

OPUNTIA 469



Saint Urho's Day 2020

Opuntia is published by Dale Speirs, Calgary, Alberta. It is posted on www.efanzines.com and www.fanac.org. My e-mail address is: opuntia57@hotmail.com When sending me an emailed letter of comment, please include your name and town in the message.

About The Cover: Taken at the annual art show Canstruction, held each spring in the Southcentre Mall. More about that further on in this issue. Despite it being a Sunday afternoon, the mall was ghostly empty because of the coronavirus panic. Their food court didn't have a dozen customers at high noon.

THE VIRUS

by Dale Speirs

The COVID-19 coronavirus panic amuses me in some ways. I don't mean to minimize the seriousness of the coronavirus, but I've lived through similar scares since the Millennium with SARS, H1N1 influenza, and Ebola. Those who are old enough will remember the swine flu scare even further back. Civilization survived.

An estimated 20 to 50 million humans died in the 1918 influenza pandemic. World War Two killed 70 to 85 million people, about 3% of the planet's population at the time, not to mention the destruction of vital infrastructure. Today there are about 8 billion humans. As of March 14, when I am typing this, there were about 150,000 cases worldwide and about 5,500 deaths. About 90% of the deaths were in China, Iran, and Italy.

On March 12, the Alberta Minister of Health banned all gatherings of 250 or more people. However, supermarkets and shopping malls are still open and definitely have more than 250 people. It wasn't stated why that was so. I'm guessing that most large meetings have delegates come from away, which would help spread the virus. On the other hand, supermarkets and shopping malls service the local neighbourhoods, so the shoppers wouldn't take the disease far.

As of March 13, Canada had 224 cases, of which Alberta had 29. Only one death was reported, in British Columbia. That was in a nursing home, which also had the majority of infections. Canada has 38 million people and Alberta has about 3 million. All of the Albertans affected had traveled outside the country or had close contact with someone who did.

Those statistics will be obsolete long before this issue is posted online. For comparison, every year about 3,500 Canadians die from influenza, but the mass media never make those deaths above-the-fold news.

The professional sports had already shut down, but the ministerial decree killed every convention in the province. The weekend of March 21 and 22 was to have been Paleo 2020, the annual convention of the Alberta Palaeontological Society, held here in Calgary. I was expecting to have a report on it in this issue, but will have to wait a year.

I am heavily involved with the Calgary Philatelic Society, which was to host its annual Spring Bourse in April, but which is now cancelled. The Edmonton Stamp Club was to host a national-level convention at the end of March but the decree crushed that event. Calgary's annual stamp show (not the same as a bourse) is in October the weekend after Thanksgiving, but hopefully by then the panic will be over.

Calgary's annual readercon When Words Collide is in middle August, but again we hope the panic will be over by then. The Calgary Comic Expo, with 90,000 paid admissions, was to be held April 23 to 26. I checked their Website on March 13 and they said they were planning to go ahead with the event.

What baffles me is why panicky Calgarians, and there were many of them, were rushing to buy toilet paper, which in Canada is now at par with gold. Coronaviruses cause respiratory diseases, not gastrointestinal complaints like noroviruses. I can understand people rushing to buy Kleenex. The supermarkets are still well stocked, excepting that they occasionally ran out of toilet paper for a day.

I have always, for decades, kept a month's supply of dried or canned food in my kitchen but one shouldn't have to wait for a panic for such prudence. I just now checked my toilet paper supply and I have about a year's worth. That was because last year they were on sale at a ridiculous low price in my local supermarket so I stocked up.

[Parts 1 to 2 appeared in OPUNTIA #409 and 439.]

Each year the Southcentre Mall hosts Canstruction, a competition of sculptures made from food cans. Various companies sponsor the artists and pay for the cost of the food cans. After the competition is over, the cans go to the Calgary Food Bank. The theme this year was “Rock Can Roll”.

The cover shows the entry from the City of Calgary. The YYC refers to the international airport code for Calgary. That’s supposed to be a vinyl album.

At right is the Calgary Co-op entry.



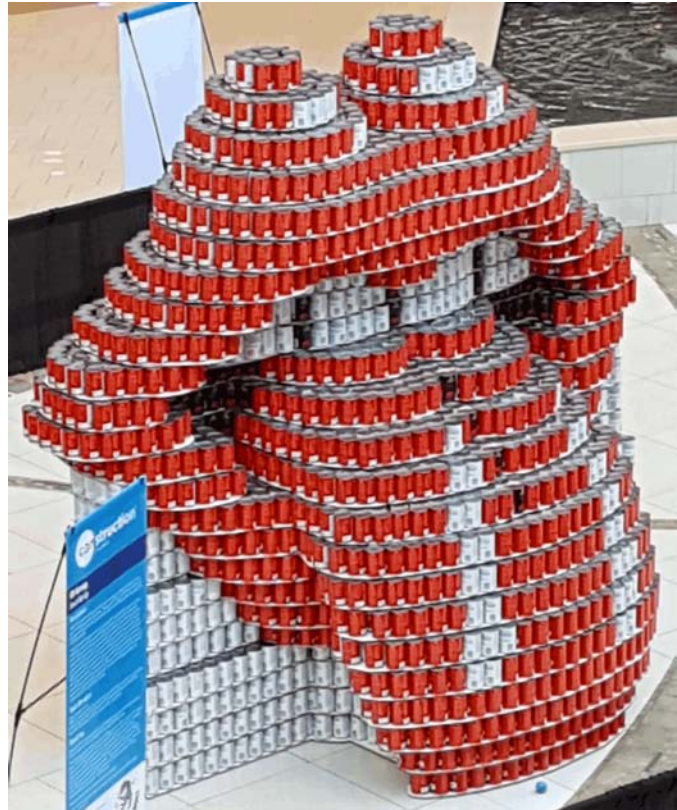
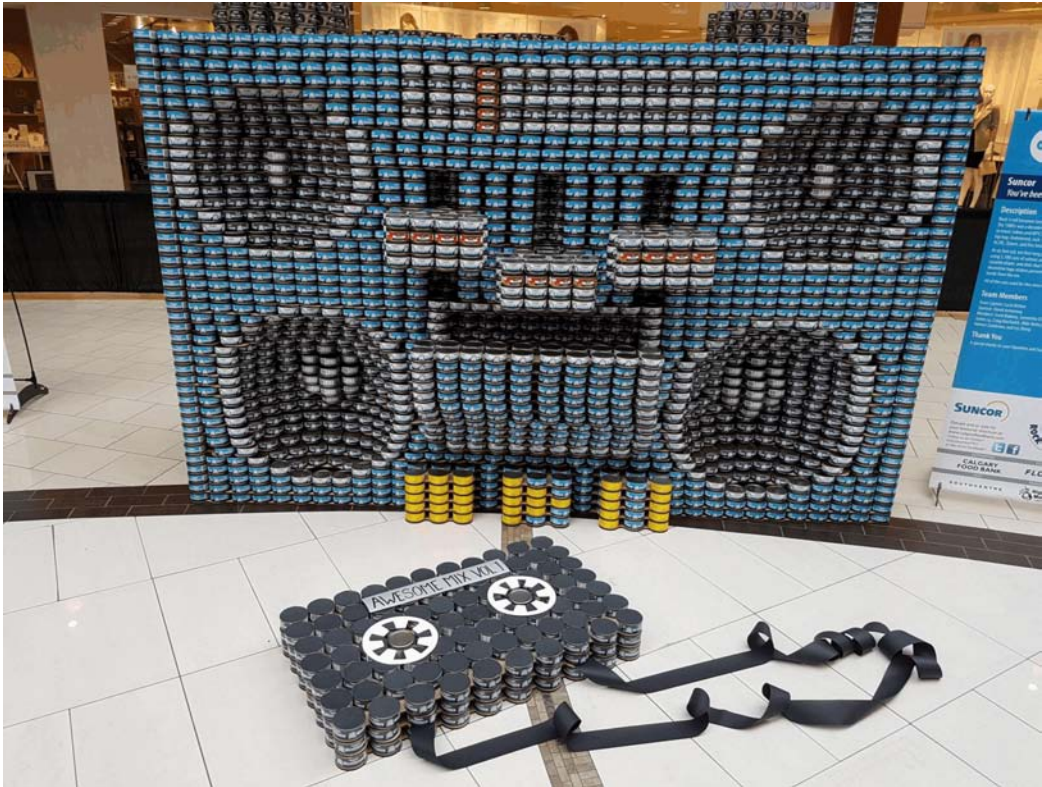


Complete this sentence:
We all live in a _____

If you know the answer, you're a Boomer. If you have no idea, then you must be a Gen Xer.

Vinyl, boom boxes, and cassettes. Ah, those were the days.

Bottom right: Whatever happened to the Rolling Stones?



COWTOWN VEXILLOLOGY: PART 3
photos by Dale Speirs

[Parts 1 to 2 appeared in OPUNTIA's #367 and 406.]

The City of Calgary funds an art programme of banners and flags for public locations around the city. The banners are changed every so often.

Here are the latest banners at Olympic Plaza in the downtown core.



DISCWORLD: PART 9

by Dale Speirs

I reviewed Terry Pratchett’s Discworld novels in OPUNTIAS #290 to 297. Recently, while checking the bookshelves for something unrelated, it occurred to me that I hadn’t covered the auxiliary Discworld books put out by Pratchett, often with co-authors. These included concordances, an almanac, and side stories of novella length.

THE DISCWORLD ALMANAK: THE YEAR OF THE PRAWN (2004) by Terry Pratchett and Bernard Pearson was typeset in ye olde style. Little details were added as throwaway lines, such as a pointing finger on the upper left corner of the cover with the line “Make the hole here”. That would not be understood by anyone unfamiliar with outhouses and how paper was recycled in pioneer days before we had blue bins.

Like any almanac, there is the monthly schedule of things to do around the garden and the farm. To pick a few at random:

March: *This is a time when a man be glad he sowed leeks last year, because they will have survived pigeon, rook, rabbit, and slug, the reason being nothing else in Creation wants to eat the damned things.*

Nip Friday in June was the culmination of the caterpillar squashing season in the endless cabbage fields of the Sto Plains. The month of Sektober was when the eels migrated: *There’s good eating on a fat eel, and they smoke well, which makes them easier to catch as they often get out of breath on steep inclines.*

Scattered the almanac are bits of history and folklore. There was a lament for the passing of the age of worm drovers, herding millions of worms from one farm to another to aerate the soil and render offal into compost. The ground would shake and mound up as the herd passed. Visitors to Sto Lat were encouraged to see the worm museum at The Jolly Vermiculturist.

