THE NEWSLETTER OF THE

ROYAL ASTRONOMICAL SOCIETY OF CANADA - KINGSTON CENTRE

AND THE

QUEEN'S UNIVERSITY ASTRONOMY CLUB

MID-NOVEMBER, 1978

SOME RAMBLING THOUGHTS ON LIGHT POLLUTION

An article in the October issue of Science Digest dealing with the topic of light pollution of the night sky should bring this subject to the attention of many people. Amateur astronomers, especially those who do much observing at all, have long been aware of the problem and many of us know that some of the most scientific work on the subject has been done by a couple of members of the R.A.S.C. who deserve a lot of credit for their investigation and the publicaiton of its results. Can we now hope that, with coverage in the periodical mentioned above, scientists in other fields and laymen in general will start to manifest their concern about what is a gallopping monster?

As many of us know, sometimes from first-hand experience, both the intensity and the extent of light pollution are increasing in frightening proportions. This has now been well documented in the study published in the Journal of the R.A.S.C., in a recent Sky and Telescope, and in the article just mentioned which includes a map of the United States and part of Canada, showing areas where conditions have become "hopeless". We need only be reminded that about forty years ago it was possible to see the Milky Way from the middle of some of our very largest cities, and on nights which the inhabitants call "clear" it is possible perhaps to see the very brightest stars if they are near the zenith.

What is shocking to consider is that neon and mercury vapour have been used to create brighter and brighter outdoor lighting and now a large array of more and more gases is being developed and already being used to deliver more of the same. However, there may be some hope. The trends and technologies that produced so much air and water pollution continued unabaited for many years until the cry arose: "Halt the pollution!" Now a reversal of the trend is to be seen in some places and in some few places cleaner air and water are reappearing. The hope is that the same can happen in the case of our night sky.

We have been blessed with technologies of great capability. With some desire and effort, the mills, which produce the hardware that we so feverishly want, can be made to operate both efficiently and cleanly, leaving our air and water undamaged. If the desire and effort is also there, men should be able to have many of the benefits they seek through lighting without encroaching on the rights of those who want to view and study the night sky which surely must be nature's greatest jewel.

Many people insist that they need bright outdoor lighting to protect property from burglary and vandalism. Even if that were the case in all instances and even if high-powered lighting had to be used, it could probably be done more efficiently with well-shaded, downward-directed lighting of a kind that did not produce a glow up ~~up~~ into the atmosphere. And if that is the reason that it is being used, is the solution always to be more and more high-powered lighting? No, surely not, if we have access to a technology that has produced scanning devices, and low-light cameras, and burglar-warning and detection devices. Without in any way suggesting a Big Brother world or going into the specific solution for all outdoor lighting problems, the suggestion is merely made that following the traditional pattern (more intense lighting) may not be the reasonable or most efficient or economical way to protect property. We do, in fact, live in a world that already has the ability to provide the necessary protection without an enormous amount of lighting. When will it start to be used?

We should proclaim to all that we want to have and protect the right to see, study, and enjoy the celestial wonders. I really would rather see starlight than street lights. It really is more interesting to see the light from a star that exploded a hundred million years ago or one that is a dozen parsecs distant and may have a planet like our own, than it is to see expensively, artifically, and perhaps unnecessarily produced light coming from a device twenty meters away.

ANOTHER DISCOVERY BY A CANADIAN

First it was Rolf Meler who discovered a comet. Now less than a year later another major discovery has been made by a Canadian. In fact, this second discovery was made and reported only about four and a half months after the first one.

On Saturday September 9th, Warren Morrison of Peterborough discovered a nova in the Constellation Cygnus. Starting to observe the variable star SS Cygnus, Mr. Morrison noticed the "new star" of magnitude 6.8 at about 8:47 E.D.T.

In a case that is somewhat reminiscent of one involving a Canadian observer many years ago, Mr. Morrison was not credited with the discovery. He sent a telegram to the Central Bureau in Cambridge, Mass. at 10:29p.m. - less than two hours after his discovery. However, the telegram was not delivered until Monday morning, September 11th!! Meanwhile Mr. Peter Collins of Mount Hopkins Observatory reported and was credited with the discovery, even though Mr. Morrison saw the nova five hours before Mr. Collins.

We congratulate Warren Morrison and wish him good luck in future observing sessions.

TWO EXCELLENT MEETINGS

Members of our centre enjoyed two excellent meetings during the month of October.

On October 5th we heard Peter Jedicke of the London Centre talk on the "Colonization Of Space". His presentation was very interesting and very well received. (If Peter reads this, we want him to know we want to say, "Thanks for coming to Kingston".)

On October 19th, David Levy talked to us about a project in which he had been involved, "Teaching Astronomy to Young Children". A lot of work had gone into his talk which he shortened and afterward delivered at a convention of the American Association of Variable Star Observers in Boston during the weekend of September 28th - 29th.

We were, in addition, pleased to hear from David on November 2nd about the A.A.V.S.O. convention and about his adventures in purchasing yet another very fine telescope (this one, a Clark refractor, no less) to add to his collection.

WHAT A COLLECTION!

Any amateur who has over a dozen telescopes, all in working order, has something very remarkable. Would you believe fourteen? That is the number owned by David and he very kindly invited the members of our centre to go to his place to see the collection. The date set was Thursday November 9th. At the moment we are looking forward to the outing. Thanks to David for the invitation.

COMING EVENTS AND OTHER ITEMS

1. Observers and astrophotographers should not forget the occultation of Aldebaran by the moon on the night of November 15th - 16th.
2. There are lots of meteors to be seen on clear nights this time of year. During this month and next, you should be aware of the following meteor showers:

   (1) The N. Tauride - a minor shower until December 1
   (2) Andromedids - a minor shower until November 12
   (3) The Leonids - November 17th
   (4) The Geminids - December 14th
   (5) The Ursids - December 22

   Lets try to catch one or two on film
3. Don't forget our meetings on: November 16th
   November 30th
   December 14th

   Remember it's room 222 in Ellis Hall at 8:30 p.m.
4. It was good to see a new face at the last meeting. Welcome to Louis Krushnisky! Hope you enjoy the Kingston Centre.
5. Let me know if you have any articles for this publication.