OPUNTIA 487

Early November 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.

AROUND COWTOWN: CARBURN PARK 2020-11-01

photos by Dale Speirs

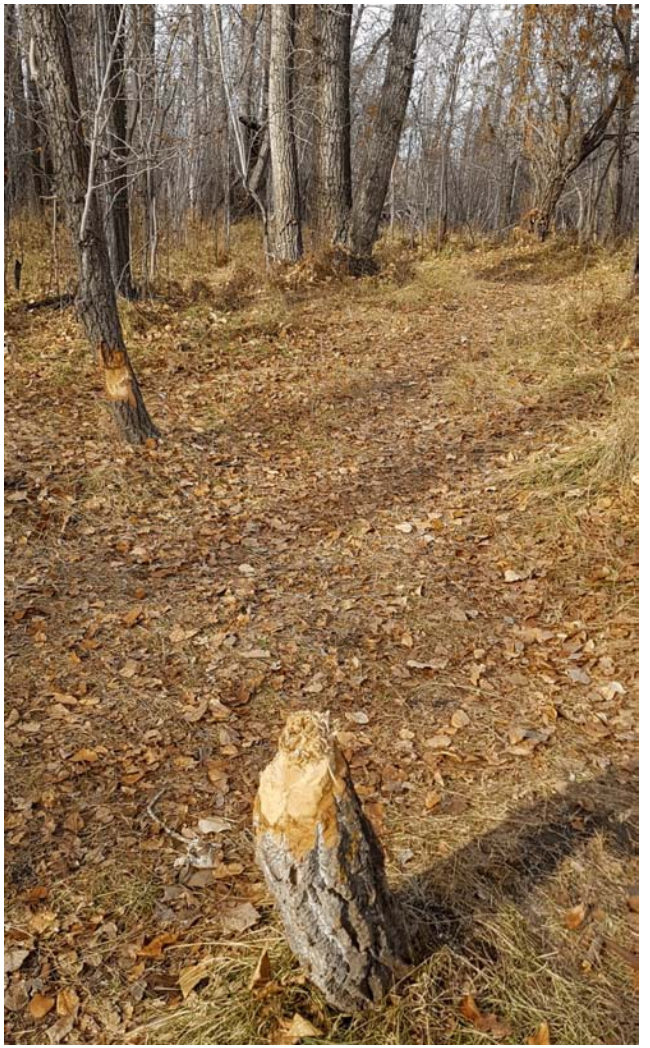
A chinook blew through Calgary on October 30 and removed all the snow. I took the opportunity to walk around Carburn Park in southeast Calgary on the left bank of the Bow River. Before the Douglasdale suburb was developed in the 1990s, the area was a gravel mine. The pits flooded after operations ceased and the City took it over and converted it to a natural park.

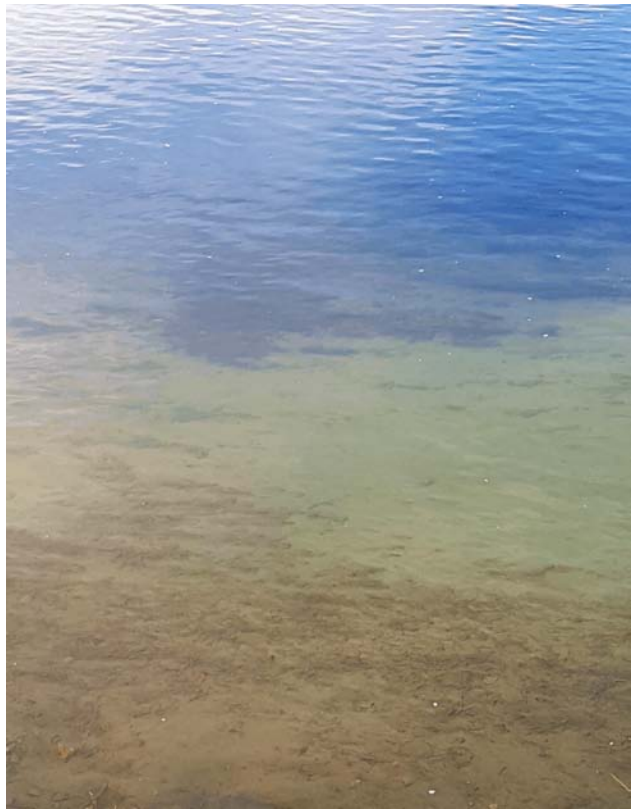
The wildlife is habituated to humans. Many times while I was taking a photo, a chickadee would land on the top edge of my smartphone, bold as brass. Unfortunately it was impossible to get a photo of that for obvious reasons. The deer were not at all disturbed by humans.

Entrance to Carburn Park. This is the South Pond, once a gravel pit. Ice was still on the pond despite the chinook.

The North Pond.

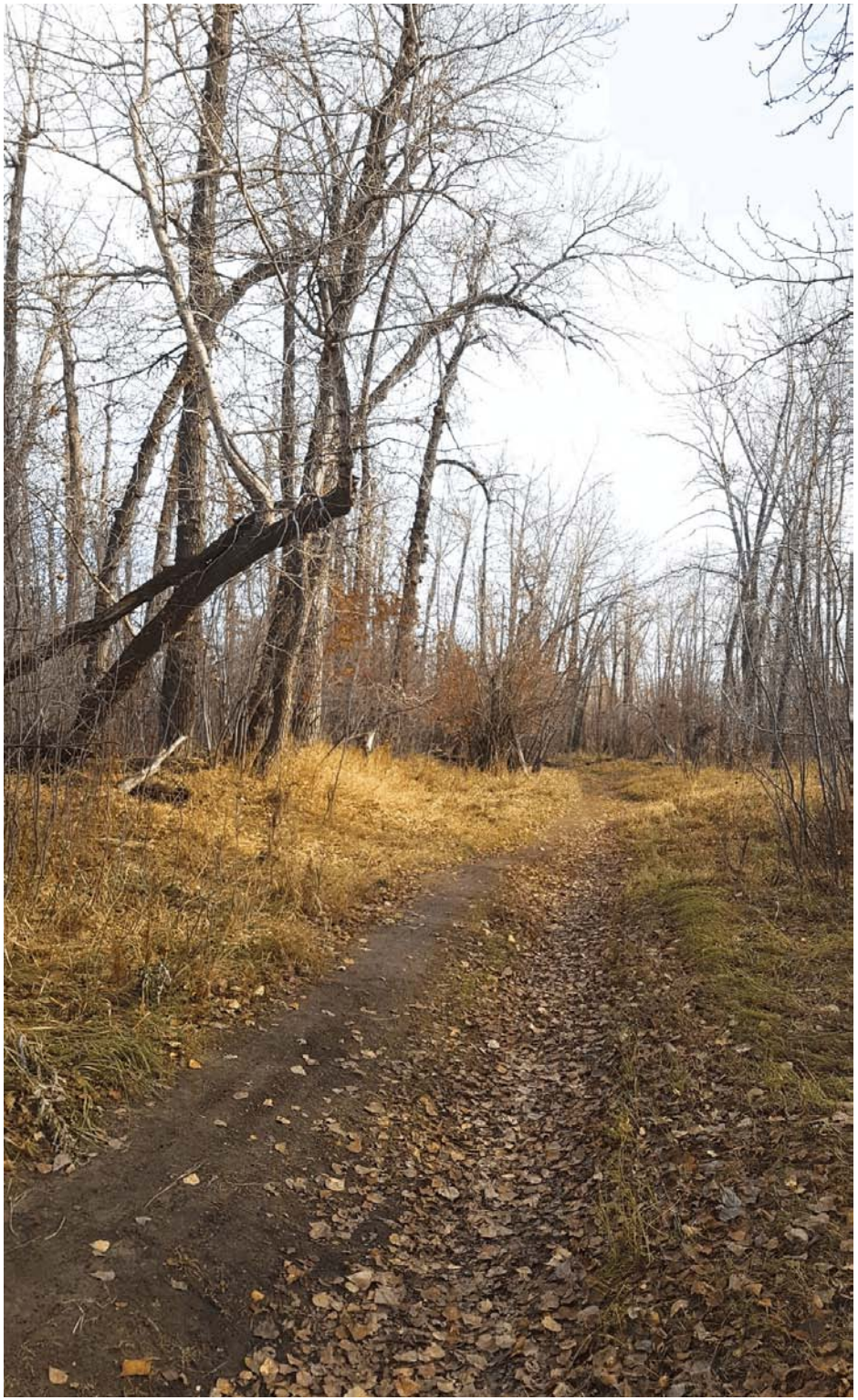
Many trees were wrapped with chicken fence wire against depredations by beavers. Calgary Parks Dept. has an on-call beaver trapper.