Useful information was provided about major organizations such as the Ankh-Morpork and Wincanton Cabbage Growers Association, and the PIN MONTHLY, for acuphiliaists who collected straight pins.

Less useful was astrology. Since Discworld was carried on the back of a giant turtle, occasional barrel rolls caused all the stars in the skies to change position

without warning. The last time it happened, the death rate of astrologers suddenly spiked. Kings don’t like it when court astrologers fail to predict massive events. When the turtle’s fin rose up above the level of the Discworld, as it paddled through space, eclipses occurred.

MRS BRADSHAW’S HANDBOOK (2014) was subtitled “To Travelling Upon The Ankh-Morpork & Sto Plains Hygienic Railway”. Pratchett used it to flesh out the details of Discworld without having to put infodumps into the novels.

Mrs Bradshaw was a widow who loved train travel. Like any guidebook, she began with the practicalities of rail travel. The porters were trolls. Don’t forget to tip them, as they read the labels on your luggage and would remember you next time if you didn’t tip.

The Lost Property Office was a franchise of the Guild of Thieves. The chapter “Excursions Without Alarms” advised female travelers that the dangers to them were much overstated. Nor would trains cause motion sickness, so it was unnecessary to buy quack nostrums.

The remainder of the book was given over to describing the train routes. Scenic views and village festivals were mentioned. The endless cabbage fields en route from Ankh Morpork were boring. The village of Sproutington was a scenic stop but should be avoided during their Bean Feast event.

There was a line to Effing Forest, but it didn’t go past Effing Halt. The scenic route through Quirm ran along the coast, partly past the Netherglades, then through Shankydoodle before reconnecting to the main line back to Ankh Morpork.

Shankydoodle was famous as a racing centre, and bettors thronged the track to lay their money down on the horses. The giant tote board displayed the horse and jockey details, current betting odds, and, no one knew why, phases of the Moon and tides at Quirm harbour.

The book was interspersed with recommendations for inns and refreshments. The Worm Herder’s Arms in Little Swelling had basic accommodations but good value for the money. The Jolly Cabbage in Scrote served locally brewed cabbage beer and a fortified cabbage wine. And so we bid adieu with a final advertisement, for anoraks.

LITERA SCRIPTA MORTEM: PART 4
by Dale Speirs

[Parts 1 to 3 appeared in OPUNTIA's #424, 428, and 440.]

Bookselling.

Nowadays fiction about bookstores can be classified as historical fiction. When I first moved to Calgary in 1978, population then 500,000, there were dozens of secondhand bookstores throughout the city. In 2020, when the population was 1.3 million, there was one store remaining, and half its shelf space were DVDs.

Today Canada only has one national bookstore chain dealing in new books, which uses various names such as Chapters, Indigo, Coles, W.H. Smith, and Classic Books, all of which are owned by Heather Reisman.

Taking an example of bookstore life and death, Lorna Barrett has a cozy series set in Stoneham, New Hampshire, where Tricia Miles operated the bookshop Haven't Got A Clue, which specialized in mystery fiction. The village was in desperate straits so the council dubbed it Booktown in imitation of Hay-On-Wye and tried for the tourist trade.

There were several bookstores, each on a specialized topic. Presumably they all had Internet sales to help them in the off-season. Miles's sister Angelica operated the Cookery, specializing in cookbooks, with a small café attached. Tricia spent more time solving murders than reading or selling them.

SENTENCED TO DEATH (2011) opened as Founders' Day was being celebrated and the village was en fete at the central square. The organizer Deborah Black was making the opening speech when a small aircraft came down on the gazebo, killing her and the pilot Monty Capshaw.

Bob Kelly had arranged the overflight so the aircraft could tow a banner over the ceremonies. He was beside himself from fear over potential liability lawsuits, nevermind the victims. It had to be an accident, but since there wouldn't be a novel if it was, then it wasn't.

Capshaw was dying by disease and took a \$10,000 payment for his beneficiaries to commit suicide. Better than slowly dying in a hospital bed and bankrupting his estate with the hospital bills. The perpetrator was a jealous woman who

wanted Black out of the way. The plot and melodramas were so complicated that Tricia seldom set foot in her bookstore.

MURDER ON THE HALF SHELF (2012) continued the bloodshed. The village was deficient in bed-and-breakfast operations but Pippa and Jon Comfort were just about to open a new establishment. The grand opening of the Sheer Comfort Inn was marred when Pippa was murdered. Jon was hiding under an alias for his real name, Harrison Tyler. He had been a mystery novelist with a bad writer's block and decided to walk away from it all, faking his death.

As Tricia Miles discovered when she first met him, he was also an ex-boyfriend of hers. That prompted her to begin investigating, nevermind the police. She had to do that in between running her bookstore. As an example, she was having trouble finding good help for the store and had to be interviewing new employees. Not helping were the activities of her eccentric sister Angelica.

The J'accuse! meeting took place in a rival's bookstore, whose husband had a history with Pippa and not a pleasant one. She had killed his wife in a car accident years ago. He followed the adage that revenge is a dish best served cold. The ending was confused because many facts were not introduced until the last minute, making it difficult for the reader to have a fair guess at whodunit.

NOT THE KILLING TYPE (2013) began with the Stoneham Chamber of Commerce election getting vicious. Tricia Miles's sister Angelica was contesting for the president's position. So was Stan Berry, but he didn't finish the campaign. Someone else finished him with a letter opener into his chest. The third candidate was incumbent Bob Kelly. He and Angelica had just broken up their romantic relationship in the nastiest way. The campaign was just as nasty.

Berry had been a cut-throat businessman who didn't fit in with village life too well, not that it bothered him. The company he kept wasn't much better. Half the village shopkeepers seemed to be indulging in sharp practice. Tricia's own sharp practice was the traditional snooping of Miss Marples everywhere, mostly criminal trespass.

Tricia did get in some bookselling during her investigation, as well as helping out a friend with her wedding. The murder seemed to help her bookshop, and sales of mystery novels were up.

Berry had been blackmailing women by photographing them in compromising positions. The killer felt he should clean up that mess and did. The good news was that the wedding went well, other than a last-minute substitution since the murderer had been one of the groomsmen. Oh, and I almost forgot, Angelica won the election.

A FATAL CHAPTER (2015) returned to the gazebo in the village square, by now repaired and ready for another murder. Yes, Tricia Miles discovered the victim, Pete Renquist of the Stoneham Historical Society, lying in the gazebo. She was at loose ends without a bookstore, although it would eventually be rebuilt once the insurance money came through. In the meantime, she had her Marpleing to keep her mind off the petty woes of commerce.

The motives for murder ranged from the usual romantic jealousies to perhaps a secret from the past that someone preferred to stay secret. *“Boy, you’ve sure got the knack for finding stiffs”*, said one of Tricia’s friends. So say us all, said the villagers.

The investigation revealed some real estate skullduggery about a cemetery. Not just skulls dug up, but entire graves illegally removed to make way for a real estate development. Renquist had been about to expose the deal and was permanently silenced.

The author apparently wanted to thin out the cast of characters, particularly boyfriends and ex-husbands. Bob Kelly was transformed into the killer, and not believably. His second victim, shot dead in front of a crowd of witnesses, was Tricia’s ex-husband. That cleared the decks for both Miles sisters in future novels.

A JUST CLAUSE (2017) had the Miles sisters in a tizzy when their father blew into town. The old man hadn’t been missed and wasn’t wanted now. Nevermind investigating other family histories when a murder was committed, the Miles family had plenty to hide themselves.

Father John was a con man who did jail time. Shortly after returning to Stoneham he became a suspect in the murder of Carol Talbot, a woman who was, shall we say, a hussy. Fortunately Tricia found the body next to someone else’s bookstore. Chapter 2 began with the line: *“Don’t you ever get tired of this?”*, Stoneham’s chief of police, Grant Baker, asked Tricia.

The Haven’t Got A Clue bookstore, rebuilt and back in operation after the fire, had a book signing with thriller author Steven Richardson. Talbot had shown up and given him a hard time. Next to her body was a signed copy of his latest book. Tricia, always ready to mess up any police investigation, went on a date with Richardson, and not to ask him where he got the ideas for his novels.

The bookstore demanded attention, as did John Miles, whose daughters didn’t trust him in the least. John had hocked Talbot’s jewelry in a pawn shop after a one-night stand with her, which made him a suspect. It was Angelica’s turn to discover the next corpse. Chapter 26 began with almost the same lines as Chapter 2.

Richardson was not without sin, and indeed was the murderer trying to cover up his past. The ending was soppy, with John promising to reform and the Miles family having a group hug.

POISONED PAGES (2018) began with Tricia Miles hosting a housewarming party after finishing renovations on her apartment above her bookstore. You will not be shocked that a man died at the party from poisoned food. The opening line of Chapter 2 was familiar, with the police chief asking: *“How many does this make?”*

Tricia was campaigning for president of the Chamber of Commerce. Her two opponents were not subtle in their attacks against her, and had plenty of ammunition. Angelica was threatened by a blackmailer. Someone hid a listening device under Tricia’s kitchen counter. All in all, situation normal for the Miles family.

The murderer was trying to gain revenge against Angelica, although Tricia seemed to get most of the backflash. It ended favourably except for one loose thread deliberately left hanging for a future novel. So you want to be a bookseller in a rural village, eh? First scout around for any Miss Marples. The villagers will tell you.

CRIME AND POETRY (2016) by Amanda Flower was the first novel in a cozy series about Violet Waverly of Cascade Springs, upstate New York. She worked at her grandmother Daisy’s bookstore. Few people in big cities can make a living selling books nowadays, but in Miss Marple villages the economics are different.

Local resident Benedict Raisin had the honour of being the series' first murder victim. Violet discovered his body in front of the house. He had been strangled with Daisy's scarf and was clutching a book Violet had sold him the day before. He had recently changed his will to favour Daisy, so that gave police incentive to consider her the prime suspect.

