself apart is its emphasis on entertainment, said Bielo, who followed the design team for more than two years as part of an ethnographic study.

"The team tries to integrate the inperative that they get from fundamentalism with the imperatives they get from Disney, primarily, but also Hollywood. Things like creating an immersive experience: that is as non-negotiable for this team as treating the Bible literally." If they can immerse visitors into a believable representation of the Bible -God's word — maybe they can convince you to read it again.

Without looking at the exhibits too closely, the Creation Museum could pass for anymid-sized natural history museum. Fossils, double helixes and even terms like "natural selection" are liberally salted throughout. In a video that loops above one of the first exhibits, a paleontologist at a dig site faces the camera. "Fossils don't come with tags on them telling us how old they are, where they lived, what they ate, or even how they died," he said, later adding: "I start with the Bible, my colleague does not. We all have the same facts - we merely interpret the facts differently because of our different starting points."

Throughout the museum, the case is made clear: we can't see the Earth's ancient history, so creationism is as reasonable a framework as evolution.

But evolution undernines the authority of God's word, with all the attendant moral consequences: abortion, homosexuality, divorce. Most of the museum, however, is devoted to wonderment over God's creation, not those sharp-edged judg-

Ark Encounter has a different goal than the museum. As Bielo describes it, "They really talk about the museum as a place for the already commit-

kids, who want to bolster their own understanding of creationism, who want some evangelistic tools." The museum is "intended and built to fortify their base.

The theme park is reaching out to a much broader audience. "The Ark they really intend as more evangelistic. They're convinced, absolutely convinced, that everybody's going to come, because the Ark is such an object of fascination, such a myth of broad appeal."

And for those whose curiosity may be piqued by the Ark, the Creation Museum is just up the road.

"I always liken it to a can opener," Marsh told me. "If I can get you to be curious about the Bible, and you actually read it and you read stories about the Arkandyou read whatever it is, maybe God is going to speak to you and open your heart."

### They think we're crazy

When I first contacted Answers in Genesis and introduced myself as a science reporter — one from a big, liberal city — I expected some scrutiny. Instead, I was immediately invited to Kentucky for two days of tours and interviews. I've had substantially more difficulty trying to interview Canadian government scientists.

I had resolved before I left not to argue with creationists about the merits of evolution. If Bill Nye couldn't convince them, I certainly couldn't either. But at the Ark Encounter design studio, as I found myself nodding along to Patrick Marsh's guileless narration, I felt a rising sense of panic. Had I somehow misled these people into thinking I was aligned with their ministry?

Two hours in, I was thoroughly disoriented from toggling between my impressions of Marsh (clearly smart, very nice), his view of Earth's biology and geology (like an alternate universe where concepts like natural selection exist but refer to unrecognizable processes) and what he thought I was doing (no idea). Finally, I asked: what about all those people who believe firmly in evolution, people who  $might think enterprises like this are {\color{red}a}$ 

"They think we're crazy," he finished my sentence. "I know. I'm used to it. Here's the thing," he went on.

"Either God is going to call you and open your heart to believe what I'm showing you, which is really God showing you, or He won't. That's what the Bible says," Marsh told me. "I don't have any fear whetheryou're going to believe it or not believe it. My job is only to do what I do and to say to you what I'm saying and to present the evidence. You evaluate whether it makes any sense or doesn't make any sense. A lot of people are going to come because it's this huge Ark they've heard about, and they're going to be curious.

Hisjob wasjust to present the argument - a realistic Ark, with realistic animals. It was my decision - or. ultimately, God's - whether I would open my heart to His word. And if not me, well, maybe one of my readers. That, of course, confirmed another possibility, one I had already considered before leaving Toronto.

"They assume you're lost and unsaved," Bielo told me. "They will use you to reach a broad audience. Their job is just to present the most sophisticated version they can."

In the decades after Darwin first

published his theory of evolution, historian Ronald Numbers relates in his book The Creationists, many thinkers held deep religious objections to the idea that man was descended from "lesser" life forms like apes. Yet Numbers could find few Americans, even those later labelled as "fundamentalists," who expressed objections to an ancient history for life on Earth or who insisted Noah's flood was global and geologically significant.

William Jennings Bryan, the devoutly conservative lawyer in the 1925 Scopes trial that prosecuted a high school teacher for teaching evolution, testified that: "I think it would be just as easy for the kind of God we believe in to make the Earth in six days as in six years or in 6,000,000 years or in 600,000,000 years. I do not think it important whether we believe one or the other."