Views of a gravel bar island in Bow River.

This lane was a haul road for the gravel mine sixty years ago.



A backwater channel of the river, still frozen despite the chinook.

BOW VALLEY SQUARE ELECTRONIC ART
photos by Dale Speirs

[Previous photos appeared in OPUNTIAs #426, 437, and 486.]

Bow Valley Square is a cluster of skyscrapers in downtown Calgary linked into the Plus-15 pedestrian system that connects about half the skyscrapers at the second floor with an enclosed pedestrian network. Along the south side, connecting to the Brookfield Place tower across the street is this wall of electronic art. The video displays by local artists constantly change.

ACTION ADVENTURE ON THE AIR: PART 4
by Dale Speirs

[Parts 1 to 3 appeared in OPUNTIAs #426, 447, and 476.]

Bogie And Baby.

BOLD VENTURE was a syndicated old-time radio series that initially aired during the 1951-52 season. It was a star vehicle for Humphrey Bogart and Lauren Bacall, with all episodes written by Morton Fine and David Friedkin. The series was transcribed and then marketed to independent radio stations.

The radio series was two steps removed from Ernest Hemingway's novel TO HAVE AND HAVE NOT via the 1944 movie version starring Bogart and Bacall. The radio series was vaguely similar to the book and somewhat similar to the movie, although it actually owed as much to CASABLANCA.

The setting was Havana, Cuba, long before the Communist takeover. Slate Shannon (played by Bogart) owned a boat called Bold Venture and did odd jobs with it to earn his living. His other business was a cheap hotel called Shannon's Place. His sort-of girlfriend was Sailor Duval (Bacall).

A calypso singer King Moses interpolated songs every so often. The dialogue was spoken more harshly in early episodes than it would be later in the series after the actors found their way. The plots were basic, and often owed something to Hemingway.

The premiere episode "Deadly Merchandise" aired on 1951-03-26. Slate Shannon had received a cable from a man named Scarn to pick up a cargo at Key West. He and Sailor Duval went out from Havana to pick it up but Scarn was a no-show.

Upon returning home, the two squabbled about the wasted trip. The dialogue was snappy and brusque. "*How do you talk about me behind my back?*", said Duval. Replied Shannon, "*Walk ahead of me and I'll think of something.*"

Their argument was interrupted by a man named Mario who asked for the merchandise from Key West. They walked away from him without explaining that the cargo had not been received, leaving him to shout imprecations from a distance.

King Moses then did a calypso number "Marry A Woman Uglier Than You", after which he sang the next few parts of the plot, certainly a novel substitute for narration.

A young woman named Bebe was the next to demand the merchandise. She didn't survive long, slashed to death by a game cock with steel spurs put into her hotel room. After the police hauled away the body, Mario reappeared, explaining that Bebe was his sister-in-law. The merchandise was guns for a revolution.

Mario only outlived Bebe by a few hours. He answered the door when someone knocked. When he opened it, he was mowed down by a fusillade of bullets. In case any listener had been in the kitchen or bathroom, King Moses then summarized the story so far in calypso form.

Shannon and Duval took the bad news to Mario's widow Celestine. She sent them on to another contact, named Etienne. He knew everything, including the fact that the guns had come in on another boat. He wanted the two to take the cargo via the Bold Venture to another island where a revolution was expected.

Celestine arrived as the cargo was loaded. With a few gunshots she sent Etienne into the grave to join Bebe and Mario. Nastily though, she also intended that Shannon and Duval would join them. Since they were booked for the series, they were able to overpower Celestine and her goons.

"Treasure On Flamingo Cay" was first aired on 1951-04-23. Slate Shannon and Sailor Duval were hired for a treasure hunt on the aforesaid island, looking for Spanish gold. A college man named Whit, acting with his partner Joe Cheney, hired the Bold Venture.

Cheney had been shipwrecked on the island years ago and discovered gold coins on the beach. He was chased away by the cay's occupants, Mark Bryan and wife Lucy. Now the two men were going back. In their private conversation they discussed killing Shannon and Duval so that word of the treasure wouldn't get out.

When the group arrived, the Bryans were waiting on the pier with shotguns. Whit was a better shot and wounded Mark. Lucy was not anguished. Shannon provided first-aid while Mark groused. The marriage was not a happy one.

Whit romanced Lucy successfully but failed with Duval. He tried to improve his odds by holding a gun to her. Shannon was rendered unconscious by Cheney. The two hooligans then took Duval and the Bold Venture to find the gold. Lucy told them where Mark had buried it on the other side of the island.

Whit and Cheney dug for the gold. As they did so, Whit described the geography of the cay in great detail. Since Duval and Cheney could see it for themselves, the infodump was obviously aimed at the listener. Whit also threw in a blatant foreboding about how that hurricane on the horizon wasn't going to bother them.

They found the gold but couldn't leave the bay because the hurricane had cut them off. Back at the pier, Shannon woke up to Lucy comforting him, while Mark recovered nearby. That bunch went walking across the island to the other bunch at the treasure spot. Just the thing to do as the hurricane arrived.

Whit shot Cheney dead. A tree fell and killed Mark. Much melodrama among the survivors. The hurricane suddenly disappeared. The two groups met up for a showdown on the beach. No prizes for guessing who won. Shannon went all moral and decided not to take the gold. As Schiller wrote, "*Against stupidity the gods themselves contend in vain*".

Sharp Practice.

THE THIRD MAN aired on old-time radio for a season in 1951-52, with Orson Welles as Harry Lime. No writers were credited. The mp3s are often labeled with varied titles using the name Harry Lime. The character came from Graham Greene's movie and later novel adaptation.

Lime met a nasty end in the original movie. In the opening narration of the radio episodes, Welles told the audience that these stories were set before Lime was shot dead fleeing through the sewers of Vienna like a rat. Lime was a confidence man constantly traveling throughout Europe.

In the radio series, most of his schemes seemed to fall through, yet he always had money to live well and go gambling in casinos. Lime narrated all the episodes as if he were a god speaking from Olympus, complacent in his superiority over the lumpenproletariat while oblivious of the fact that he lost more often than he won.

The most distinctive part of the radio series, and what set it apart from other radio shows, was the theme and incidental music, played on a zither by Anton Karas. Even today it would stand out on a television series.

As part of the radio episodes, the music could be considered as important as Welles' rich voice. The existing mp3s are somewhat distorted from old tape recordings but allowing for that they cannot fail to impress. Well worth downloading as free mp3s from www.archive.org.

"Too Many Crooks" was the first episode of the series, airing on 1951-08-03. During the first minute the announcer announced the title as THE THIRD MAN, then a moment later as THE LIVES OF HARRY LIME.

Harry Lime was summoned to Budapest by a banker named Fekadi who feared his bank was going to be robbed. He offered Lime a $20,000 fee, operating on the principal of set a thief to catch a thief. Before going inside the bank, Lime had stopped at a flower shop across the street for a boutonnière. He recognized the shopgirl Lulu as a member of the Corelli family, who specialized in bank robberies. She warned him off but did give him a carnation for his buttonhole.

The meeting with Fekadi had a rough start. Eventually the two men smoothed things over and got down to business. Fekadi wanted Lime to apprehend the thieves before any robbery, not after. Lime soon learned there was a fair amount of paranoia and jealousy among the bank management, particularly in the competition for the affections of Lulu.

Fekadi said there was a tunnel being dug from the flower shop to the bank basement. His assistant Fodor was going to leave the daily cash takings outside the vault, the better for Lulu and her family (two brothers and a cousin) to steal it without the fuss and bother of cracking the vault.

Fekadi intended to do a double-cross, taking the money after Fodor left it there and before the Corellis could get it. Lime was suspicious about everything and everybody. He suspected Lulu would be the only one to profit.

Fekadi took the cash and stepped outside the bank into the waiting arms of the police. Lime had betrayed him, then Lulu and the Corellis. He did so in anticipation of reward money free and clear. The final line was his remark that "*Too many crooks spoil the goulash"*.

"See Naples And Live" was the second episode. Harry Lime was on the trail of a large emerald set in a locket and worn by a fat socialite named Mrs Fredricka Donaldson. The heist was to be done in Naples.