The murder gave Violet incentive to go Marpleing to clear her grandmother's name. En route she adopted Emerson, who had been the dead man's cat and who came to reside in the bookstore. She stirred up an unsolved murder case from a decade ago, and encountered a group of white trash who had been feuding between themselves for as long.

The murderer was one of the white trash who wanted to clean away all those messy details from long ago. There was the usual held-at-gunpoint ending, where the murderer explained every detail at great length instead of just shutting up and shooting Miss Marple on sight. Violet lived to see another day selling books. Ah, for the quiet life in a peaceful village.

Carolyn Hart has a lengthy series about bookseller Annie Darling and her husband Max, who reside in Broward's Rock, South Carolina. The tone of the novels was slighter more serious than regular cozies, but nonetheless followed the time-honoured traditions of Miss Marple.

Darling operated the Death On Demand mystery bookstore, which had good business from the tourist trade and thrived in a rural village where similar bookstores struggle in metropolitan cities. Economics is not a strong suit of cozies.

DEAD, WHITE, AND BLUE (2013) began with the disappearance of a scarlet woman, Shell Hurst. Her specialties were blackmail, extortion, fraud, adultery, and other unsocial practices. When she vanished at a Fourth of July picnic, there was no hue and cry.

After Hurst's body was found in a lagoon, the Marpleing by Annie and Max started. It was the tourist season and their bookstore was selling more volume in a day than a Walmart, so the snooping was hampered by having to attend to the cash registers. Two tills, as mentioned in the text, which got me to thinking that I have never seen a secondhand bookstore that needed more than one.

The J'accuse! meeting was done like a stage play, with actual spotlights on the suspects and/or witnesses. There were several pages of who did what to whom at what time, laid out as if assembling a bus schedule. No mention of a stenographer to record all the details.

That didn't matter since almost all of the information would not have been admissible in court. The murderer was a jealous wife. She admitted nothing when arrested. With an average lawyer, she would have been acquitted because of contaminated evidence.

DEATH AT THE DOOR (2014) had Annie Darling investigating two murders, a doctor who supposedly shot himself, and a woman allegedly bludgeoned to death by her husband. The doctor's sister didn't believe the police decision to call it suicide, and asked Darling for help. The two murders seemed linked, so off to the Marpleing.

I got to thinking this cozy series was actually alternative history. The village newspaper was prosperous, with its own staff to vigorously investigate crimes. A specialized bookstore was busy enough to have two cash registers. Both types of enterprises struggle in the big cities, but it's different in Marple country.

The killer was psychotic born and raised, under the control of a woman who wasn't much better. Implacable was the word. Darling survived the confrontation with both killers. The reader will survive the detailed denouement.

DON'T GO HOME (2015) began with the Death On Demand bookstore proudly hosting author Alex Griffith, a local resident who had a bestselling novel. He announced it was a roman-a-clef and that at the book signing he would reveal the real people behind the characters.

Just to make it absolutely certain that he would be the murder victim, he also declared his next book would be non-fiction about the seamy side of life in Broward's Rock. It was a wonder that he made it as far as Chapter 2. The suspects were every villager with guilty secrets who did not care to have them aired by a novelist to a national audience.

The Deppity Dawgs used their standard method of investigation, picking a suspect and then gathering evidence to fit her instead of the other way around.

This naturally brought Annie Darling into the fray, trying to discover those guilty secrets. The newspaper joined in, with plenty of staff to investigate. Another J'accuse! meeting. The murderer did indeed have guilty secrets, although it could have been anyone in the village.

WALKING ON MY GRAVE (2017) was another variation on the Who will inherit? trope of mysteries. Wealthy Vesta Roundtree had six heirs who were short of cash and wouldn't mind inheriting sooner rather than later. Then there were five, after one of her heirs was found floating in the harbour.

Roundtree disappeared but it wasn't certain if she was dead or in hiding. Soon enough, there were only four heirs, after one was shot while sitting at his desk. After the usual snooping by Annie Darling, there came the usual J'accuse! meeting. Roundtree made a surprise reappearance.

And the murderer was ... (pointing of finger) one of the surviving heirs. Thereupon followed a detailed chronology, including cellphone calls, before the police led away the accused. He admitted nothing. There was a probability he could be acquitted because the evidence was either circumstantial or contaminated. The trials, however, are not part of cozies, and for good reason.

PROLOGUE TO MURDER (2019) by Lauren Elliott was a cozy novel set in Greyborne Harbor, somewhere in New England. The state was not specified but I'm guessing it was Maine, given the village's murder rate.

Addie Greyborne was the resident Miss Marple, a descendant of the village's founder. She operated Beyond The Page, a bookstore. The local newspaper's gossip columnist was libeling her, the sniffer townsfolk didn't like her, and a nosy reporter from Los Angeles showed up causing trouble.

The good news was that Greyborne was dating the local Deppity Dawg, so she could draw upon more resources than the average Miss Marple. She needed them after librarian June Winslow never made it home from a book club meeting. It wasn't so much the plethora of family feuds and soap operas but rather how vicious they were.

Winslow had published a book about local pirate lore and possible buried treasure. Two people read the book and took it seriously enough to begin tunneling. They needed to keep it secret, so they silenced Winslow. They found a pirate's lair but it had been empty for centuries. Death in vain.

MURDER IN THE FIRST EDITION (2019) was the next novel in the series. Addie Greyborne was on the trail of a stolen 1843 edition of Charles Dickens' A CHRISTMAS CAROL. It had been scheduled for a charity auction but someone stole the book and murdered the auction chairwoman. Just to garnish the season, a Nor'easter was heading toward Greyborne Harbor.

Greyborne was sleuthing for the book as much as the victim. After churning up the gossip and inferences that pass for evidence in a cozy, she narrowed the suspects down. Both the victim and the murderer had been embezzling charity funds left, right, and centre. The denouement was complicated by all the false identities everyone had been using. The book was recovered and all was well.

Again, although this book followed the cozy tropes, it came off as harsher than expected. Were it a noir or a mean-streets novel, that would not be a discussion point, but for a cozy it had a tinge of sourness.

Book Restoring Made Bloody.

THE LIES THAT BIND (2010) by Kate Carlisle (pseudonym of Kathleen Beaver) was a novel in a series about Brooklyn Wainwright of San Francisco. She was a bookbinder, restoration specialist, and Miss Marple. The story began with her teaching a bookbinding class at Bay Area Book Arts or BABA. The director of the centre was Layla Fontaine, a bossy woman inclined to sharp practice.

Fontaine made it as far as Chapter 6 before someone put a bullet into her. As part of her legacy, a fake first-edition of OLIVER TWIST was floating about, being sold and resold. Fontaine's niece Naomi was helping with the business of fakes.

There was something rotten in the state that BABA was in, and it was there that the final confrontation took place. The murderer was an employee who was ambitious and had wanted half the illicit business. Wainwright survived and lived to bind books another day.

MURDER UNDER COVER (2011) was the next novel, which began with Brooklyn Wainwright taking a commission to restore an antique copy of the KAMA SUTRA. A difficult book to restore, not so much because of technical problems but because of the distracting content. Wainwright thought she might pick up a few hints to spice up her sex life.

Her best friend Robin Tully got into trouble when a handsome hunk she met was found shot dead in her bed. Wainwright got involved, as she would, in exchange for which her apartment was ransacked by someone obviously looking for something. The scene where Wainwright fainted at the sight of the bloody corpse was not believable because she was an experienced Miss Marple by now.

The MacGuffin was a memory stick pursued by Ukrainian and Russian spies, which had come into the possession of Tully without her knowing it. The alarums and body count rose. Chapter 17 began with Wainwright saying: *At least I wasn't the one who found the body this time.*

The memory stick contained information the Russian government would rather not have publicized, while the Ukrainian government wanted it for bargaining. Tully's mother, who was a whole nother story, had smuggled it into her daughter's apartment. She wasn't much of a mother to begin with, and this certainly solidified matters.

ONE BOOK IN THE GRAVE (2012) Brooklyn Wainwright had a contract to restore a first edition of BEAUTY AND THE BEAST. That threw me for a loop because I had always assumed it was an ancient fairy tale, but Google assured me that it was first published in 1740 by Gabrielle-Suzanne Barbot de Villeneuve.

Wainwright recognized the particular copy of the book as one that years before she had given to her friend Max Adams, who soon afterward had died in a suspicious car crash. While researching the provenance of the book to find out where it had been since, she went to book dealer Joseph Taylor. She found him dead in the shop, freshly murdered.

As Chapter 3 opened, she lamented: *Yes, I felt really, really bad for Joe, but why was it always me who discovered the dead body? ... I'd seen so many dead bodies by now that you'd think I'd be a little more blasé about it but no.*

Let's see now, Wainwright was a single woman of a certain age, operating a marginal business, a snoop who poked her nose into other people's business, and who evidently didn't choose her friends as carefully as she should. So yes, she was a Miss Marple. As the traveling salesman said, it comes with the territory.

Wainwright discovered that Adams had faked his death and was living in hiding. She found him though. Drug dealers, an extremely possessive ex-girlfriend, that sort of thing. There was a survivalist cult in the mix. Many alarums and a complicated cast of characters.

The book, remember the book?, was part of an elaborate plan to use Wainwright to locate Adams and wreak revenge. A messy ending but it cleaned up well.

A COOKBOOK CONSPIRACY (2013) began with Brooklyn Wainwright's sister Savannah asking her to restore an old cookbook given to her by ex-boyfriend Baxter Cromwell. Both those two were professional chefs, but he didn't make it past Chapter 4. Savannah was the prime suspect.

The cookbook, dating from the Revolutionary War, had disappeared. Brooklyn proceeded to Marple, interspersed with infodumps about book restoration. The reader will perforce learn about paper foxing, leather rot, cracked spines, and rubbed fore edges. Educational if nothing else.

Cromwell was the regular type of murder victim. He was unpopular with all who knew him, was a ladies man, blackmailed on the side, and was an all-around boor. The stolen cookbook was found, along with the body of the man who had it. Brooklyn screamed and fainted, which was implausible considering how many bodies she had previously discovered.

The murderer was one of the blackmail victims, pushed too far by Cromwell. There was a recipes appendix with modern adaptations of Revolutionary era menus, such as Syllabub, with some modern dishes such as the oxymoronic Gourmet Coleslaw. [Rant deleted concerning a food truck in Calgary that specializes in gourmet macaroni and cheese.]

