First Light Lite

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Jim Lynch – Editor

Message from the CCAS President

This fall is actually looking like the beginning of more normal times after two years of Covid enforced social distancing and isolation. We have had two large outreach star parties (plus associated lectures), and we also have a number of activities slated over the next two months. CCAS needs to "jump start" in-person activities as Covid has abated to manageable levels, and our recent activities and plans are a good starting point. Let me elaborate, starting with star parties.

Star Parties

I have described our July star party with Joint Base Cape Cod in previous newsletters, so let me just reiterate that it was successful, and that we'd certainly be amenable to working with the folks from the base again if they wish to do so!

"Dark Skies" event at Cape Cod National Seashore

The latest star party (plus lectures), at the Cape Cod National Seashore on September 24th, absolutely exceeded all expectations. Cape Cod is not quite "Starizona" when it comes to clear nights, but the 24th was perhaps one of the clearest nights I have seen on the Cape in the 40 years I have lived here. The Milky Way stretched from horizon to horizon, and Jupiter and Saturn made guest appearances as well. CCAS set up a laser/binoculars sky tour, as well as three 8" telescopes for the attendees, with both our old hands and newer members handling the scopes. People got to see a good number of the deep sky attractions available, as well as the planets, and were made familiar with a beautiful sky that often gets obscured by weather and lights. An estimated 400-450 people attended over the three hours of the party.

But the "star" of the show wasn't one of nature's displays, but a man-made one. A bit after 7:00 PM, a few people looked to the south and spotted a very odd object moving through the sky. Thankfully, a few of our members took pictures of

the object, and I present a great photo below, courtesy of CCAS member Mary Lou Ricci.



To quote Mary Lou's letter to a newspaper that she submitted this picture to: "an Unidentified Flying Object last night ... turned out to be a SpaceX Falcon 9 rocket carrying 52 Starlink satellites." Reading the next day's papers, the story was that these satellites were going to be used to help improve the internet in Iran, which had been partially shut off during protests. The red light in the picture was due to all participants using red light flashlights to maintain night vision. And if you look carefully at the photo, you will see a faint trail of dots underneath the rocket trail. This is a plane going by and the picture being a (relatively short) time exposure.

The capture of this rocket trail at the "Dark Skies" event was also a bit ironic, in that long after the exhaust trail has dissipated, there will be 52 more light sources in the sky that will interfere with earth-based telescopes taking images for astronomy – and they will be only a few of the thousands that are already there or are planned. Moreover, this was the exact topic of one of the afternoon talks by astronomer Dr. Larry Marschall: "The Astronomer's Disappearing Sky."

Before moving on from the Dark Skies event, a couple of more call-outs are in order. First, to the National Park Service personnel, who initiated this event and held it on their grounds. They are great folks to work with, and we're hoping to do so again in the future. Second, to our four CCAS speakers who all gave interesting and well-attended talks. And finally to our members, especially the newer ones, who organized the event, did the logistics/equipment transportation, worked the scopes, and did a great job of spreading both knowledge and enthusiasm to the public that attended. Having a successful event involves a lot of background work, and kudos to all involved for doing a great job!

Adult Education Program Star Parties at Upper Cape Tech

We are planning to have (initially) two "talk plus star party" events at Upper Cape Tech on (tentatively) November 16th and December 14th. We are working on the PR for the event at present, and have lined up the first two speakers as well. We will need 2-3 members at each of the star parties to work the observational gear (two 8" Dobsonians and a dozen sets of binoculars). If you are interested, please let Jim Lynch know via email at jlynchwhoi@gmail.com!

Member Training

Over the past few years, we have lost half a dozen club members (due to passing or family matters) who were experienced in using amateur astronomy gear and also were familiar with the Northern Hemisphere night sky. Due to Covid, we haven't been able to either recruit or train people in these skills over the past two years. But we need to do this, and happily over the past month or two, we've had some members step up and become familiar with things. This is part of the enjoyment of amateur astronomy – seeing what we can see in the night sky with decent viewing equipment! But we still need a few more people to get familiar with things. As I said in the previous newsletter, amateur equipment is made to be user friendly, and learning the night sky is only a matter of a night or two's observing. To help further this essential goal, Charlie Burke and I are planning to have some additional sessions both at WSO and in Falmouth (where many members reside). Using solar scopes, go-to mounts, and basic photography will be major parts of the sessions, which also can be done in daytime to make things easier for members.

Stay tuned for times/dates/details!

School Projects and Activities

As also mentioned in past newsletters, we have been unavoidably separated from the Cape's schools for two years, during which there has been a turnover in personnel and even in the directions that the curricula are going. We need to adjust to those changes, and work with the teachers to provide them with material that they can use in this "new era."

Since our Dennis Yarmouth Regional School District contract extension is now in place, we took the next step of talking to the Dennis Yarmouth HS (DYHS) teachers about directions and projects with their students for next fall. The talks on June 22nd were very productive, and we continued them on September 9th. In October, DYHS will have STEM Week type activities, which we hope to participate in. I think the challenge this year is to envision some new ideas that will help the new teachers, and not simply copy what we had done in the past. Again, stay tuned for updates.

We also are continuing efforts to coordinate with other Cape Cod schools, especially Upper Cape Tech, with whom we are pursuing interaction with their adult education program (see above) and also their astronomy course.

There are also other Cape schools we'd like to continue interactions with, such as Sturgis Academy and Barnstable HS, and we will continue to pursue those possibilities during the fall.

One continuing student interaction will be our "book give away" to any HS students who attend our November CCAS lecture (see below). We can't pursue this program for all our lectures (due to expense), but will try to do this for speakers who have also authored popular books which could be of interest to the students.

Upcoming Speakers

October

In October, we have James Lowenthal from Smith College speaking about gravitationally lensed distant starburst galaxies, and what the JWST might have to say about them. This will be a remote-only talk via Zoom. Abstract and biography will be sent with the Zoom invitation link.

November

In November, Martin Elvis from Harvard Smithsonian Center for Astrophysics will talk about his recent book, "Asteroids: How love, fear, and greed will determine our future in space." This book will be distributed to any students attending the talk. It will be both live at DYHS and linked via Zoom.

December

In December, we will have Nathan Whitehorn from Michigan State University speaking to us about Neutrino Astronomy, a topic we haven't heard about in our talks in the last few years. Remote only via Zoom.