Lime had originally arranged with a man named Rubio for him to fence the jewel. As the episode began, Lime told him the deal was off, having decided to keep all the spoils to himself. Naturally Rubio did not appreciate the breach and uttered threats, one of which was the famous saying "*See Naples and die*" but meant differently. (Often misquoted as "*See Rome and die*")

Lime finagled his way into the confidence of Donaldson and her servant Amy Collins. He did little favours, took them to dinner, and socialized at every opportunity. Competition showed up, for the emerald did not go unnoticed among the less trustworthy denizens of Naples, specifically Rubio.

Working with doped champagne, Lime tried to blur Donaldson's judgement on a tour of Pompeii. He made the snatch but Rubio appeared and rendered him unconscious. The police arrived and spoiled the theft. The good news was that Rubio was arrested and blamed for the crime. The bad news was that Lime didn't get the emerald, which was quickly restored to Donaldson. He did get a £100 reward from her.

Collins told him she had seen him do the theft. If he knew what was good for him he would never again socialize with the two women. Leaving Naples in disgrace, Lime had little to show for taking such chances. At least he had seen Naples and lived.

"Clay Pigeon" aired 1951-08-17. The episode took place in 1942 after Harry Lime returned to New York City. He made contact with Governor James Hadley, state not specified, for a $15,000 contract and a full pardon.

Hadley was being blackmailed with faked photographs to ruin his re-election. Hadley's rival Cato was hoping to use the photos so his underworld syndicate could move in. Lime agreed to stop Cato but took the $15,000 in advance and insisted Hadley's secretary Norah help him.

Word spread quickly and Cato soon heard that Lime was in town. They met on the field of battle, or at least one of Cato's nightclubs. Lime met the Hadley doppelganger who had posed for the photos. Luke Hadley was James' twin brother, which Lime found difficult to believe. Cato reassured him it was so. Luke was the black sheep of the family and wanted revenge for having been cast out into the wilderness. Cato offered Lime $25,000 to throw over his deal with James, much to the indignation of Luke, who had only been paid $500 to pose for the photos.

Cato's response was to have Luke beaten up. Lime's response was to demand half of Cato's take. He also told Cato he had files on him that would be released to the police if anything happened to him. Cato was now in the same spot as James. He agreed to Lime's cut. The two men paid a visit to James and Norah. Lime delivered the negatives and then shot Cato dead, telling the Governor to say it was an attempted assassination.

Lime told James that he would keep the negatives as security against the possibility of any state troopers coming after him. Without telling James, he later burned them. He didn't burn the $15,000.

"Ticket To Tangier" first aired on 1951-08-24. It began when Lime was down and out in Paris. Browsing through the newspaper classified ads in search of something better, he came across a Personals item specifically addressed to him by name. The ad said he would find something of great profit to him in Tangier. All the money he had would only buy him a beer, so the complication would be in raising the price of a ticket.

Working his way down the Personals, he found another ad willing to pay someone to go to Tangier but they had to be able to whistle a certain tune. That brought him an envelope addressed to him by name, which contained a plane ticket, some cash, and a hotel reservation.

In Tangier, he was directed to a nightclub called the Kabalah. The tab was paid for by someone unknown, and his escort was Patsy Smith, the stewardess on his flight. The plot and dialogue meandered about and wound up at a villa.

After meandering about the house, Smith got down to real business. She had murdered her husband Rico McGetty, a mutual acquaintance who like Lime was a sharp practice man. Rico left as his legacy a large package of heroin, but she didn't know how to dispose of it.

She heard him mention Lime and wanted him to make contact with wholesalers. This was not implausible, as in the movie where Lime met his death, he had been selling stolen and subsequently watered antibiotics in postwar Vienna.

The conversation was interrupted by Dr Bessay, also a former colleague of Rico. He wanted the heroin, which Lime advised was in the piano. As he walked over to get the package, Smith shot him dead. That brought the police, so the two fled separately without the heroin.

Lime later tipped off the police about her murders. They pulled her off her plane and that was finis for her. Lime then went back to the villa and found the heroin. He got a good price for the stash, $50,000.

Since the broadcast network censor wouldn't approve of that ending, an epilogue was added in which Lime explained he threw the heroin into the bay and substituted confectionary sugar.

"Greek Meets Greek" was the last episode of the series, airing on 1952-07-25. Harry Lime was visiting a Greek seaside resort when he came down with measles and was quarantined by a local doctor.

A young woman Andrea staying next door barged into Lime's room. She ignored the quarantine and asked Lime for help because she had found the body of a man named Gregor in her suite. The head was almost decapitated by a knife, so it was murder. She told him she was mixed up in Greek politics and was to have delivered important papers to the defunct.

A series of alarums followed, including someone firing shots into Lime's room. After that, he called room service because he needed a stiff drink. Once fortified, he interrogated Andrea. She said that she was leaving her husband to join her lover, and Gregor was to have helped her.

The plot didn't move much until a man arrived, pretending to be a doctor and trying to kill Lime. That failed, so they adjourned to the docks where Andrea had crates loaded aboard a ship. They contained munitions for Crete. She was a smuggler but with a kind heart, for she told Lime the bullets for the guns were defective.

Off they sailed to an undefined resolution. Presumably Lime would depart for Vienna where he would suffer his unpleasant death in the sewers. As for this episode, it was confused and interminable, not a good wrap-up for the series.

WE'LL ALL GO TOGETHER WHEN WE GO: PART 12

by Dale Speirs

[Parts 1 to 11 appeared in OPUNTIAs #249, 276, 283, 301, 312, 327, 343, 365, 417, 431, and 445.]

Murder By Meteorite.

"A Celestial Crime" by Charles Stuart Pratt (1897 December, THE BLACK CAT, available as a free pdf from www.archive.org) read as a murder mystery on campus for the most part. I was going to put it in my "The Groves Of Academia" column but for the twist ending.

Three young professors were vying for the heart of the college president's daughter. At a private function they attended, one proposed and was accepted. They each walked home afterwards, but one did not make it, having had his head bashed in on the campus quad.

The police found evidence to fit the accused professor, the affianced man, and the jury returned a verdict of guilty. The third professor then stood up and said he had seen a meteorite strike the dead man but had remained silent because he wanted the daughter. Now remorse struck him.

A wildly implausible ending but no worse than all those meteorite movies where the hero saves the world with nukes or reversing the polarity.

Invasion By Meteorite.

"Carnate Crystal" by Mayo Reiss (1928 October, WEIRD TALES, available as a free pdf from www.archive.org) was about Edward Martin, a science hobbyist who grew crystals in aqueous solution.

Not a difficult thing actually. You may have done it in school science classes with salt solutions. Martin had access to a meteorite with a strange red crystal in it, so decided to try and grow more crystals from it by immersing it in chemical solutions.

He was too successful. The meteorite crystal grew and spilled out of its container. Martin picked up a fragment of the new growth, which then sank its traces into him. He felt and saw in his mind's eye the crystal's home world, where its kind grew slowly for lack of nutrients.

His body provided a flood of nutrients. A few hours later, red crystals began poking out of his skin and his body was slowly consumed. When eventually his friends and coworkers noticed his absence, nothing was found of him in his apartment but a pile of red dust.

"The Dancer In The Crystal" (1929 December, WEIRD TALES) by Francis Flagg (pseudonym of Henry George Weiss) caught my attention because the second half of the story was set in the Calgary foothills. The city was specifically named, although the action took place out in the countryside.

The premise was that in 1930, a meteorite fell in Manitoba. When it was recovered, it was found to contain seven crystals, each with a swirl of black gas in its centre. A wanna-be mad scientist eventually got hold of the crystals and took them out to the foothills, 1,500 km to the west in Alberta. He broke a couple open and discovered he had released aliens.

It was 1941, and suddenly all the electricity in the world was sucked up by the aliens. Cities without electricity quickly became hell. No telephones or telegraphs, no streetlights, nor any oil lamps left because no one used them in years. Rioters, rapists, robbers, and barbarians reigned.

A couple of decades later, after a semblance of order had been restored and a bit of civilization recreated when the electricity came back on, the narrator visited the Alberta foothills and found a giant blackened pit.

The residents nearby told him what happened. The two aliens had used all the electricity to power themselves out into space, leaving behind chaos.

The other crystals were still intact. The narrator ended his tale as follows: *For in the bottom of the box was a round object; and when I picked it up my fascinated eyes were held by a transparent bubble the size of an orange with a black spot at its core, dancing, dancing ...*

We <u>Will</u> Go Together.