THE BOOK STOPS HERE (2014) spread mayhem through San Francisco television broadcasting. Brooklyn Wainwright was a guest on THIS OLD ATTIC, where she appeared as a rare book appraiser. Her first item, submitted by Vera Stoddard, was a valuable first edition of a children's book.

After the episode was aired, a man claimed the book was his. People were threatened, there was violence, and Stoddard was murdered. The plot then split into two lines, the book and the television show. Between them, they managed to generate a lot of carnage.

The original book owner was not a man to be trifled with. The original creator of the television series resented being shoved aside by the network and was not to be trifled with either. He was more successful and managed to kill the series in mid-season.

The book turned out to be valuable because it was autographed by Mae West. The murderer got what was coming. The television disruptor had charges dropped to quench the bad publicity and accepted a job with the National Library of Kosovo. Why the Kosovo government would hire a librarian from San Francisco is for another mystery novel.

RIPPED FROM THE PAGES (2015) moved Brooklyn Wainwright to Sonoma in northern California. Probably feeling the heat from the SFPD, she went north to visit her parents in wine country. While she was there, a room was discovered in the wine caves which contained a treasure trove of art from World War Two. Oh, and a mummified body clutching a first edition of Jules Verne's A JOURNEY TO THE CENTER OF THE EARTH. Time of death was 1946.

The question was whether the treasure was loot or was preserved for posterity after the war when the legal titles could be sorted. Wainwright quietly appropriated the Verne book on the grounds that a 70-year-old murder wasn't going to court so no one could accuse her of contaminating evidence. She did have some trouble snooping around the vineyards since news of the body brought in the tourist traffic. The wine and souvenir shops did runaway business.

The book contained schoolboy scribbles and some more serious notes, some of which were by the vineyard owner's grandfather. It also contained a map that led to another treasure cave. Spelunking was never more profitable than in Sonoma County. The vultures came out to claim or steal the artworks, shots were fired, and the death toll steadily climbed.

Every so often the action stopped for infodumps about book restoration procedures, as Wainwright worked on the book between alarums and cave excursions. She found some notes in the book written in French. Instead of using Google Translate, she sent it to a friend who didn't report back until just before the denouement.

Pause for rant. Cozy mysteries tend to be about a decade behind the Internet. Even now, only a few Miss Marples have cellphones or remember to charge

them overnight like the rest of us do. This allows a standard fake excitement where Miss Marple is trapped by the killer but can't call for help because her cellphone is dead. No one ever checks their voice mail or texts if doing so would cut 25 pages out of the novel. The more advanced Marples have smartphones and look up information on the World Wide Web instead of going to the library but they are rare. End of rant.

The murderer, like so many others, was after the cave treasure. Mixed in was a Mossad agent named Elise Asimov, but fortunately that cutesy bit of nonsense wasn't too distracting.

BOOKS OF A FEATHER (2016) started the action over at the Covington Library where John James Audubon and his famous bird books were a special exhibit. Brooklyn Wainwright looked in and met Jared Mulrooney. He was president of the National Bird Watchers Society. Wine had been spilled on a lesser Audubon book, and Mulrooney wanted Wainwright to clean it. He didn't make it out of the library alive that evening, and so the detecting began.

Wainwright had other work contracted for, plus some family problems. The murder didn't help either, and all that combined had her in an emotional tizzy. The death toll continued to climb, as did the number of infodumps about book restoration.

The murderers were part of a family that had real problems. The motives were complicated but were basically jealousy among the living and of dead ancestors. The Audubon books appeared initially as the MacGuffins but the plot took them beyond that. They were not just artifacts but wrapped up in the murderers' family history for reasons explained at length.

Wainwright had a near-fatal confrontation with the family of killers, all of whom were psychopaths. This novel read reasonably well, but the motives and characters expanded to the point where close reading was necessary to understand everything. One thread was left hanging for a future novel.

ONCE UPON A SPINE (2017) was the next novel in the series. Brooklyn Wainwright was engaged to Derek Stone and nervous about meeting her future in-laws, who were traveling to San Francisco. However the meeting went well, and her mother-in-law was a frustrated Miss Marple. That came in handy for the murders.

A couple of rare copies of ALICE'S ADVENTURES IN WONDERLAND stirred up excitement at Brothers Bookshop. Even more excitement happened when two men died in The Rabbit Hole juice bar. The plot was paced with infodumps on the ALICE books. Wainwright's sleuthing was paced by the machinations of a real estate development proposal to tear down the shops of her neighbourhood for skyscrapers.

Also paced was the denouement where a gunfight was halted while the murderers discussed ALICE editions with Wainwright. Since this was a book cozy, it wasn't as ridiculous as might be otherwise. It seemed off kilter that shots would be fired and then everyone would stop to discuss who had what copy of what printing.

Wainwright had to tread carefully considering how many people were holding guns: *But I kept my mouth closed, knowing that if I mentioned that the book might be worth up to two million dollars, it might give one of those knuckleheads an excuse to actually kill someone.*

BURIED IN BOOKS (2018) had Brooklyn Wainwright worrying more about her impending nuptials with Derek Stone than rare books. At her bridal shower, two old friends visiting San Francisco for a librarians convention gave Wainwright rare books as gifts. She was presenting a workshop at the convention on bookbinding and was to give a talk on book conservation. Oh, and not to forget the wedding rehearsal that weekend.

The friends were Heather Babcock and Sara Martin, the latter having stolen Babcock's boyfriend Roderick in college and then married him. Babcock had not cooled off even though twelve years had passed, and at the convention publically threatened to kill her. Babcock gave Wainwright a rare edition of THE BLUE FAIRY BOOK. Martin tried to upstage her by giving Wainwright a first edition of THE THREE MUSKETEERS.

Wainwright's reputation for always finding a body spread to a tour group she was guiding. They were disappointed that no corpse was included in the scenic tour of the city. There was a corpse, but it was in a basement where Wainwright was poking around and found Martin's body buried under a pallet of books.

Shortly thereafter, Wainwright was examining the MUSKETEERS when she discovered it was a forgery. Between old jealousies and new frauds, she had her work cut out for her, not to mention finding shoes to match her wedding gown.

The final confrontation more or less blended into the marriage ceremony. The police carted away some of the guests after the murderer blubbed all, and the knot was tied. Martin had been forging books, Roderick was selling them, and other guests were in on the secret. After everything was explained, the wedding toast then took place.

THE BOOK SUPREMACY (2019) started with Brooklyn and Derek on honeymoon in Paris. Brooklyn found a first edition of THE SPY WHO LOVED ME in a Seine bookstall, which she gave to Derek as a present. They met Ned Davies, who had been in the spy business with Derek long ago. He recommended Derek look up a friend in San Francisco who had a spy equipment shop.

Thus it was done. The spy shop owner Owen Gibbons, who named his store SPECTRE, asked permission to display the book. From there, two subplots got going. Derek was having employee problems in his security business, and SPECTRE had a man shot to death on its premises. Messy for both of them. Then a letter arrived from France, informing Derek that Davies had been murdered.

Brooklyn did some restoration work on the James Bond book. She found a strip of microfilm hidden in the endpapers, which became the MacGuffin of the plot. It was a list of names of spies. One wonders why it just wasn't transmitted electronically to home office, but cozies are generally 10 to 15 years behind the times.

The two subplots came together when the nasty employee of Derek's business was revealed as the killer, who was chasing the microfilm. Fair enough. What was odd was that although the book was not a food cozy, there was a recipes appendix.

The French Toast fit the plot, as did the Escape Room Snack Mix. I suppose spies and book restorers eat Parmesan Chicken Salad or Weeknight Salmon, but I don't recall James Bond nibbling on them.

Book Clubs.

"Mrs Knapp's Lion" by Charles Webster Kimball (1903 August, THE BLACK CAT, available as a free pdf from www.archive.org) was set in the town of Parsons, where the Alpha Reading Circle reigned. They received a letter from

a famous novelist Wallace Payne, who was looking for a quiet place to write his next bestselling novel.

The ladies of the book club competed for the honour of hosting him, won by the banker's wife Mrs Knapp. Payne arrived and proved to be a handsome young man. He worked a few hours in the morning and spent the rest of the day socializing with the townfolk and romancing the Knapp's daughter.

He mentioned to the old man that he was thinking of a plot where a woman was locked in a bank vault and almost suffocated before help arrived. He asked Mr Knapp if he might see the actual vault at the bank as it was opened, who was only too happy to oblige for the publicity.

Payne watched closely as Knapp twiddled the dials, and listened with great interest as the security system was explained. A few days later, Payne vanished along with the cash from the vault. About the same time, the real Payne returned from a trip to Europe to discover the imposition.

The final line of the story summed up the aftermath: *The ladies of Parsons who had coveted the literary prize at first, now rejoiced in escaping Mrs. Knapp's lion, but the Alpha Reading Circle never met again.*

MURDER AT THE BOOK GROUP (2015) by Maggie King was a cozy novel about Hazel Rose of Richmond, Virginia, and her fellow members of the Murder On Tour book club.

The name was related to the premise of the club. Instead of everyone reading and discussing the same book, they chose a geographical location such as Florida. Each member then found a different mystery novel set in that locale and delivered a book report.

Carlene Arness, married to Rose's ex-husband Evan, gave her report, took a sip of tea, and learned the hard way it had been flavoured with cyanide. Or so everyone thought. She had her share of enemies so murder was possible. However it could have been suicide as she had her share of troubles. A note was found but it probably was a forgery.

Rose uncovered several soap operas within the book club. Some of it was steamy sex, so much so that she and her boyfriend tried out some of the positions. But enough of that, for there was a murder to be solved.

One of the book club members did it. She was Evan's biological mother and had given him up for adoption. He didn't know that, nor that she was a possessive mother who wanted her baby back from Carlene.

BOOKED 4 MURDER (2017) by J.C. Eaton (pseudonym of wife and husband Ann Goldfarb and James Clapp) was the first novel in a series about Sophie Kimball, a divorced accounts clerk in Mankato, Minnesota. Her mother Harriet Plunkett lived in Sun City, Arizona, and belonged to the Booked 4 Murder book club.

Plunkett telephoned her daughter because members of the club were dying off rapidly and she thought it was a murder conspiracy. To no avail, Kimball pointed out that the elderly women were dying from obesity, diabetes, chain smoking, pneumonia, and bee sting allergies, plus one who died while driving her golf cart on the street.

