Incorporated January 16 1979

OSFS Statement

May 2021, Issue 506, Volume 46, Number 5

An artist's depiction of Machairodus lahayishupup eating Hemiauchenia, a camel relative. Artist: Roger Witter

From the Rattlesnake Formation of central Oregon, where fossils of the newly identified species have been found.

This giant saber-toothed cat lived in North America between 5 million and 9 million years ago, weighed up to 900 pounds and hunted prey that likely weighed up to 1,000 to 2,000 pounds. In recognition of its origin, Calede and Orcutt collaborated with the Tamástslikt Cultural Institute to name the new species Machairodus lahayishupup . Machairodus is a genus of large saber-toothed cats that lived in Africa, Eurasia and North America, and in the Old Cayuse language, Laháyis Húpup means "ancient wild cat."

There were giant cats in Europe, Asia and Africa, during this period as well. Now we have our own giant saber-toothed cat in North America There's a very interesting pattern of either repeated independent evolution on every continent of this giant body size in what remains a pretty hyperspecialized way of hunting, or we have this ancestral giant saber-toothed cat that dispersed to all of those continents. It's an interesting paleontological question.

Event Coordinator – We have this monthly OSFS newsletter called The Statement. If you would like to be on the e-mail list contact the editor@ottawasfs.ca

Editor's Blather: – The, first few minutes of the lunar eclipse might have been visible from Ottawa, The full moon, variously called Flower, and/or Super, was worth having a glance when weather permited.

The associated partial solar eclipse the morning of June 10 is just a nip out of the edge from our point of view.

Annular Solar Eclipse on June 10, 2021 - Time

Time EST	Phase	Event	Direstion	Altitude
04:43:00	not up yet	Partial start	East-Northeast	Below horizon
05:05:00	Sunrise		East-Northeast	Just visible
05:39:00		Maximum	East-Northeast	Near horixon
06:39:00		Partial ends	East	Higher

For Your Viewing Pleasure

Jupiter and Saturn lie low in the southeast before dawn. Mars is low in the sunset glow. The Moon will be New on 10th.

Local Writer, Madona Skaff,

Hi everyone,

I'm thrilled to announce that the cover reveal for my new SF novel, Shifting Trust, will be Saturday, May 29, at 7 pm (EST).

Artwork was created by my talented daughter. There'll be readings as well as the world premiere of my exciting book trailer! Oh, and there will be door prizes!

Here's the link for the Facebook pre-order event. Remember to also register on Eventbrite.

https://www.facebook.com/events/567564504229542

Hope to see you Saturday.

Cheers! Madona

Fans of Harry Potter may be amused by the discovery of a "chocolate frog" in New Guinea. A new found specie is closely relaated to the Australian green tree frog.

http://www.sci-news.com/biology/litoria-mira-09706.html

LOC: Dear OSFen:

Many thanks for issue 507 (actually, I think it is issue 505) of the Statement. *(mea culpa Ed.)* I know there is little to report on these days, and the pandemic has seen to that. I hate to say it, but this may be the second summer in a row where there's nothing of anything happening. Believe me, I would be pleased to be wrong. I hope all are getting or have gotten their first done of vaccine at least.

I guess the 'yellowballs' are what we'd call star nurseries, superhot areas where stars are born, and perhaps ejected to populate the galaxy they are in. We continue to learn more, and we must learn more if we can stop ourselves from destroying ourselves, and head out to the stars.

My letter…I am told that Marc St-Pierre is all right now, but he and a few cousins have been left to wind up Sylvain's estate, as well as his mother's. I got notifications from Facebook that my uncle Don had died a few days ago, his wife Henrietta had appeared on a CBC documentary about senior figure skaters out in British Columbia. I am now editing a young adult novel from former Amazing Stories editor-in-chief Ira Nayman, and I hope to have that done before the end of this month.

Good to see my convention list is at least filling up the issue. I hope it is useful, if nothing else, in reminding you of conventions that have been cancelled or postponed, to go to their websites to see if there are plans for 2022 or 2023. I did have coming up a steampunk event in St. Thomas, Ontario, south of London, but they decided to cancel everything, and issue refunds to all. They do intend to start up again in 2022, and see if they can make a go of it. For the record, it was called The Beer-lesque and Carniv-ale, a combination microbrewery and steampunk event at the St. Thomas Steam Train Museum.

All done for the moment, keep the zines coming, and we will see you when the weather's warmer, I hope.

Yours, Lloyd Penney.

IN THE CORE OF THE MILKY WAY

Dr. Ken Tapping, Astronomer, National Research Council, Dominion Radio Astrophysical Observatory, Penticton, BC, V2A 6J9, June, 2021

Isaac Asimov's Foundation trilogy is one of the iconic works of science fiction. Published in 1953,the book is based upon our vision of what our galaxy was like at that time. The books describe the decline and fall of a galactic empire. The empire was ruled and administered from the planet Trantor, located at the centre of the galaxy. This location made administrative sense. At the time there was no known scientific reason not to.

On summer evenings, if we look south you will be looking towards the centre of our galaxy, which lie ssome 30,000 light years away. However, thanks to great clouds of dust and stars, we can only see a few thousand light years. Back in the 1950's large optical telescopes on the ground could not do much better; the centre of the Milky Way was hidden from view. Radio astronomy was a young science in those days, but radio telescopes had found a strong source of radio waves located at the Galactic Centre. It was called Sagittarius A, because it was the brightest known radio source in the constellation of Sagittarius. However, nobody knew what the source might actually be.

Back in the 1950's we believed the universe was on the whole, a fairly quiet place, which is the impression we get when lying under a dark, clear sky. Stars grew old and some blew up, but basically things changed only slowly. Today that illusion has gone. Now, in addition to optical telescopes on the ground, we have telescopes in space, which can see ultraviolet, X-rays and other high-energy radiation that does not reach the ground. Radio telescopes have improved immensely. In the past we could measure the characteristics of radio waves coming from a small patch of sky. Today we can make radio images, in some cases better than anything our eyes can give us or we can obtain using an optical telescope. This has changed the whole picture. One of the big surprises the New Astronomy has given us is that the centre of the Milky Way is not a tranquil place at all. X-ray and infrared telescopes orbiting the Earth can see through the dust clouds to the core of our galaxy, and modern radio telescopes can image Sagittarius A, not just detect its presence. It turns out that the energy driving that radio source is a black hole, with a mass four million times that of the Sun. There are stars orbiting close to the hole and in the process of falling into it. There is dust and other material being sucked in and its disappearance from sight is marked by strong X-ray emissions.

It seems that most large spiral galaxies like ours have a large black hole in their cores. There does not seem to have been enough time since the beginning of the universe for the black holes to have been formed through the death of giant stars and the merging together of the resulting small black holes. At the moment it looks as though it is more likely these huge black holes were formed when the galaxies formed, and when two or more galaxies merged, their black holes spiralled in on each other and eventually merged too. Back in the 1950's the physics of the time predicted the possibility of black holes. However the overall opinion was that there was more likely a problem with the physics. It took quite an accumulation of evidence before the scientific community accepted that no matter how bizarre they might seem to us, there are such things. Today we are used to the idea that the universe has many more weird things to show us.The high-radiation environment at the core of our galaxy, together with the general instability, would make Trantor uninhabitable. It might not have even had the time to form. This is why, decades later, when Asimov wrote sequels to his Foundation books, he relocated Trantor to somewhere safer.

<30>