"The Last Gentleman" by Rory Magill (1953 January, WORLDS OF IF, available as a free pdf from www.archive.org) began with reports of five atomic explosions in a straight line across western USA. Only one village in Utah was obliterated, and the other explosions occurred in the desert.

There was a brief flurry of speculation in the news but in the absence of information the story faded away. The obvious enemies of the USA denied it was them, nor did it seem to be them because of the waste of atomic bombs in an empty desert.

It wasn't nuclear war but the people were baffled. One man called his astronomer brother Hugh, who came to visit. He had the horrible truth. The explosions were fragments of a white dwarf, burrowing their way into Earth's core.

By themselves, they would eventually destroy life as Earth imploded from the huge gravity of the fragments. Hugh told his brother not to worry about them. Look up, way up. The sixth and largest of the fragments was inbound and would arrive in ten hours. Earth would not survive.

Or Perhaps Not.

"Breath Of The Comet" by A. Rowley Hilliard (1934 January, ASTOUNDING, available as a free pdf from www.archive.org) was the sad story of Professor Hertz, who discovered a comet inbound for Earth. He shouted Doom! from the mountaintops but was only a voice crying in the wilderness. Scorned by all, he prepared himself a bunker to survive the passage of the comet across the face of the planet.

There followed an infodump about comets and planetary perturbations that would change their orbits unexpectedly. This story would have been written in 1933 when Pluto had only been discovered in early 1930, so it was cutting edge fiction.

Emerging from his bunker after the passage, Hertz found the land burned to cinders, with a few human-shaped lumps scattered on the ground. He laughed and laughed, for he had been vindicated. The realization that he was the last human on Earth sobered him.

A Zeppelin arrived and picked him up. The damage done by the comet was only regional, and the rest of Earth survived intact. The destruction was no worse than a hurricane track or a big earthquake. Hertz went mad. He wanted to gloat over the destruction of the human species but couldn't.

TEMPUS FUGIT: PART 6
by Dale Speirs

[Parts 1 to 5 appeared in OPUNTIAs #401, 432, 442, 464, and 483.]

The Clock Is Ticking.

"Number Seven" by Livingstone B. Morse was a short story in THE BLACK CAT issue of 1897 September, available as a free pdf at www.archive.org. A man had a new grandfather clock in his house that seemed to tick-tock rather loudly. So much so, that no matter where he went in the house he could hear the tick-tock. He fled the house to the barn, yet still heard it.

Stumbling down the road, a neighbour farmer met up with him and was astonished at the poor man's upset. Now far down the road, he still heard the tick-tock as a brain worm, getting louder and louder while no one else could hear the clock.

Also from THE BLACK CAT was "The Clock That Went Crazy" by Louise Betts Edwards (1898 April). A clock tower in the rural village of Corinne was acting strangely, but instead of people assuming a mechanical malfunction, the citizenry were in a dither. Some said Judgement Day was nigh, notwithstanding that the Bible was silent on erratic clock towers as a foreboding of Armageddon.

The hands of the clock, which a moment ago had marked fifteen minutes past ten, had suddenly turned a swift pirouette round the dial face, not once only, but twice and thrice, and so quickly that the dazzled eye counted dozens of hands instead of a single pair. Then, with equal suddenness, the movement stopped, leaving people rubbing their eyes.

The clock looked placidly at them with its big, benevolent, white face, as a frisky old cat dares any one to say that it was recently executing kittenish capers. The time indicated was sixteen minutes past ten. "Exactly traversed its own circle, by Jove!" breathed Henderson.

Inspection of the mechanism by level-headed citizens produced no results, and a guard mounted in the clock tower was useless in stopping it. Concurrent with this mystery, a revivalist was preaching, with the assistance of a magic lantern to show the sinners what they might expect. He urged them to give up vanity and flash, and offered to collect their gold watches and silks for disposal.

Nearly too late, it was realized the con man had something to do with the errant clock. On his arrival in Corinne, he had photographed the clock tower at intervals. He then shone the images in rapid sequence to make it look the clock was running wild yet returning to the correct time.

That got all the villagers riled up and ready for Judgement Day. A rather elaborate plot, but a cutting-edge one, given that magic lanterns were the state of the art in 1898. Rural folk would seldom if ever have seen one in operation, which would help the scam.

Again from the same magazine, in the 1901 January issue, was "When Time Turned" by Ethel Watts Mumford. The narrator was visiting a doctor who introduced him to another man named Gage. He told a story about how time began running backward for him at his wife's death.

He was at her side when she went. At that moment, clocks began ticking backward. Gage then lived his life backward. It was all a delusion, insanity brought on by the shock of her death. Nonetheless he managed to put out a convincing story about his life in reverse. The fact that he looked in his sixties while claiming to be 23 years old was explained by him as having led his life backward and then forward again.

"At The Third Hour" by Crete Warren (1906 January, THE BLACK CAT) was about a repairman who had to make a repair on a tower clock. It was late at night and a blizzard was brewing, but he figured he could do the job quickly. He lowered himself on a rope, then edged his way on a horizontal hand to where he had to fix the clock.

The job turned into a nightmare when his hand slipped and let the rope dangle freely. The wind kept blowing it sideways out of reach, while the clock hand was sloping down as it moved. If he slipped, the long fall would kill him. It meant he had to hold on with all his strength to the vertical hands until they moved around to horizontal again.

No pedestrians were about to hear his cries for help, and the cold and ice made it increasingly difficult to hang onto the clock hands. He finally managed to grasp the rope and get back inside the tower, but at a huge emotional cost that would haunt him the rest of his life.

"The Sign Of Scorpio" by Frank Lillie Pollock (1906 June, THE BLACK CAT) was about Carl Reaumur, the wayward son of a clockmaker. His dying father made him promise to look after and keep running a grandfather clock he had built. Reaumur didn't, and sold the clock and the remnants of the estate. His wanderlust took him across America in various jobs before returning to his birthplace.

He found the woman who had bought the clock and courted her. Not because of the clock, mind, because it wasn't that important to him. Five years to the day after the old man had died, the clock struck midnight and then kept striking endlessly. Reaumur investigated and saw a letter extruded from the clock by a hidden mechanism.

Reading the letter, he discovered it was a message from beyond the grave by his father. Knowing that his son would have blown any big money quickly, he had left his fortune in care of solicitors, to be collected five years after, and only if Reaumur still had the clock. His guilty conscience compelled him to give the fortune to his wife.

"The Good-Natured Pendulum" by Edward Everett Hale was an 1869 story which I read as a reprint in the 1933 May AMAZING STORIES, available as a free pdf at www.archive.org.

A schoolboy had been learning the mathematics behind pendulums, that if you shorten the stroke then a clock running off it will run faster. The school clock, by which the time of classes was regulated, was a large grandfather clock.

The schoolboy, a clever lad indeed, opened the clock unobserved. He took the plum bob off the bottom of the pendulum and attached a horseshoe halfway up. As a result, classes were but a fraction of their regular length, much to the puzzlement of the teachers, who couldn't understand why the time seemed to pass so quickly.

It backfired on the lad though. Recess was but a few minutes, and lunch was a hasty grab and go meal. The boy took reset the clock back the way it was once the accelerated classes were over, so that they had the day off by 10h00.

All good things come to an end, and eventually the headmaster figured out what was happening. It was fun while it lasted.

The story wasn't science fiction and so didn't belong in AMAZING STORIES. On the other hand, the boy was using science and mathematics quite well, positively a genius, so it was in the spirit of Hugo Gernsback. John W. Campbell Jr would have taken it as an ANALOG story a few years later.

I took this photo on May 24, but as of November when this issue was set, the clocks were still off. Seen on Stephen Avenue pedestrian mall in the downtown core.

Gimme That Old Time Radio.

"The Judas Clock" was a 1945 episode, written by Frederick Maytho (sp.?), of INNER SANCTUM, an old-time radio series available as free mp3s from www.otrrlibrary.org. It was introduced, as always, by the sound of a creaking door, followed by a smarmy host who delighted in ghoulish puns.

In this episode, he told his listeners not to worry about the chilly atmosphere and corpses lying about the inner sanctum because "*Many are cold but few are frozen*". "*Your sheet is reserved for you but don't tear it. Remember the high ghost of living.*", the host bwah-ha!-ha!-ed.

He introduced the story with "*If you've got some time to kill ..*" The protagonist was Sebastian Packard, a clockmaker like his father before him. For thirty years he had been searching for one specific clock, the Cleopatra Clock, and also for the man who had murdered his father.