Her mother wasn't convinced. The book club was reading a novel THE TWELFTH ARRONDISSEMENT. She thought there was a curse attached to the book. How an Accounts Receivable clerk could solve it was the real mystery.

Nonetheless, a dutiful daughter flew out to Arizona. More alarums and near-deaths, and the revelation of the strange sales statistics of the book. The plot was tangled. The book publisher's scheme to hype sales with an alleged curse was hijacked by others who wanted to thin out some wealthy relatives.

Both groups of murderers had fallings-out and betrayed each other readily. A good thing too. The police pointed out that none of the Miss Marple evidence was admissible in court, so only confessions could bring the cases to trial. The book ended with Kimball deciding to stay in Arizona and go into partnership with a retiring police officer as private investigators.

DITCHED 4 MURDER (2017) was the sequel. Sophie Kimball was hard at work, not with the agency but helping her Aunt Ina's wedding preparations. The blushing bride was 74. If that didn't keep Kimball busy enough, someone dumped a body on her mother's doorstep.

Ina's fiancé Louis Melinsky recognized the defunct as Theodore Sizemore, a restaurateur. The second body was Roland LeDoux, a chef. Kimball had the honour of finding his corpse. Like mother, like daughter. The next disaster was

Aunt Ina’s decision to have the Booked 4 Murder club help plan the wedding. This ensured they were too busy to be Marpleing. The club seemed to have replenished its membership.

Melinsky then vanished. Soon learned was that he and the two victims knew each other from way back when. The book club stirred up some additional mulm but for the most part were subservient to Kimball. Melinsky reappeared in time to say “I do”. The reception was a chaotic disaster but the murderers were arrested. The motives were nasty stuff in the restaurant business and not the food.

STAGED 4 MURDER (2018) began with Sophie Kimball and her partner Marshall Gregory trying to run their detective agency while running interference from Mother Plunkett. The Booked 4 Murder book club was involved with a local production of Agatha Christie’s “The Mousetrap”. Anyone who has ever been involved in amateur dramatics will immediately guess where the plot was headed.

The non-fatal food poisoning of the director was the opening prologue, followed by the body of Miranda Lee, the leading lady. Kimball had to sort out a large quantity of suppositions, slander, insinuations, lies, half-truths, and stonewalling.

The case was complicated by the discovery that there were two murderers. The only reason Lee wasn’t the third murderer was because she was done unto before she could do unto others. The good news was that the sensation made the play a sellout.

WORLD WIDE PARTY ON JUNE 21

Founded by Benoit Girard (Quebec) and Franz Miklis (Austria) in 1994, the World Wide Party is held on June 21st every year. 2020 will be the 27th year of the WWP. Mark your calendars now!

At 21h00 local time, everyone is invited to raise a glass and toast fellow members of zinedom around the world. It is important to have it exactly at 21h00 your time. The idea is to get a wave of fellowship circling the planet.

Rescheduling it to a club meeting or more convenient time negates the idea of a wave of celebration by SF fans and zinesters circling the globe. At 21h00, face to the east and salute those who have already celebrated. Then face north, then south, and toast those in your time zone who are celebrating as you do. Finally, face west and raise a glass to those who will celebrate WWP in the next hour.

Raise a glass, publish a one-shot zine, have a party, or do a mail art project for the WWP. Let me know how you celebrated the day.

LETTERS TO THE EDITOR

[Editor’s remarks in square brackets. Please include your name and town when sending a comment. Email to opuntia57@hotmail.com]

FROM: Lloyd Penney
Etobicoke, Ontario

2020-03-12

It’s the evening, and the coronavirus has caused the cancellation of nearly everything in sight. We’re all advised to self-isolate so we won’t catch it, and we figure, we’re at home most nights anyway, so nothing has really changed for us.

OPUNTIA #466: Manhole covers are just enormous coins. I’ve seen some of the Shaw Cable manhole covers in southern Ontario. Shaw has their Eastern Canada offices on the north side of the Queen Elizabeth Way. The best one I’ve seen has been on social media a lot. The cover says TELEPORT on it, and the caption says, “I’ve been standing on this thing all day, and nothing happened!”

We still spot some Little Free Libraries here and there, but I think some are being taken down or stolen. The book stores around here are still going good business, although the comparison of percentage of books against the percentage of gifts is dropping. The book/gift line continues to recede towards the back of the store.

[LFLs are doing very well in Calgary. Only one used bookstore still exists, but the chain stores seem to sell books. I suspect the overpricing of ebooks may be the reason.]

I admit that I am not on fanac.org as much as I used to be, and I need to remedy that. But then, there's a lot of sites, like File 770, I am not on as much as I used to be. A full cross-indexing of all fanzines would be a good idea, if I could think how it might be useful to a future researcher.

My previous letter of comment: I recently finished editing the latest issue of AMAZING STORIES, and I will tell you that one of the first entries in the magazine is a tribute to the late fan artist, Steve Stiles.

OPUNTIA #467: We discovered after the fact that there was an Etobicoke Winter Festival. Our greatest problems is that we have a weekly paper in Etobicoke, the GUARDIAN, but it is distributed only to houses, and not to apartment buildings. I was told that it is figured that those who live in apartment buildings are itinerant. They were unmoved when I told them I have lived in the apartment I am in for nearly 20 years.

I asked how to get weekly copies, seeing they have done away with distribution to libraries and the Civic Centre up the street, and they had no answer for me. Anyone who asks me how to advertise local, I say go to the TORONTO STAR, for the ETOBICOKE GUARDIAN only goes to half the population of Etobicoke, and not to the whole. I think they may go online soon.

OPUNTIA #468: [Re: 30 years of OPUNTIA] Well, happy 30th anniversary!

Most paper boxes around here are gone, too, but not because the newspapers have all gone online. It's because distribution went exclusively to variety stores. The paper boxes were run by people the papers refused to trust, so they were almost all taken away. There's lots of gaps where the boxes were on The West Mall.

Ah, a magpie. The ones we saw in Britain were black with white patches. None has the blue patch of the one here on page 4. Canada geese were seen at Kew Gardens, and they were just as bad tempered as the ones here. We did see some domestic grey geese, too. The local shopping malls have sparrows inside them, mostly to nest in the mall's vegetation, and clean up any food scraps left behind, especially around the food courts.

Like you, when I hear about THE AVENGERS, I think of Peel and Steed, not those heroes who wear their underwear on the outside.

I have put the World Wide Party on my calendar for June 21. It's not far off now.

I am done for the moment, and I suspect that you have issue #469 well on the go. Stay well, and we will all get through the coronavirus and stock market drops together.

[The Toronto Stock Exchange dropped from 17,000 to 12,000 in a few days, so I'm thinking of buying more if it keeps bouncing along a bottom. As Warren Buffett so wisely remarked, the time to buy is when there is blood in the streets.]

AROUND CHEZ OPUNTIA

photo by Dale Speirs

Just a filler to make the page come out even. A snowshoe hare nesting in my front yard, seen on February 5 under a spruce tree.



THAR SHE BLOWS!: PART 4

by Dale Speirs

[Parts 1 to 3 appeared in OPUNTIA's #70.1D, 314, and 457.]

Shake, Rattle, And Roll.

SHOCKWAVE (2016) was a disaster movie written by Ari Novak, Rafael Jordan, and Blaine Chiapetta. It wasn't a classic but it was a cut above the usual quality of television movies and B-movies. Worth watching, and available from the usual sources on DVD.

The heroine was geologist Kate Ferris, who knew that a stolen military weapon was causing volcanic eruptions. With her bratty daughter Jessie and estranged husband Rob, she teamed up at the San Andreas fault, conveniently located close to the production studio, where they saved the world.

The action began in war-torn Yemen, where freedom fighters or terrorists, depending on your viewpoint, launched a stolen Hellstorm device. This was a superscience weapon that drilled through the lithosphere at high speed. In its passage, it cracked open the crust to allow lava flows and volcanic tornadoes of ash and fire.

Jump cut to California a week later, along the San Andreas fault. Ferris was in a meeting with military brass, trying to convince them the doomsday device was on its way. Another jump cut to happy campers on the fault line who weren't happy campers after the device activated the fault.

Ferris needed her secret files back from The Agency and got a mole inside to do it. He was almost discovered but hid inside a toilet stall, making grunting noises. That quickly cleared the men's room.

Then a jump to Paris, where the city quickly looked like an Hawaiian volcano lava field, plus the ash tornadoes. Goodby Eiffel Tower. This was puzzling, as the Hellstorm seemed to be zigzagging about the planet, yet returned at intervals to lurk about the San Andreas fault.

The volcanoes and lava flows were only set off in recognizable landmarks. Hint: don't live in a city with an iconic skyline. Pick a home like my birthplace, the rural village of Eckville, Alberta, where nothing ever happens, never has,

and never will. The Forbidden City of Beijing got hammered, then downtown Los Angeles, where skyscrapers burst into flames without being touched by lava or ash tornadoes. St Paul's Cathedral in London, the Statue of Liberty, you name it, they got it. That Hellstorm apparently traveled at hypersonic speed underground.

Various subplots were used to pace the movie, such as the dysfunctional Ferris family. SFX were used to keep everyone awake. They were well rendered, with realistic volcanic clouds rather than the cheapo gasoline explosions or stock shots of Hawaiian lava flows.

The Agency scrambled to get back control of the Hellstorm, but were stymied by the spy/hacker in their midst. Everyone used computer keyboards that clickety-clacked like manual typewriters, found only in Hollywood, whereas the rest of the world uses silent keyboards. The scientists stared at screens displaying perfect sine waves, which apparently were the scientific data that would solve the case.

The spy made a run for it with a laptop of stolen secrets. He was overweight and middle-aged but easily outran the security guards who obviously trained at the gymnasium. He was finally stopped by a bad-ass guard who obviously didn't train at the gym but knew how to use a baton in close quarters.

The spy confessed under torture he had copied the data to Ferris, which set the Agency chasing after her. They were quickly forced to change their minds when the Hellstorm set course for the Yellowstone supervolcano. The solution, as it so often is, was to destroy the device with a 1-kiloton tactical nuke before it could reach the supervolcano.