In Kentucky, one of my overriding questions was how, a century and a half after Darwin, we have arrived at such a historic high in the rigidity of creationism. I had part of my answer. "Even though the gross numbers haven't grown, their level of cultural power and access to various kinds of cultural capital, thathas grown," Bielo said. Media plays a huge role in that.

Pew Research Center surveys show that while 98 per cent of scientists who belong to the American Association for the Advancement of Science believe humans evolved over time, only two-thirds of the public believe that scientists agree on evolution The media's ongoing problem with false balance — presenting "both sides" of an issue when one "side" has accumulated vastly more evidence, as many journalists did long after researchers reached a consensus on man-made global warming –

is surely a contributor. When Ken Ham debated Bill Nye, many commentators argued Nye lost just by showing up: his presence validated Answers in Genesis. While Ham disputes accounts that Ark Encounter was funded by post-Nye donations, he agrees that it significantly boosted the group's visibility.

"They're good marketers, they're savvy communicators," Bielo said. "They're as modern as you can get, except for natural processes."

Of course, to blame the rise of fundamentalist young-Earth creationism on any one force - media, the courts, public education - would be naive. "I don't think there's any single explanation for this," Numbers said. Like any significant sociological trend, the cause is probably some unknowable nexus of political, economic, cultural, legal and religious forces.

The next most obvious, and far more important, question is even tougher to answer: How do we fix this? When I asked Numbers, a former Seventh-day Adventist who was raised believing in young Earth creationism, he just sighed. "Boy. I'd be rich if I had the answer," he said.

Numbers had some ideas on what notto do. He recently blurbed a book for science teachers on how to approach creationism. The main message: don't confront creationists. Just teach evolution.

If that seems self-evident, it isn't. In a 2007 Pennsylvania State University study of 926 high school biology teachers, just 28 per cent taught the subject according to National Research Council recommendations, by presenting evidence that evolu-

was a literal 24-hour day in a literal seven-day week. So they don't believe the fossil record shows animals existing before humans, or layers of geologic time. Instead, they think one catastrophic event, Noah's flood, is responsible for the entire fossil re-

Genesis says God created both man and the beasts of the Earth on the sixth day, which creationists believe

### Speciation

Creationists reject the idea that animals can evolve into new groups that modern birds evolved from dinosaurs, for example. They dispute all examples of transitional fossils (the feathered dinosaur archaeopteryx, the hominin Lucy). They believe there were feathered birds, scaly dinosaurs and perhaps feathered dinosaur "kinds" aboard the Ark. Every animal, even if it later went extinct, can trace its ancestry back to these kinds, and nature can't produce new kinds that God didn't originally create.

Carnivores The Creation Museum's Garden of Eden exhibit features a Tyrannosaurus rex, but insists the dinosaur would have been a herbivore, since Genesis states that thorns, disease and meat eating were products of Adam and Eve's sin.

### Geology

The Creation Museum makes a fuss over the Grand Canyon because it shows different bands of rock. To try to invalidate the evidence of geologi cal phenomena dating back billions of years, the Creation Museum cites examples of volcanoes and other catastrophes creating canyon-like structures very quickly.

### **Human origins**

This is a big one, since the Bible says God created man in his image. The Creation Museum has dressed Lucy, the Australopithecus fossil, with gorilla-like fur and posture under a statement that says: "Man's word says humans and apes evolved from a common ancestor, but God's Word says THERE'S NO APE IN YOUR ANCESTRY!

Genesis says that eight people disembarked after the flood: Noah, his three sons and the wives of all four men. Creationists believe all humans are descended from them, so we are all one "race." (The story of Babel explains our different traits and languages.) Biologists increasingly agree, but for different reasons: there is more genetic variation within populations of individuals than between them, making race a tenuous biological construct. Creationists celebrate this finding. Kate Allen

Legislative Assembly of Ontario



Assemblée législative de l'Ontario

### **Bill 172, Climate Change Mitigation and Low-carbon Economy Act, 2016**

The Standing Committee on General Government will meet to consider Bill 172, An Act respecting greenhouse gas.

The Committee intends to hold public hearings in Toronto on Monday April 4 and Wednesday, April 6, 2016.

Interested people who wish to be considered to make an oral presentation on Bill 172 should provide their contact name, mailing address. phone number, and email address to the Clerk of the Committee by 12:00 noon on Wednesday, March 30, 2016.

Those who do not wish to make an oral presentation but wish to comment on the Bill may send a written submission to the Clerk of the Committee at the address below by 6:00 p.m. on Wednesday,

An electronic version of the Bill is available on the Legislative

Grant Crack, MPP, Chair

Telephone: (416) 325-3515 Facsimile: (416) 325-3505 TTY: (416) 325-3538 E-mail: sprzezdziecki@ola.org

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