A woman, surname Arnold, walked into Packard's shop, wanting him to visit her house. Her husband had a non-functioning giant clock, too heavy to move, cased in black marble. The dial face had a strange engraving of a beautiful woman holding the limp form of a young man in her arms. Packard immediately recognized it as the Cleopatra Clock.

An infodump then explained that Ceopatra had paid a servant 40 gold pieces to poison her younger brother. The gold pieces eventually ended up in Italy, where a prince used them to power a large pendulum clock. (Pendulum clocks are operated by a large descending weight.)

Packard narrated that he got the coins decades ago. The explanation was convoluted, his father having unknowingly bought it as stolen property from an Italian cousin Andrew who had murdered the owner. A police inspector touched the clock and fell dead from unknown causes.

Later the clock fell on his father and crushed him to death while Andrew watched unconcerned, unaware that Packard was watching from hiding. Andrew left and so did Packard, but not before taking the 40 gold pieces out of the clock.

Many alarums and excursions followed as the flashbacks took up the story. The death toll steadily rose. Packard figured out that the Cleopatra Clock had been rigged to topple forward when it struck midnight.

Back in the present, Packard surmised that Mr Arnold was in fact Cousin Andrew. He rigged the clock for his own form of sabotage, with 20 of the gold pieces in one counterweight and 10 in the other, retaining the other 10 for himself.

Arnold recognized Packard despite not having seen him since he was a boy thirty years ago. They told each other lies and waited out the stroke of midnight. The clock fell on Arnold and Packard had his revenge. "*A fine time was had by all*", summed up the host in the closing. "*A timely moral*", he added, and finished off with a joke about working overtime.

The greatest mystery was never explained. Why was the episode titled "The Judas Clock"? It actually would have made a better story with that name and thirty pieces of silver.

AMOS AND ANDY was the most successful old-time radio series ever, running from 1928 to 1955 in its recognizable form. It was preceded by a similar show in the early 1920s and dwindled away in the late 1950s as a disc jockey show. It was heavily criticized as racist because the series' creators and writers, Freeman Gosden and Charles Correll, were white men playing the part of Negroes, although the actresses and supporting characters were blacks.

However, if you did not know the back story, listening to it would create the impression that the characters were Southerners transplanted to the big city. Nobody called them nigger and they moved about in places on the show that in real life would not accept Negroes at that time.

They had authentic accents because Gosden and Correll were from Georgia. The scripts could be performed on television by white actors today if no one knew the past history.

An example is "The Electric Clock Caper", which aired in 1944. Andy Brown was given an electric clock as a gift by his fellow lodge members in appreciation for his part in helping found the organization twenty years ago. The next morning he plugged in the clock at his apartment but it didn't work.

Discussing the matter with fellow lodge member Kingfish Stevens, they decided to take it for service to the manufacturer, the Wilson Clock Company, which had its factory in the city. On arrival, they discovered it had been converted into a war materials production plant, manufacturing altimeters for aircraft.

The company had been expecting two men to deliver a new prototype of altimeter. There was a misunderstanding. The sentry had been told to expect them and by mistake sent Brown and Stevens to the manager's office. The two got lost en route and wound up in a highly classified research workshop.

Someone else thought they were spies trying to steal the altimeter and had them arrested by the FBI, who took them in for questioning. After a number of comic turns, the confusion was resolved and the two sent on their way.

All of the episodes had twist endings. For this one, it was their return home and finding out the reason the clock hadn't worked was because Brown was overdue on his electricity bill. The power company had cut him off that morning just before he went to plug in the clock.

Seen On The Screen.

"Ninety Years Without Slumbering" was a 1963 episode of the television series THE TWILIGHT ZONE. The teleplay was by Richard De Roy, based on a short story by George Clayton Johnson. Truth be told, it was based just as much on the famous 1876 song "My Grandfather's Clock" by Henry Clay Work.

The episode was about an elderly man living with his pregnant granddaughter and her husband. In his room he had a grandfather clock handed down from one generation to the next, about which he developed an obsession. Like the song, he thought that when the clock stopped ticking, so would he. Once it did stop momentarily, and he had a psychosomatic heart attack.

His granddaughter convinced him to sell the clock to a neighbour. It caused him distress when he found out they weren't conscientious about winding it. The episode culminated during his sleep when he had a conversation with his ghost spirit which left his body. The upshot was that both agreed it was a silly superstition and he could keep living regardless of the clock.

This wasn't what the viewer would expect, as a clichéd plot would have been a tearjerker about the old man dying when the clock stopped. Dripping with sentimentality, nonetheless.

The movie THE HOUSE WITH A CLOCK IN ITS WALLS (2018) was based on a 1973 novel by John Bellairs, with screenplay by Eric Kripke. Set in 1955, the movie was about orphaned 10-year-old Lewis Barnavelt, who went to live with his maternal uncle Jonathan, a warlock who lived in a spooky mansion filled with clocks. Next-door neighbour Florence Zimmerman, a witch, was frequently in the house.

The previous occupants of the house were warlock Isaac Izard and his witch wife Selena. They had hidden a clock in the walls of the house, for which Jonathan was constantly searching. Barnavelt had his own problems adjusting to school, which he sublimated by teaching himself magic from grimoires in the house library.

Barnavelt accidently revived Izard, after which many alarums and excursions. The clock was set to destroy humanity. Because, apparently. There was a last-minute battle to the death and the world was saved. Barnavelt destroyed the clock on his own.

The movie dragged from time to time, and its pace was measured. For adults, it was acceptable but I suspect that tweenies and teenagers would have found it boring in several scenes.

What Time Is It?

In 1954 and 1955, a television series SHERLOCK HOLMES was aired on NBC. It was written and produced by Sheldon Reynolds in France, where production costs were much lower. Ronald Howard was Holmes and H. Marion Crawford played Watson.

The episodes are in the public domain and therefore available in several different box sets. The collection I'll cite here is "Ultimate Sherlock Holmes TV" from St Clair Entertainment.

More of the episodes were pastiches but some were based on canon stories, however loosely. Interestingly there was some continuity between episodes when characters referred back to previous events. That was unusual for the times, as most television shows were zero-reset.

"The Case Of The Belligerent Ghost" (1954), written by Charles Early, began with Watson staggering into 221B with a black eye. He had attended a heart attack victim Albert Higgins, who didn't survive. After Watson left the victim's rooming house, he was astonished to see Higgins walking down the street. When challenged, Higgins punched Watson in the eye and ran away.

Holmes and Watson returned to Higgins' room where they talked with the landlady Maggie Blake. She told them he had been a day watchman at a nearby art gallery. His shift ended at 21h00 and he punctually returned home a few minutes later for his supper. Watson was puzzled because by his watch he had met Higgins just after 20h00. Blake insisted the time had to be after 21h00.

Leaving that conundrum aside for the moment, Holmes and Watson visited the morgue and verified that the body of Higgins was indeed him. Holmes noted that Higgins had specks of paint on his hands and face, as if he had been painting. The police recognized Higgins as a counterfeiter, so Inspector Lestrade came into the case saying "*He made the best pound notes you ever saw.*"

The time came into question again. Lestrade said Blake had called the police at 21h30, but Watson continued to insist there was something wrong with the chronology. More annoyingly, the following night Watson was once again accosted by the ghost of Higgins, who pulled his nose and then ran off. This time the incident took place just after 21h00.

Holmes suspected something was up at the art museum. He correctly predicted there would be a forgery made by Higgins substituted for a Da Vinci painting on loan from the Italian government.

While Lestrade bumbled elsewhere, Holmes and Watson returned to the museum after hours and found the stolen painting hidden underneath another. The curator organized the crime, paying off Higgins. Unfortunately when Higgins had a heart attack, the curator had to pay Blake to adjust the chronology and establish an alibi.

The curator subsequently dressed as Higgins to discredit Watson with his tales of ghosts assaulting him. In the final confrontation, Watson got his revenge and captured the curator. A twist ending then finished the episode. The explanations of the episode were slightly questionable, but all told the episode was a clever one. Time is indeed the simplest thing.