The nuke had to be placed down in an abandoned mine, with lots of alarums and SFX en route. An electronic clock counted down as last-minute twists stretched out the suspense. The Hellstorm was destroyed and the bad guys got what they deserved.

The volcanoes and ash tornadoes suddenly vanished. Millions were dead but they were just statistics and crowd extras. The Ferris family had a group hug on the San Andreas fault and so to the closing credits.

See Alberta And Die.

GLOBAL MELTDOWN (2018) was a disaster movie written and directed by Daniel Gilboy. I found it online when I was browsing Amazon.ca. The blurb promised volcanoes and tectonic plates run amok. Alberta has neither, so I sat back for some vicarious entertainment.

Ostensibly set in Pleasant Valley, Washington State, the scenery in the opening credits had me thinking that state's scenery could pass for Alberta. One of the credits was for Alberta Film Projects, which made me sit up. I didn't recognize the exact location but now I could see the scenery was indeed Alberta.

The first views as the title cards rolled were where the prairies began at the slopes of the Porcupine Hills south of Calgary, a range of foothills of the Rocky Mountains. The land is ranching country and many times I've driven down Highway 22, which threads through the foothills. The location shooting was done in autumn when the trees were leafless and there was snow in the elevations, although the prairies were still dry.

The movie opened with the heroine Dr Karen Cavanaugh arriving on a ranch to inspect a sudden unexplained mass livestock kill. She was quickly distracted from her task by a passing helicopter going down in flames, a television news report of San Francisco wiped out by a gigantic tsunami, and assorted other harbingers of doom.

A conversation between characters mentioned that Pleasant Valley was only 90 miles from the Yellowstone supervolcano. That got the cast in a flutter. The conclusion was to run north for safety on high ground in the Rocky Mountains.

A convoy moved out, although half the villagers were fried when the ground cracked open, emitting lava and fire. From there, the survivors began their odyssey through hell, high water, and incessant bickering. Along the way they met assorted conspiracy theorists who cackled "I told you so".

For outlanders, the epic travels were perhaps boring. As someone who knows southwestern Alberta very well and has hiked in many places that appeared in this movie, I found the movie great fun. Setting aside minor details such as heavy snow in one scene and bare ground in the next, the route traveled by the characters doubled back and forth between the mountains west of Calgary and the foothills south of the city too many times to count.

The first scenic views of the mountains were of the Kananaskis River valley, the first range of the Rockies adjacent to Calgary. The convoy was traveling south, well up the valley. Suddenly they were climbing the Spray River valley road up from Canmore in the Bow River valley, parallel and west of Kananaskis on the opposite side of the mountains. There are no roads overtop the mountain chains, and the convoy would have had to double back to the Trans-Canada Highway in the Bow Valley and go around the end of the mountains.

There was an earthquake and one of the vehicles in the convoy plunged over a cliff, rendered on an 8-bit graphics card. The SFX fluctuated wildly in quality. Some were borrowed from other movies, most were reasonably good, and a few were cartoonish.

The characters stopped and looked at the burning vehicle far below. The convoy resumed its way and was suddenly westbound on Highway 66 in the Elbow River valley far to the east, on the other side of the Kananaskis mountains. They then turned about once more and were now southbound along the Porcupine Hills/prairies contact zone.

This would be about 100 km southeast of the previous scene. They weren't actually going around in circles but were doubling back and forth along the foothills and front ranges. Every so often there was an alarm, usually an earthquake, that thinned out a few more supporting characters. The survivors were forever digging graves.

The remains of the cast then turned about once more and went back onto Highway 66, this time all the way west to where it terminates at the base of Mount Romulus, easily seen in the background. (Watch for the metric traffic sign; remember this was supposed to be Washington State.) Since this is a dead-end road, there was no surprise for me when I saw them once again driving south along the prairies. I lost track of how many times they shuttled between the snowy mountains and bare grass prairies.

My absolute favourite was the Sheep River valley highway washout, which I have visited (see OPUNTIA #447, page 10). During the Great Flood of 2013, which devastated Calgary and southwestern Alberta, the Sheep River cut out a huge chunk of the highway. To refill the washout would have needed a mountain's worth of fill, so the highway was re-routed and the washout became a tourist attraction. The Sheep River is far, far south of Kananaskis and Elbow River and does not connect at all.

The washout, several hundred metres deep, made a spectacular SFX. The flood also washed out a high-level bridge on Highway 66 about 100 km north, since replaced (shown on next page, a photo I took on 2013-08-14). The wreckage of that bridge was green-screened in with the Sheep River washout. Depending on the camera angle on the characters standing around the washout, the bridge wreckage appeared, disappeared, or changed position.

Then the convoy drove into a cloud of sulphuric acid, obviously from a volcanic vent. Abandoning their vehicles, the engines ruined by the acid, the survivors were next seen on the summit of Tunnel Mountain, which forms the eastern side of Banff townsite, about 200 km away.

Another jump shot and they were walking west in the Kananaskis valley, then north in the Cascade River valley north of Banff, and finally, all the way out and around to the Sheep River Falls far south again. I estimate they must have traveled about 2,000 km back and forth along the mountains.

There was an unpleasant encounter with survivalists. Then the Yellowstone supervolcano quit messing around and blew up on the north side of the Bow River mountains by Canmore, a town about halfway between Calgary and Banff on the Trans-Canada Highway. The very few survivors left watched complacently from the far side of the valley.



The SFX showed the townsite of Canmore on the bottom of the valley, while the supervolcano erupted north of Cougar Creek valley, which I have hiked several times. I had no idea there was a supervolcano there.



Above is a photo I took in 2015 from the Spray River valley, looking north down on Canmore in the Bow River valley. The screenshot at left was photographed from a slightly higher elevation while the supervolcano took out Wyoming.

The notch in the mountains on the far side of the valley is Cougar Creek. The townsite is mostly screened by spruce trees but you can see a few grid streets.

This Elbow River bridge on Highway 66 in Kananaskis has since been rebuilt. During the Great Flood of 2013, the water rose up and lifted off one of the decks. The movie used a helicopter photo and moved it to the Sheep River.

I took this photo in the summer of 2013 from a Bailey bridge installed as a bypass.



SEEN IN THE LITERATURE

Semaw, S., et al (2020) **Co-occurrence of Acheulian and Oldowan artifacts with Homo erectus cranial fossils from Gona, Afar, Ethiopia.** SCIENCE ADVANCES 6:doi.org/10.1126/sciadv.aaw4694 (available as a free pdf)

Authors’ abstract: *Although stone tools generally co-occur with early members of the genus Homo, they are rarely found in direct association with hominins. We report that both Acheulian and Oldowan artifacts and Homo erectus crania were found in close association at 1.26 million years (Ma) ago at Busidima North (BSN12), and ca. 1.6 to 1.5 Ma ago at Dana Aoule North (DAN5) archaeological sites at Gona, Afar, Ethiopia.*

The BSN12 partial cranium is robust and large, while the DAN5 cranium is smaller and more gracile, suggesting that H. erectus was probably a sexually dimorphic species. The evidence from Gona shows behavioral diversity and flexibility with a lengthy and concurrent use of both stone technologies by H. erectus, confounding a simple “single species/single technology” view of early Homo.

Rogers, A.R., et al (2020) **Neanderthal-Denisovan ancestors interbred with a distantly related hominin.** SCIENCE ADVANCES 6:doi.org/10.1126/sciadv.aay5483 (available as a free pdf)

Authors’ abstract: *Previous research has shown that modern Eurasians interbred with their Neanderthal and Denisovan predecessors. We show here that hundreds of thousands of years earlier, the ancestors of Neanderthals and Denisovans interbred with their own Eurasian predecessors, members of a “superarchaic” population that separated from other humans about 2 million years ago.*

The superarchaic population was large, with an effective size between 20 and 50 thousand individuals. We confirm previous findings that
(i) Denisovans also interbred with superarchaics,
(ii) Neanderthals and Denisovans separated early in the middle Pleistocene,
(iii) their ancestors endured a bottleneck of population size, and
(iv) the Neanderthal population was large at first but then declined in size.
We provide qualified support for the view that (v) Neanderthals interbred with the ancestors of modern humans.

Venkadesan, M., et al (2020) **Stiffness of the human foot and evolution of the transverse arch.** NATURE 579:97-100

Authors’ abstract: *The stiff human foot enables an efficient push-off when walking or running, and was critical for the evolution of bipedalism. The uniquely arched morphology of the human midfoot is thought to stiffen it, whereas other primates have flat feet that bend severely in the midfoot.*

However, the relationship between midfoot geometry and stiffness remains debated in foot biomechanics, podiatry and palaeontology. These debates centre on the medial longitudinal arch and have not considered whether stiffness is affected by the second, transverse tarsal arch of the human foot.

Here we show that the transverse tarsal arch, acting through the inter-metatarsal tissues, is responsible for more than 40% of the longitudinal stiffness of the foot. The underlying principle resembles a floppy currency note that stiffens considerably when it curls transversally.

In the foot, the material properties of the inter-metatarsal tissues and the mobility of the metatarsals may additionally influence the longitudinal stiffness of the foot and thus the curvature-stiffness relationship of the transverse tarsal arch.

By analysing fossils, we track the evolution of the curvature parameter among extinct hominins and show that a human-like transverse arch was a key step in the evolution of human bipedalism that predates the genus Homo by at least 1.5 million years.

This renewed understanding of the foot may improve the clinical treatment of flatfoot disorders, the design of robotic feet and the study of foot function in locomotion.

Key, F.M., et al (2020) **Emergence of human-adapted Salmonella enterica is linked to the Neolithization process.** NATURE ECOLOGY AND EVOLUTION 4:324-333

Authors’ abstract: *It has been hypothesized that the Neolithic transition towards an agricultural and pastoralist economy facilitated the emergence of human-adapted pathogens. Here, we recovered eight Salmonella enterica*

subsp. enterica genomes from human skeletons of transitional foragers, pastoralists and agropastoralists in western Eurasia that were up to 6,500 yr old.

Despite the high genetic diversity of S. enterica, all ancient bacterial genomes clustered in a single previously uncharacterized branch that contains S. enterica adapted to multiple mammalian species. All ancient bacterial genomes from prehistoric (agro-)pastoralists fall within a part of this branch that also includes the human-specific S. enterica Paratyphi C, illustrating the evolution of a human pathogen over a period of 5,000 yr.

