



Greg Smith – editor	Volume 25, No.8 December 2019
Program: FOG Christmas Potluck Party	Meeting: December 11, 2019 River's Edge Condominiums

2020 a Year for Vision

December is a time for looking forward, and next year being 2020 is a reminder that we need to have a good vision for our club. This means that we as a group should be looking toward making plans. I know that we can have great dreams for the future, but we still need to keep a realistic perspective.

Our plans for this years Solstice walk have been ambitious, but they have been within realistic goals. Next year’s goals could be expanded too, keeping with ‘baby step’ increments.

What about goals for the club? What do we want to do with our meetings, our star parties, our outreach?

For me personally, this year has been so full of non-astronomy activities, that I feel as if I cannot fit one more thing into my schedule. But I am still determined to do outreach to the community.

In fact, I have been asked to do a class that deals with astronomy for students in the STEM programs of the Longview and Kelso School Districts. They have all learned about the solar system and how far things are from the Earth in the universe. There is one thing

that has not been covered and that is how to look at the sky and find constellations and stars in the night sky. I found a printable planisphere that will be given to each student. They will cut it out and put it together and then we will go over how to use it. I will show them how they can find a constellation, at what time of the year it is visible, and what day and time is the best for viewing.

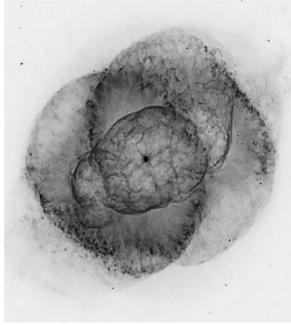
With the winter constellation of Orion and the asterism of the Pleiades rising now, this is a great starting point for orienting them to the night sky. Many will know of the Big Dipper and the north star,

My first class is December 12th for Kelso, and next Spring will be the class for Longview (of course I will have a different set of constellations).

Preparing for this amidst a house remodel is really pushing my time limits.

Have a great time with your families this Holiday Season and keep looking up.

**Every Day is a Star Filled Day
Every Night is a Starry Night**



Dubious Martian Bugs



It's Still Not Aliens: 'Mars Bug' Claim Could Damage the Search for Life

By [Chelsea Gohd](#)

An Ohio scientist claims to have found photographic proof of "insect and reptile-like" [life on Mars](#). But, as always, it's not aliens, other researchers say.

William Romoser, a professor emeritus who specializes in arbovirology (the study of viruses transmitted by arthropods) and entomology at Ohio University, has compiled photographs from NASA Mars rovers that he says are evidence of life on Mars. "There has been and still is life on Mars," Romoser [said in a statement](#).

But Romoser's evidence for this alleged Martian life comes only from his interpretation of these photographs. As he asserts in the findings [he presented](#) on Nov. 19 at the national meeting of the Entomological Society of America, the images show the shapes of life-forms that look similar to reptiles and bee-like insects. According to the statement, these observations are of both fossilized and living creatures on the surface of Mars.

"There is apparent diversity among the Martian insect-like fauna which display many features similar to Terran insects that are interpreted as advanced groups — for example, the presence of wings, wing flexion, agile gliding/flight, and variously structured leg elements," Romoser said about the supposed life-forms.

Now, if you really squint at these images and have already read that someone else thinks that they look like insects and reptiles, you might think they look like insects and reptiles, too. But, according to David Maddison, a professor in the integrative biology department at Oregon State University, this "proof" is likely just [an example of pareidolia](#), a phenomenon in which people see patterns in random data.

"I, personally, have pareidolia with respect to insects, beetles in particular," Maddison told Space.com in an email. "I've worked on beetles for decades; I have collected many thousands of beetles around the world. Through the years I have built into my brain a pattern-recognition system for picking out beetles."

"However," Maddison added, "there is a rate of false positives — my 'seeing' beetles where there are none, which I realize when I investigate further. The false positives are usually fairly low toward the end of a field trip, as I retrain my brain, but in some circumstances — i.e., a lack of beetles in the environment — that rate of false positives is higher, as my eyes don't naturally get drawn to the real beetles, instead latching on to whatever beetle-like blob is out in the landscape.

"I do not think there are insects on Mars. The photographs that are in that press release you sent are

entirely unconvincing, as they fall within the range expected in zillions of non-insect objects photographed in lowish resolution on a Marscape," Maddison said. "It is vastly more parsimonious to presume the blobs are simply rocks. As has been said, 'extraordinary claims require extraordinary evidence'; those pictures are far, far less than extraordinary." And simply pointing out suggestive shapes in NASA photos may not be the best way to draw conclusions in the search for life beyond Earth.

"I think it's really easy to find patterns in images, especially when they're out of context," Nina Lanza, a planetary scientist at Los Alamos National Laboratory, told Space.com. "They're little clips of larger images and there's no scale bar on them ... you could imagine a lot of different shapes in there. That's not a good way to do this kind of assessment."

Putting things in perspective

Researchers [continue to extensively study](#) the Martian landscape, soil, history and atmosphere. And, while scientists [actively search for signs of life](#), compiling data that might one day serve as evidence for past or present life on Mars or beyond, there exists [no concrete proof](#) of any life-forms on Mars (or elsewhere beyond Earth).