SEEN IN THE LITERATURE

Tsunoda, N., et al (2020) **The impact of nuclear shape on the emergence of the neutron dripline.** NATURE 587:66-71

Authors' abstract: *Atomic nuclei are composed of a certain number of protons Z and neutrons N. A natural question is how large Z and N can be. The study of superheavy elements explores the large Z limit, and we are still looking for a comprehensive theoretical explanation of the largest possible N for a given Z, the existence limit for the neutron-rich isotopes of a given atomic species, known as the neutron dripline.*

The neutron dripline of oxygen (Z = 8) can be understood theoretically as the result of single nucleons filling single-particle orbits confined by a mean potential, and experiments confirm this interpretation. However, recent experiments on heavier elements are at odds with this description.

Here we show that the neutron dripline from fluorine (Z = 9) to magnesium (Z = 12) can be predicted using a mechanism that goes beyond the single-particle picture. As the number of neutrons increases, the nuclear shape assumes an increasingly ellipsoidal deformation, leading to a higher binding energy.

The saturation of this effect (when the nucleus cannot be further deformed) yields the neutron dripline: beyond this maximum N, the isotope is unbound and further neutrons 'drip' out when added.

Our calculations are based on a recently developed effective nucleon-nucleon interaction, for which large-scale eigenvalue problems are solved using configuration-interaction simulations. The results obtained show good agreement with experiments, even for excitation energies of low-lying states, up to the nucleus of magnesium-40 (which has 28 neutrons).

Deng, Z., et al (2020) **Early oxidation of the Martian crust triggered by impacts.** SCIENCE ADVANCES 6:doi.org/10.1126/sciadv.abc4941 (available as a free pdf)

Authors' abstract: *Despite the abundant geomorphological evidence for surface liquid water on Mars during the Noachian epoch (>3.7 billion years ago), attaining a warm climate to sustain liquid water on Mars at the period of the*

faint young Sun is a long-standing question. Here, we show that melts of ancient mafic clasts from a martian regolith meteorite, NWA 7533, experienced substantial Fe-Ti oxide fractionation.

This implies early, impact-induced, oxidation events that increased by five to six orders of magnitude the oxygen fugacity of impact melts from remelting of the crust. Oxygen isotopic compositions of sequentially crystallized phases from the clasts show that progressive oxidation was due to interaction with an ^{17}O-rich water reservoir.

Such an early oxidation of the crust by impacts in the presence of water may have supplied greenhouse gas H_2 that caused an increase in surface temperature in a CO_2-thick atmosphere.

O'Rourke, L., et al (2020) **The Philae lander reveals low-strength primitive ice inside cometary boulders.** NATURE 586:697-701

Authors' abstract: *On 12 November 2014, the Philae lander descended towards comet 67P/Churyumov-Gerasimenko, bounced twice off the surface, then arrived under an overhanging cliff in the Abydos region. The landing process provided insights into the properties of a cometary nucleus.*

Here we report an investigation of the previously undiscovered site of the second touchdown, where Philae spent almost two minutes of its cross-comet journey, producing four distinct surface contacts on two adjoining cometary boulders. It exposed primitive water ice, that is, water ice from the time of the comet's formation 4.5 billion years ago, in their interiors while travelling through a crevice between the boulders.

Our multi-instrument observations made 19 months later found that this water ice, mixed with ubiquitous dark organic-rich material, has a local dust/ice mass ratio of 2.3 +0.2 or -0.16:12.3 -0.16 or +0.2:1, matching values previously observed in freshly exposed water ice from outbursts and water ice in shadow.

At the end of the crevice, Philae made a 0.25-metre-deep impression in the boulder ice, providing in-situ measurements confirming that primitive ice has a very low compressive strength (less than 12 pascals, softer than freshly fallen light snow) and allowing a key estimation to be made of the porosity (75 ±7 per cent) of the boulders' icy interiors.

Komacek, T.D. (2020) **Stable climates for temperate rocky circumbinary planets.** JOURNAL OF GEOPHYSICAL RESEARCH: PLANETS 125:doi.org/10.1029/2020JE006712 (available as a free pdf)

Author's abstract: *Recent discoveries of "circumbinary" planets that orbit multiple stars have spurred advances in understanding their climate. Notably, such planets have strong seasonal-like variations in received starlight due to the motion of the planet relative to that of their host stars.*

A recent study uses numerical modeling techniques similar to those used to study climate change on Earth to determine if these variations in starlight cause significant variations in the planetary surface temperature.

They find that the variations are small for planets with similar properties to Earth, and as a result temperatures never get too hot or cold for Earth-like life to exist. This indicates that circumbinary planets that have a similar size as and receive a similar amount of incident starlight to Earth are promising targets to search for signs of life.

Circumbinary planets may comprise a significant fraction of the temperate rocky planets in our galaxy. A wide range of previous work has explored the climate of circumbinary planets with one-dimensional energy balance models, but studies utilizing three-dimensional general circulation models (GCMs) have only explored gaseous or ocean-covered planets.

The study determined the impact of the time-varying stellar forcing on the climate of Earth-like circumbinary planets in a broad range of 12 modeled systems with stellar spectral types from G2 to M0. The planets modeled are assumed to have the same continental and oceanic configuration as Earth and receive the same time-averaged stellar instellation as Earth.

In all cases the climate variability has a low amplitude, with local maximum temperatures never exceeding the wet bulb threshold for human life. As a result, Earth-like life could persist on circumbinary planets that undergo large-amplitude orbital variations in instellation, and such planets remain viable targets to search for biosignatures and other key habitability indicators.

Speirs: This throws out many science fiction stories and novels where the general assumption was that planets orbiting binary stars would have extreme climatic changes.

Sulej, T., et al (2020) **The earliest-known mammaliaform fossil from Greenland sheds light on origin of mammals.** PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES USA 117:26861-26867

Authors' abstract: *Mammals underwent an adaptive radiation shortly after the acquisition of several morphological characters in their dentition and jaw. Most of these innovations evolved to facilitate more efficient food processing. The double-rooted molariforms with a specialized crown are one such innovation, but their role in the early diversification of mammals has remained poorly understood.*

This study shows a comprehensive analysis of an early mammaliaform dentary, which combines data from comparative anatomy, CT scanning, and FEA. The new fossil fills an important gap in our understanding of mammaliaform evolution showing a transitional stage between triconodont-like molariform pattern of morganucodontids and multicusped pattern of haramiyidans. Moreover, this study demonstrates that double-rooted teeth are more resistant to bite-related stresses than singlerooted teeth.

Synapsids are unique in having developed multirooted teeth and complex occlusions. These innovations evolved in at least two lineages of mammaliamorphs (Tritylodontidae and Mammaliaformes).

Triassic fossils demonstrate that close to the origins of mammals, mammaliaform precursors were "experimenting" with tooth structure and function, resulting in novel patterns of occlusion.

One of the most surprising examples of such adaptations is present in the haramiyidan clade, which differed from contemporary mammaliaforms in having two rows of cusps on molariform crowns adapted to omnivorous/herbivorous feeding. However, the origin of the multicusped tooth pattern present in haramiyidans has remained enigmatic.

Here we describe the earliest-known mandibular fossil of a mammaliaform with double molariform roots and a crown with two rows of cusps from the Late Triassic of Greenland.

The crown morphology is intermediate between that of morganucodontans and haramiyidans and suggests the derivation of the multicusped molariforms of haramiyidans from the triconodont molar pattern seen in morganucodontids. Although it is remarkably well documented in the fossil record, the significance of tooth root division in mammaliaforms remains enigmatic. The results of our biomechanical analyses (finite element analysis) indicate that teeth with two roots can better withstand stronger mechanical stresses like those resulting from tooth occlusion, than teeth with a single root.

Venditti, C., et al (2020) **150 million years of sustained increase in pterosaur flight efficiency.** NATURE 587:83-86

Authors' abstract: *The long-term accumulation of biodiversity has been punctuated by remarkable evolutionary transitions that allowed organisms to exploit new ecological opportunities. Mesozoic flying reptiles (the pterosaurs), which dominated the skies for more than 150 million years, were the product of one such transition.*

The ancestors of pterosaurs were small and probably bipedal early archosaurs, which were certainly well-adapted to terrestrial locomotion. Pterosaurs diverged from dinosaur ancestors in the Early Triassic epoch (around 245 million years ago). However, the first fossils of pterosaurs are dated to 25 million years later, in the Late Triassic epoch. Therefore, in the absence of proto-pterosaur fossils, it is difficult to study how flight first evolved in this group.

Here we describe the evolutionary dynamics of the adaptation of pterosaurs to a new method of locomotion. The earliest known pterosaurs took flight and subsequently appear to have become capable and efficient flyers. However, it seems clear that transitioning between forms of locomotion, from terrestrial to volant, challenged early pterosaurs by imposing a high energetic burden, thus requiring flight to provide some offsetting fitness benefits.