Bacterial genomic comparisons suggest that the earlier ancient strains were not host specific, differed in pathogenic potential and experienced convergent pseudogenization that accompanied their downstream host adaptation. These observations support the concept that the emergence of human-adapted S. enterica is linked to human cultural transformations.

McCracken, A.W., et al (2020) **The hidden costs of dietary restriction: Implications for its evolutionary and mechanistic origins.** SCIENCE ADVANCES 6:doi.org/10.1126/sciadv.aay3047 (available as a free pdf)

Authors' abstract: Dietary restriction (DR) extends life span across taxa. Despite considerable research, universal mechanisms of DR have not been identified, limiting its translational potential. Guided by the conviction that DR evolved as an adaptive, pro-longevity physiological response to food scarcity, biomedical science has interpreted DR as an activator of pro-longevity molecular pathways.

Current evolutionary theory predicts that organisms invest in their soma during DR, and thus when resource availability improves, should outcompete rich-fed controls in survival and/or reproduction. Testing this prediction in Drosophila melanogaster (N > 66,000 across 11 genotypes), our experiments revealed substantial, unexpected mortality costs when flies returned to a rich diet following DR.

The physiological effects of DR should therefore not be interpreted as intrinsically pro-longevity, acting via somatic maintenance. We suggest DR could alternatively be considered an escape from costs incurred under nutrient-rich conditions, in addition to costs associated with DR.

Ageing has attracted extensive scientific interest, from both a fundamental and biomedical perspective. Dietary restriction (DR) extends health and life span across taxa, from baker's yeast to mice, with very few exceptions. The reduction in total calories, or restriction of macronutrients, such as protein, extends life span reliably.

Although the precise universal mechanisms that connect DR to ageing remain elusive, translation of DR's health benefits to human medicine is deemed possible. The widespread assumption of DR's translational potential originates from the notion that DR's beneficial effects are facilitated by shared evolutionary conserved mechanisms, as beneficial effects of DR are observed across taxa.

Experiments on our close evolutionary relatives, rhesus monkeys (Macaca mulatta), have demonstrated that DR could be translational. Still, the mechanisms by which these benefits are accrued physiologically may differ between species, as no single genetic or pharmaceutical manipulation mimicking the benefits of DR across model organisms exists.

In addition, genetic heterogeneity within species presents an additional layer of complexity, since efficacy of DR-driven longevity extension can differ between genotypes. Mechanistic insight will be key, since dietary restriction as a human lifestyle intervention has limited scope, given the degree of self-restraint required.

Speirs: I liked that understated last sentence.

Wilkin, S., et al (2020) **Dairy pastoralism sustained eastern Eurasian steppe populations for 5,000 years.** NATURE ECOLOGY AND EVOLUTION 4:346-355

Authors' abstract: Dairy pastoralism is integral to contemporary and past lifeways on the eastern Eurasian steppe, facilitating survival in agriculturally challenging environments. While previous research has indicated that ruminant dairy pastoralism was practiced in the region by circa 1300 BC, the origin, extent and diversity of this custom remain poorly understood.

Here, we analyse ancient proteins from human dental calculus recovered from geographically diverse locations across Mongolia and spanning 5,000 years.

We present the earliest evidence for dairy consumption on the eastern Eurasian steppe by circa 3000 BC and the later emergence of horse milking at circa 1200 BC, concurrent with the first evidence for horse riding.

We argue that ruminant dairying contributed to the demographic success of Bronze Age Mongolian populations and that the origins of traditional horse dairy products in eastern Eurasia are closely tied to the regional emergence of mounted herding societies during the late second millennium BC.

Blomster, J.P. and V.E. Salazar Chávez Origins of the Mesoamerican ballgame: Earliest ballcourt from the highlands found at Etlatongo, Oaxaca, Mexico. SCIENCE ADVANCES 6:doi.org/10.1126/sciadv.aay6964 (available as a free pdf)

Authors’ abstract: The ballgame represents one of the most enduring and iconic features of ancient Mesoamerican civilization, yet its origins and evolution remain poorly understood, primarily associated with the Gulf Coast and southern Pacific coastal lowlands.

While one early ballcourt dates to 1650 BCE from the Chiapas lowlands, ballcourts have remained undocumented in the Mesoamerican highlands until a millennium later, suggesting less involvement by highland civilizations in the ballgame’s evolution.

We provide new data from the southern highlands of Mexico, from the Early Formative period (1500 to 1000 BCE), that necessitate revising previous paradigms. Along with ballplayer imagery, we recently excavated the earliest highland Mesoamerican ballcourt, dating to 1374 BCE, at the site of Etlatongo, in the Mixtec region of Oaxaca.

We conclude that Early Formative highland villagers played an important role in the origins of the formal Mesoamerican ballgame, which later evolved into a crucial component of subsequent states.

The rubber ballgame is one of the most fundamental features of ancient Mesoamerica, a pre-Columbian cultural region encompassing Guatemala, Belize, most of Mexico, and western Honduras and El Salvador. The presence of more than 2,300 probable ballcourts in this region indicates the ballgame’s great importance to ancient Mesoamericans.

Rich visual, iconographic, and architectural data from the two best-known Mesoamerican civilizations, the Maya and Aztec, emphasize the ritual and political focus of the ballgame, with symbolism that included the regeneration of life and the maintenance of cosmic order.

The origin narratives of the Maya, as codified in the Popol Vuh, implicate the ballgame, as part of a contest between heroic mortals and underworld deities, in the creation of the universe.

Melby, C.K. (2020) Empire and nation in British future-war and invasion-scare fiction, 1871-1914. HISTORICAL JOURNAL 63:389-410

Author’s abstract: The British wrote and read a large quantity of fictional depictions of future wars and invasions in the period between 1871 and 1914, imagining the various ways in which a great war might look before the real conflict broke out. This article outlines the ways in which this form of literature described a British world united across time and space.

The stories have traditionally been read as indicative of a societal fear of invasion, of imperial decline, or of the dangers of revolutionary upheaval. The article argues that the stories’ popularity can instead be traced to the way they included their readers in the experience of invasion and conflict, and how they were well suited to the era of modern mass newspapers.

The article therefore concludes that earlier interpretations of how readers engaged with such fiction has underestimated how a varied readership could view the stories as entertaining spectacles where they were invited to participate. As such, the article offers a new interpretation of an important literary genre as well as of British pre-war political culture.

Few other short pieces of nineteenth-century fiction have caused as much stir as George Tomkyns Chesney’s The battle of Dorking, first published in the Blackwood’s Magazine in May 1871.

While fictional descriptions of future wars and invasions have a long pedigree, and were not exclusively British phenomena, it was The Battle of Dorking that set off this literary industry in its modern form. It was also on the British Isles that the vision of foreign fleets and hostile armies found its most eager audience in the decades prior to 1914.

Nienhuis, J.H., et al (2020) **Global-scale human impact on delta morphology has led to net land area gain.** NATURE 577:514-518

Authors’ abstract: *River deltas rank among the most economically and ecologically valuable environments on Earth. Even in the absence of sea-level rise, deltas are increasingly vulnerable to coastal hazards as declining sediment supply and climate change alter their sediment budget, affecting delta morphology and possibly leading to erosion.*

However, the relationship between deltaic sediment budgets, oceanographic forces of waves and tides, and delta morphology has remained poorly quantified.

Here we show how the morphology of about 11,000 coastal deltas worldwide, ranging from small bayhead deltas to mega-deltas, has been affected by river damming and deforestation. We introduce a model that shows that present-day delta morphology varies across a continuum between wave (about 80 per cent), tide (around 10 per cent) and river (about 10 per cent) dominance, but that most large deltas are tide- and river-dominated.

Over the past 30 years, despite sea-level rise, deltas globally have experienced a net land gain of 54 ± 12 square kilometres per year (2 standard deviations), with the largest 1 per cent of deltas being responsible for 30 per cent of all net land area gains.

Humans are a considerable driver of these net land gains; 25 per cent of delta growth can be attributed to deforestation-induced increases in fluvial sediment supply.

Yet for nearly 1,000 deltas, river damming has resulted in a severe (more than 50 per cent) reduction in anthropogenic sediment flux, forcing a collective loss of 12 ± 3.5 square kilometres per year (2 standard deviations) of deltaic land.

Not all deltas lose land in response to river damming: deltas transitioning towards tide dominance are currently gaining land, probably through channel infilling. With expected accelerated sea-level rise, however, recent land gains are unlikely to be sustained throughout the twenty-first century.

Weimerskirch, H., et al (2020) **Ocean sentinel albatrosses locate illegal vessels and provide the first estimate of the extent of non-declared fishing.** PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES USA 117:3006-3014

Authors’ abstract: *Here, we describe a concept of “Ocean Sentinel” using animals equipped with state-of-the-art loggers which monitor fisheries in remote areas. Albatrosses fitted with loggers detecting and locating the presence of vessels and transmitting the information immediately to authorities allowed an estimation of the proportion of non-declared fishing vessels operating in national and international waters of the Southern Ocean.*

We found that in international waters, more than one-third of vessels had no Automatic Identification System operating; in national Exclusive Economic Zones (EEZs), this proportion was lower on average, but variable according to EEZ. Ocean Sentinel was also able to provide unprecedented information on the attraction of seabirds to vessels, giving access to crucial information for risk-assessment plans of threatened species.

Attraction differed between species, age, and vessel activity. Fishing vessels attracted more birds than other vessels, and juveniles both encountered fewer vessels and showed a lower attraction to vessels than adults. This study shows that the development of technologies offers the potential of implementing conservation policies by using wide-ranging seabirds to patrol oceans.

Benjamin J Crain, B.J., et al (2020) **Species protection in areas conserved through community-driven direct democracy as compared with a large private land trust in California.** ENVIRONMENTAL CONSERVATION 47:doi.org/10.1017/S0376892919000407

Authors’ abstract: *Protected area systems include sites preserved by various institutions and mechanisms, but the benefits to biodiversity provided by different types of sites are poorly understood. Protected areas established by local communities for various reasons may provide complementary benefits to those established by large-scale agencies and organizations.*

Local communities are geographically constrained, however, and it remains unclear how effectively they protect biodiversity. We explored this issue by focusing on protected areas established through direct democracy via local

ballot initiatives whereby communities vote to tax themselves for open space preservation. We compared the effectiveness of local ballot-protected areas to areas protected by a large-scale conservation actor, The Nature Conservancy (TNC).