"That's just the way it is. We haven't yet been able to make that statement, but we are looking," Lanza said. "We are just as excited, we want to do this too! We are going to tell you as soon as we find life."

Regarding Romoser's work and assertion that there is proof of life on Mars, NASA officials responded to Space.com with the following statement:

"The collective general opinion of the large majority of the scientific community is that current conditions on the surface of Mars are not suitable for liquid water or complex life. As part of its astrobiology objectives, one of NASA's key goals is the search for life in the universe and the Mars 2020 rover, launching next summer, is our next stage in exploring the potential of past life on the Red Planet.

"Although we have yet to find signs of [extraterrestrial life](#), NASA is exploring the solar system and beyond to help us answer fundamental questions, including whether we are alone in the universe. From studying water on Mars, probing promising "oceans worlds," such as [Enceladus](#), [Europa](#), and [Titan](#) to looking for biosignatures in the atmospheres of planets outside our solar system, NASA's science missions are working together with a goal to find unmistakable signs of life beyond Earth."

The harm that dubious claims can cause

To scientists like Lanza and Maddison, the fact that this claim is not truly "proof" of life on Mars is obvious. But to the untrained eye, to the person who might only have time to skim the headline on his or her commute home, [overblown claims like this](#) can be damaging.

"When we have this kind of sensationalist headline, it's really hard for the public to know whether or not this is true," Lanza said. "It seems legitimate, it's coming from Ohio University, these are real institutions and so ... when we actually find something on Mars and beyond, if we do that, it will be less of an impact ... people keep hearing 'we've already found life on Mars.'"

"It takes away the excitement from our real discoveries," she added.

Editor's Note: Following the publication of Romoser's work, the press release for the study was taken down.

"I wanted to let you know that the faculty member no longer wishes to engage with media regarding this research, so we have opted to remove the story from our website and EurekAlert," Jim Sabin, the Media Relations Manager at Ohio University, told Space.com in an email.

Minutes of the November Meeting

FOG Minutes, 11-20-19

Ted called the meeting to order. He introduced Greg Smith and Mike Fiest as our program speakers tonight.

Greg was the first speaker for our program entitled, "An Astronaut's Wish List". Greg had a handout of Christmas ideas for the astronomer. He had children's books, along with adult books. Some books he suggested were Astrophysics is Easy, Night watch, Turn Left at Orion, The Backyard Astronomer's Guide, Messier Marathon, along with others.

Mike was next to speak. He had lots of gadgets for the astronomer. He had telrads, dew heaters, filters, and even a meteorite. He also suggested fractureme.com to have photos made into glass pictures.

The Mt. St. Helen's Institute made a short video of this summer's Star Party. It is available on YouTube if you are interested.

Our annual Christmas Party will be held on Wednesday, December 11th at River edge Condos at 6 PM. It will be a potluck dinner with an astronomy related gift exchange.

Steve Powell handed out the RCA calendars that were ordered. He then gave us a treasurers report.

Ted did the Sky Report. Jupiter, Venus, and Saturn are all visible in the early evening as the southwest sky darkens. Venus appears a little higher in the sky each night while Jupiter and Saturn appear lower each night. Mercury and Mars are visible in the southeast sky just before sunrise. The Geminids meteor shower is active from Dec 4-17th. Messier of the Moth is M39. It is a magnitude 5.5 open cluster in the constellation Cygnus. It contains about 30 stars and is about 825 light years away. It is best observed through binoculars or a small telescope at low power.

Roy Gawlick updated us on the upcoming Solstice Walk on Dec 21st from 7-9 pm. We need to be there at 5 pm to help set up. Kudos to Chuck for getting sponsors. Everything is coming together.

Greg updated us on Dawn Neilson. Oregon state consulted with Dawn, the Audubon and some medical professionals about lighting. The state will be working with them on dark sky lighting.

Ted reminded us to sign up for snacks, and thanked Hakkaya for tonight's snacks.

Meeting adjourned.

☞ December 2019 Meeting ☞

DATE: Wednesday December 11

TIME 5:30 PM

**PLACE: River View Condominiums
1548 River Road, Longview
4th Floor Recreation Rm**

PROGRAM: Christmas Party & Potluck

2019 FOG Activities and Viewing Schedule

DEC MOON: FULL=12, NEW=26

11 Annual Christmas Party - River View Condominiums

1548 River Road, Longview
4th Floor Recreation Rm

21 Solstice Lantern Walk (Lake Sacajawea)

Friends of Galileo Club Officers

PRESIDENT	Ted Gruber
VICE-PRESIDENT/ PROGRAM CHAIR	Mark Thorson
SECRETARY	Becky Kent
TREASURER	Steve Powell
WEBSITE	Ted Gruber
NEWSLETTER ED.	Greg Smith
ALCOR	Tom Meek

Next Month's Newsletter Deadline

The deadline for items in next month's newsletter is:

**Wednesday: seven days
before next meeting.**

**Please feel free to send in your
thoughts and experiences about
your astronomical adventure.**

Submit your material by E-mail to:

grlyth@msn.com

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