Using phylogenetic statistical methods and biophysical models combined with information from the fossil record, we detect an evolutionary signal of natural selection that acted to increase flight efficiency over millions of years.

Our results show that there was still considerable room for improvement in terms of efficiency after the appearance of flight. However, in the Azhdarchoidea, a clade that exhibits gigantism, we test the hypothesis that there was a decreased reliance on flight and find evidence for reduced selection on flight efficiency in this clade.

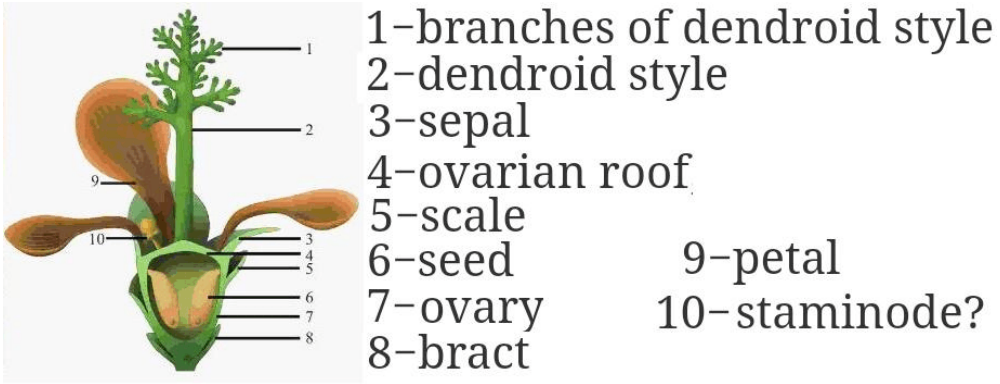
Fu, Q., et al (2020) **Nanjinganthus is an angiosperm, isn't it?** CHINA GEOLOGY 3:359-361

[Angiosperms are flowering plants. They were rare until after the end-Cretaceous extinction of dinosaurs. Like mammals, they thrived after the asteroid.]

Authors' abstract: *The discovery of the Early Jurassic (>174 Ma) angiosperm Nanjinganthus has triggered a heated debate among botanists. Nanjinganthus is an Early Jurassic angiosperm recognized based on the study of over 200 specimens.*

However, some other authors have misinterpreted these fossils. Here the authors try to remedy the problems, by pointing out the logical pitfalls in these publications and underscoring a long-used, workable criterion for early angiosperms. ... Nanjinganthus is an angiosperm.

[Image is from this paper. Not an aesthetic flower, but scientifically it is.]



Daza, J.D., et al (2020) **Enigmatic amphibians in mid-Cretaceous amber were chameleon-like ballistic feeders.** SCIENCE 370:687-691

Authors' abstract: *Extant amphibians are represented by three fairly simple morphologies: the mostly hopping frogs and toads, the low-crawling salamanders, and the limbless caecilians. Until the early Pleistocene, and for more than 165 million years, there was another group, the albanerpetontids. We know little about this group because amphibian fossils are poorly preserved, and previous specimens from this group are both rare and mostly badly damaged.*

We describe a set of fossils preserved in amber showing that this group was unusual both in their habitat use (they may been climbers) and their feeding mode, which appears to have been convergent with the ballistic feeding now seen in chameleons.

Albanerpetontids are tiny, enigmatic fossil amphibians with a distinctive suite of characteristics, including scales and specialized jaw and neck joints. Here we describe a new genus and species of albanerpetontid, represented by fully articulated and three-dimensional specimens preserved in amber.

These specimens preserve skeletal and soft tissues, including an elongated median hyoid element, the tip of which remains embedded in a distal tongue pad. This arrangement is very similar to the long, rapidly projecting tongue of chameleons. Our results thus suggest that albanerpetontids were sit-and-wait ballistic tongue feeders, extending the record of this specialized feeding mode by around 100 million years.

Gibbs, S.J., et al (2020) **Algal plankton turn to hunting to survive and recover from end-Cretaceous impact darkness.** SCIENCE ADVANCES 6:doi.org/10.1126/sciadv.abc9123 (available as a free pdf)

Authors' abstract: *The end-Cretaceous bolide impact triggered the devastation of marine ecosystems. However, the specific kill mechanism(s) are still debated, and how primary production subsequently recovered remains elusive. We used marine plankton microfossils and eco-evolutionary modeling to determine strategies for survival and recovery, finding that widespread phagotrophy (prey ingestion) was fundamental to plankton surviving the impact and also for the subsequent reestablishment of primary production.*

Ecological selectivity points to extreme post-impact light inhibition as the principal kill mechanism, with the marine food chain temporarily reset to a bacteria-dominated state. Subsequently, in a sunlit ocean inhabited by only rare survivor grazers but abundant small prey, it was mixotrophic nutrition (autotrophy and heterotrophy) and increasing cell sizes that enabled the eventual reestablishment of marine food webs some 2 million years later.

Shimada, K., and H.D. Hanks (2020) **Shark-bitten hesperornithiform bird bone from a Turonian (Upper Cretaceous) marine deposit of northeastern South Dakota, U.S.A.** TRANSACTIONS OF THE KANSAS ACADEMY OF SCIENCE 123:414-418

Authors' abstract: *In this paper, a shark-bitten partial tibiotarsus of a hesperornithiform bird is described from the Upper Cretaceous of Grant County, South Dakota, U.S.A. Whether the bite marks represent a predatory attack or scavenging is uncertain, but they are attributed to an anacoracid shark, Squalicorax cf. S. falcatus.*

The specimen is significant because it further indicates that hesperornithiform birds were common food sources for carnivores in the Late Cretaceous Western Interior Seaway of North America, and that Squalicorax was a trophic generalist.

Westermeier, A.S., et al (2020) **Functional-morphological analyses of the delicate snap-traps of the aquatic carnivorous waterwheel plant (Aldrovanda vesiculosa) with 2D and 3D imaging techniques.** ANNALS OF BOTANY 126:1099-1107

Authors' abstract: *The endangered aquatic carnivorous waterwheel plant (Aldrovanda vesiculosa) catches prey with 3 to 5-mm-long underwater snap-traps. Trapping lasts 10 to 20 milliseonds, which is 10-fold faster than in its famous sister, the terrestrial Venus flytrap (Dionaea muscipula).*

After successful capture, the trap narrows further and forms a 'stomach' for the digestion of prey, the so-called 'sickle-shaped cavity'. To date, knowledge is very scarce regarding the deformation process during narrowing and consequent functional morphology of the trap.

Anich, P.S., et al (2020) **Biofluorescence in the platypus (Ornithorhynchus anatinus).**. MAMMALIA 84:doi.org/10.1515/mammalia-2020-0027 (available as a free pdf)

Authors' abstract: *The occurrence of biofluorescence across Mammalia is an area of active study. We examined three specimens of the platypus (Ornithorhynchus anatinus) from Tasmania and New South Wales, Australia, housed in the Field Museum of Natural History and the University of Nebraska State Museum, under visible light and ultraviolet light.*

The pelage of the animals appeared uniformly brown under visible light and green or cyan under UV light, due to fluoresced wavelengths that peaked around 500 nm. Our observations are the first report of biofluorescence in a monotreme mammal.

Within mammals, biofluorescence of the pelage under ultraviolet light has been previously documented in nocturnal-crepuscular New World taxa including marsupial opossums and placental flying squirrels. Platypuses are typically nocturnal-crepuscular and use a suite of unique phenotypic traits to exploit low-light aquatic environments at dawn, dusk, overnight, and in murky water.

Of the species of mammals previously known to have biofluorescent pelage under UV light, all are nocturnal-crepuscular and only the water opossum (Chironectes minimus), which biofluoresces purple, is semi-aquatic. The fur of other species biofluoresces in shades of red, orange, yellow, blue, purple, lavender, and pink.

This new observation of biofluorescence in the platypus under UV light strengthens the hypothesis that the trait is adaptive in low-light environments.