We evaluated how well the two protected area types correspond with amphibians, reptiles, birds, mammals and special status elements of natural diversity. Local ballot-protected areas differed from those of TNC in terms of size, location, proximity to urban areas and habitat diversity.

In terms of potential habitat coverage, local ballot-protected areas outperformed TNC sites for all species groups with the exception of special status elements of natural diversity. While not necessarily targeting wildlife and habitats, we conclude that locally established protected areas can make an important contribution to biodiversity conservation.

McCain, J., et al (2015) **A psychological exploration of engagement in geek culture.** PLOS ONE 10:doi.org/10.1371/journal.pone.0142200 (available as a free pdf)

Authors' abstract: *Geek culture is a subculture of enthusiasts that is traditionally associated with obscure media (Japanese animation, science fiction, video games, etc.).*

*However, geek culture is becoming increasingly mainstream; for example, in the past year alone, Dragon*Con, a major Geek convention in Atlanta, Georgia, attracted an attendance of over 57,000 members.*

The present article uses an individual differences approach to examine three theoretical accounts of geek culture. Seven studies (N = 2354) develop the Geek Culture Engagement Scale (GCES) to quantify geek engagement and assess its relationships to theoretically relevant personality and individual differences variables.

These studies present evidence that individuals may engage in geek culture in order to maintain narcissistic self-views (the great fantasy migration hypothesis), to fulfill belongingness needs (the belongingness hypothesis), and to satisfy needs for creative expression (the need for engagement hypothesis).

Geek engagement is found to be associated with elevated grandiose narcissism, extraversion, openness to experience, depression, and subjective well-being across multiple samples.

Mary, A., et al (2020) **Resilience after trauma: The role of memory suppression.** SCIENCE 367:doi.org/10.1126/science.aay8477

Authors' abstract: *In the aftermath of trauma, little is known about why the unwanted and unbidden recollection of traumatic memories persists in some individuals but not others. We implemented neutral and inoffensive intrusive memories in the laboratory in a group of 102 individuals exposed to the 2015 Paris terrorist attacks and 73 nonexposed individuals, who were not in Paris during the attacks.*

While re-experiencing these intrusive memories, nonexposed individuals and exposed individuals without posttraumatic stress disorder (PTSD) could adaptively suppress memory activity, but exposed individuals with PTSD could not.

These findings suggest that the capacity to suppress memory is central to positive posttraumatic adaptation. A generalized disruption of the memory control system could explain the maladaptive and unsuccessful suppression attempts often seen in PTSD, and this disruption should be targeted by specific treatments.

Ai, T., et al (2020) **Correlation of chest CT and RT-PCR testing in Coronavirus Disease 2019 (COVID-19) in China: A report of 1,014 cases.** RADIOLOGY https://doi.org/10.1148/radiol.2020200642 (available as a free pdf at the DOI)

Authors' abstract: *Since December 2019, a number of cases of unknown viral pneumonia related to a local Seafood Wholesale Market were reported in Wuhan City, Hubei Province, China. A novel coronavirus (SARS-CoV-2) was suspected to be the etiology with Phinolophus bat as the alleged origin.*

In just two months, the virus has spread from Wuhan to the whole China, and another 33 countries. By 24:00 on February 24, accumulative 77,658 confirmed cases with 9,126 severe cases and 2,663 deaths were documented in

China, and 2,309 confirmed cases with 33 deaths were reported in other countries (including Japan, Korea, Italy, Singapore, Iran as the top five countries). As of 24:00 on February 11, a total of 1,716 confirmed cases and 1,303 clinically diagnosed cases of medical personnel were reported from 422 medical institutions, of which 5 died, accounting for 0.4% of the nationwide deaths during the same time period.

The positive rates of RT-PCR assay and chest CT imaging in our cohort were 59% (601/1014), and 88% (888/1014) for the diagnosis of suspected patients with COVID-19, respectively. With RT-PCR as a reference, the sensitivity of chest CT imaging for COVID-19 was 97% (580/601).

In patients with negative RT-PCR results but positive chest CT scans (n=308 patients), 48% (147/308) of patients were re-considered as highly likely cases, with 33% (103/308) as probable cases by a comprehensive evaluation.

With analysis of serial RT-PCR assays and CT scans, 60% to 93% of patients had initial positive chest CT consistent with COVID-19 before the initial positive RT-PCR results. 42% of patients showed improvement of follow-up chest CT scans before the RT-PCR results turning negative.

Richards, J.L., et al (2020) **Prevalence of critically endangered European eel (*Anguilla anguilla*) in Hong Kong supermarkets.** SCIENCE ADVANCES 6:doi.org/10.1126/sciadv.aay0317 (available as a free pdf)

Authors' abstract: *European eel (Anguilla anguilla) is a critically endangered species requiring CITES permits for international trade. Despite the fact that no imports to Hong Kong were declared within the last 2 years, our study found that this species is still commonly sold in major supermarket chains across Hong Kong.*

In a COI barcoding survey of 49 retail vendors encompassing 13 brands, 9 of 13 carried A. anguilla, and 45% of all eel products available at retail outlets (n = 49) were unambiguously identified as A. anguilla. Considering the visual similarity of eel species and disproportionate amount of undeclared A. anguilla available for consumption, this finding raises urgent concerns regarding the enforcement of international CITES trade regulations.

Furthermore, the prevalence of A. anguilla in supermarkets highlights how illicit wildlife products are not solely limited to specialized affluent buyers; some species have entered mainstream distribution networks for the average consumer.

Fritz, J., et al (2020) **A chronobiological evaluation of the acute effects of Daylight Saving Time on traffic accident risk.** CURRENT BIOLOGY 30:doi.org/10.1016/j.cub.2019.12.045

Authors' abstract: *There is evidence that the spring Daylight Saving Time (DST) transition acutely increases motor vehicle accident (MVA) risk ("DST effect"), which has been partly attributed to sleep deprivation and circadian misalignment. Because spring DST also shifts clock time 1 hour later, mornings are darker and evenings brighter, changing illumination conditions for peak traffic density.*

This daytime-dependent illumination change ("time of day effect") is hypothesized to result in DST-associated afternoon and evening accident risk reductions. Furthermore, sunrise and local photoperiod timing depend on position in time zone. The sun rises at an earlier clock time in the eastern regions of a given time zone than in the western regions, which is thought to induce higher levels of circadian misalignment in the west than in the east ("time zone effect")

This study evaluated the acute consequences of the DST transition on MVAs in a chronobiological context, quantifying DST, time of day, and time zone effects. We used large US registry data, including 732,835 fatal MVAs recorded across all states (1996 to 2017), and observed that spring DST significantly increased fatal MVA risk by 6%, which was more pronounced in the morning and in locations further west within a time zone.

DST-associated MVA risk increased even in the afternoon hours, despite longer daylight hours. The MVA risk increase waned in the week subsequent to DST, and there were no effects of the fall-back transition to Standard Time (ST) on MVA risk, further supporting the hypothesis that DST-transition-associated, preventable circadian misalignment and sleep deprivation might underlie MVA risk increases.

Kloft, L., et al (2020) **Cannabis increases susceptibility to false memory.** PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES USA 117:doi.org/10.1073/pnas.1920162117 (available as a free pdf)

Authors’ abstract: *With the growing global acceptance of cannabis and its widespread use by eyewitnesses and suspects in legal cases, understanding the popular drug’s ramifications for memory is a pressing need. In a double-blind, randomized, placebo-controlled trial, we examined the acute and delayed effects of Δ^9 -tetrahydrocannabinol (THC) intoxication on susceptibility to false memory in 64 healthy volunteers.*

Memory was tested immediately (encoding and retrieval under drug influence) and 1 wk later (retrieval sober). We used three different methods (associative word lists and two misinformation tasks using virtual reality). Across all methods, we found evidence for enhanced false-memory effects in intoxicated participants.

Specifically, intoxicated participants showed higher false recognition in the associative word-list task both at immediate and delayed test than controls. This yes bias became increasingly strong with decreasing levels of association between studied and test items.

In a misinformation task, intoxicated participants were more susceptible to false-memory creation using a virtual-reality eyewitness scenario and virtual-reality perpetrator scenario. False-memory effects were mostly restricted to the acute-intoxication phase.

Cannabis seems to increase false-memory proneness, with decreasing strength of association between an event and a test item, as assessed by different false-memory paradigms. Our findings have implications for how and when the police should interview suspects and eyewitnesses.

Huang, Z., et al (2020) **Temporal circuit of macroscale dynamic brain activity supports human consciousness.** SCIENCE ADVANCES 6:doi.org/10.1126/sciadv.aaz0087 (available as a free pdf)

Authors’ abstract: *Evidence from noninvasive functional neuroimaging studies has pointed to two distinct cortical systems that support consciousness. The default mode network (DMN) is an internally directed system that correlates*

with consciousness of self, and the dorsal attention network (DAT) is an externally directed system that correlates with consciousness of the environment.

The DMN engages in a variety of internally directed processes such as autobiographical memory, imagination, and self-referencing. The DAT, on the other hand, mediates externally directed cognitive processes such as goal-driven attention, inhibition, and top-down guided voluntary control.

Moreover, the DMN and DAT appear to be in a reciprocal relationship with each other such that they are not simultaneously active, i.e., they are “anticorrelated”. This anticorrelation is presumed to be vital for maintaining an ongoing interaction between self and environment that contributes to consciousness.

Conversely, diminished anticorrelation between DMN and DAT activity has been reported in humans when consciousness was suppressed by general anesthesia

The ongoing stream of human consciousness relies on two distinct cortical systems, the default mode network and the dorsal attention network, which alternate their activity in an anti-correlated manner. We examined how the two systems are regulated in the conscious brain and how they are disrupted when consciousness is diminished.

We provide evidence for a “temporal circuit” characterized by a set of trajectories along which dynamic brain activity occurs. We demonstrate that the transitions between default mode and dorsal attention networks are embedded in this temporal circuit, in which a balanced reciprocal accessibility of brain states is characteristic of consciousness. Conversely, isolation of the default mode and dorsal attention networks from the temporal circuit is associated with unresponsiveness of diverse etiologies.