Potts, R., et al (2020) **Increased ecological resource variability during a critical transition in hominin evolution.** SCIENCE ADVANCES 6:doi.org/10.1126/sciadv.abc8975 (available as a free pdf)

Authors' abstract: *Although climate change is considered to have been a large-scale driver of African human evolution, landscape-scale shifts in ecological resources that may have shaped novel hominin adaptations are rarely investigated. We use well-dated, high-resolution, drill-core datasets to understand ecological dynamics associated with a major adaptive transition in the archeological record ~24 km from the coring site.*

Outcrops preserve evidence of the replacement of Acheulean by Middle Stone Age (MSA) technological, cognitive, and social innovations between 500 and 300 thousand years ago, contemporaneous with large-scale taxonomic and adaptive turnover in mammal herbivores.

Beginning ~400 kiloyears ago, tectonic, hydrological, and ecological changes combined to disrupt a relatively stable resource base, prompting fluctuations of increasing magnitude in freshwater availability, grassland communities, and woody plant cover. Interaction of these factors offers a resource-oriented hypothesis for the evolutionary success of MSA adaptations, which likely contributed to the ecological flexibility typical of Homo sapiens foragers.

Waters, M.R., et al (2020) **The age of Clovis: 13,050 to 12,750 cal yr B.P.** SCIENCE ADVANCES 6:doi.org/10.1126/sciadv.aaz0455 (available as a free pdf)

Authors' abstract: *For decades, Clovis was considered to represent the basal archaeological horizon in North America and that later technologies in North and South America were believed to be derived from it. Clovis is characterized by a tool assemblage that includes bifaces and a distinctive lanceolate fluted projectile point, blade cores and blades, and osseous points and tools.*

The belief that Clovis tools were left behind by the first people to enter the Americas has changed with the discovery of sites predating Clovis in North and South America, and genetic studies that show North America was occupied a few millennia before Clovis appeared on the landscape.

That said, dating archaeological sites of the Clovis complex is important to understand how Clovis fits into the process of the Late Pleistocene settlement of the Americas and the extinction of megafauna.

Thirty-two radiocarbon ages on bone, charcoal, and carbonized plant remains from 10 Clovis sites range from 11,110 ± 40 to 10,820 ± 10 ^{14}C years before the present (yr B.P.). These radiocarbon ages provide a maximum calibrated (cal) age range for Clovis of ~13,050 to ~12,750 cal yr B.P.

This radiocarbon record suggests that Clovis first appeared at the end of the Allerød and is one of at least three contemporary archaeological complexes in the Western Hemisphere during the terminal Pleistocene.

Stemmed projectile points in western North America are coeval and even older than Clovis, and the Fishtail point complex is well established in the southern cone of South America by ~12,900 cal yr B.P.

Clovis disappeared ~12,750 cal yr B.P. at the beginning of the Younger Dryas, coincident with the extinction of the remaining North American megafauna (Proboscideans) and the appearance of multiple North American regional archaeological complexes.

Joskowicz, Ari (2020) **The Age of the Witness and the Age of Surveillance: Romani Holocaust testimony and the perils of digital scholarship.** AMERICAN HISTORICAL REVIEW 125:1205-1231

Author's abstract: *For over half a century, historians have made ample use of witness testimonies. Efforts to preserve the accounts of marginalized people in particular have broadened the range of voices available to us and significantly expanded the field. Yet we have paid too little attention to the potentially disturbing consequences of the creation and distribution of such testimonies.*

Focusing on the experiences of Romani Holocaust survivors, this essay argues that new practices of surveillance and victim witnessing developed in tandem, from the mid-twentieth century to the present.

Beginning in the 1960s, prosecutors asked Romani survivors to testify about the crimes committed against them under Nazism even as state authorities continued to criminalize and surveil Romanies across Europe. These and related experiences have meant that different Romani witnesses, or potential witnesses, have often had to balance the desire to have their stories heard against the fear of being listened in on.

As surveillance becomes increasingly pervasive and as personal information is increasingly monetized, the lessons that European Romanies learned as early victims of targeted policing remain salient for historians today. Despite its potential to empower, victim-witnessing also creates new vulnerabilities, both those we can currently anticipate and those we can't yet fully imagine.

Jütte, Daniel (2020) **Sleeping in church: Preaching, boredom, and the struggle for attention in Medieval and Early Modern Europe.** AMERICAN HISTORICAL REVIEW 125:1146-1174

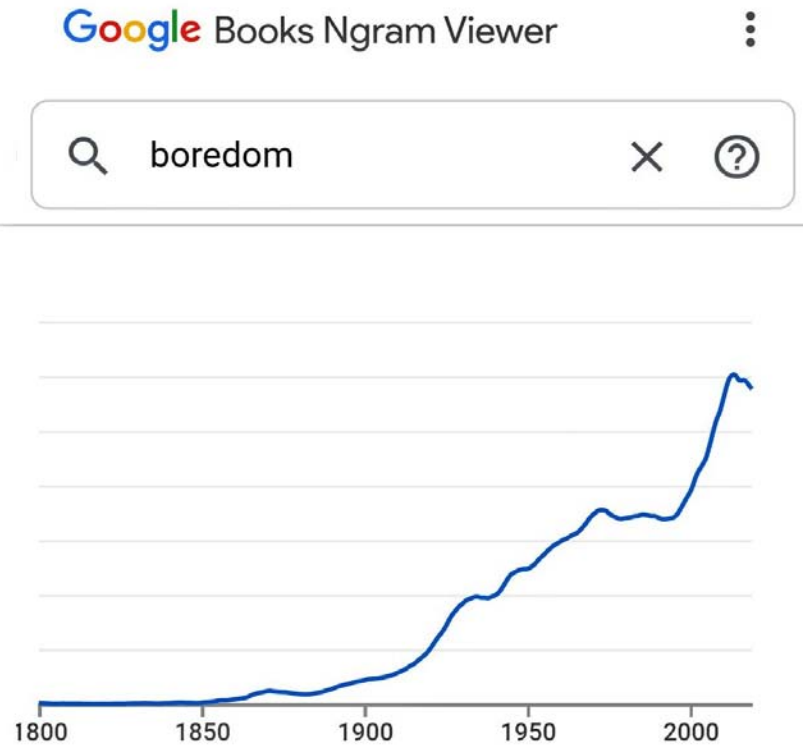
Author's abstract: *The word "boredom" was not used in English before the eighteenth century. Does this mean that pre-eighteenth-century people did not*

experience boredom? Or did their experience of boredom differ from ours? This article approaches these questions by exploring the history of people falling asleep in church, and asking whether boredom played a role in their slumber.

Across the confessional spectrum in premodern Europe, religious somnolence was depicted as a common and grave problem. The preoccupation with this problem went hand in hand with longstanding ecclesiastic concerns about deficient attention among the flock.

Probing medieval and early modern controversies about somnolence and boredom offers insight on two levels: First, it helps to correct the problematic presentism that identifies boredom as a quintessentially modern condition. Second, exploring the long history of boredom adds nuance to our understanding of premodern culture and mentalities, revealing, in the case of religious audiences, a struggle for attention that we would not expect to find in a world in which religion reigned supreme. The article also touches on other social and institutional contexts (such as court life) in which boredom was both endogenous and endemic.

Speirs: I checked www.books.google.com/ngrams and Jutte was correct. Apparently Charles Dickens invented the word in one of his novels. What struck me was how the graph took off after the year 2000.



Really? In a world like ours, people are still bored with life?

ZINE LISTINGS

[I only list zines I receive from the Papernet. If the zine is posted on www.efanzines.com or www.fanac.org, then I don't mention it since you can read it directly.]

THE FOSSIL #385 (US$10 per year from The Fossils Inc, c/o Tom Parson, 157 South Logan Street, Denver, Colorado 80209) Published by a group specializing in the history of zines since their beginnings in the 1870s.

This issue has a biography of Viola Frances Addison, not only a pioneer zinester of the 1890s but someone whose example could teach riot grrls the true history of zine suffrage. Addison (her maiden name; she was married twice, both times to zinesters) started the first apa for women only. She battered her way into national apa conventions, and she did it while operating a dental practice.

Also in this issue is the genealogy of a science fiction story that moved from professional publication to a fanzine, then back to a prozine, heavily edited each time.

WHEN WORDS COLLIDE 2021

August 2021 may be cutting it close for a convention to re-open but Calgary's annual readercon When Words Collide will give it a go from August 13 to 15. When Words Collide organizers are already at work and hope to include a few special events to mark the occasion. Information from whenwordscollide.org

At this time they are planning an in-person festival for August 2021. Should health concerns prevent a real-world convention, they will move the entire festival (except the banquet and autograph session) online. Either way, they are also planning to hold an online warm-up on Saturday, August 7, where they will have some special online presentations and social events.