

the Spectrum

BUFFALO ASTRONOMICAL ASSOCIATION INC.
BUFFALO MUSEUM OF SCIENCE
HUMBOLDT PARKWAY
BUFFALO NEW YORK 14211

Editor: Ernst E. Both

SEPTEMBER - OCTOBER 1972

SEPTEMBER MEETING: Our first meeting of the new season (September 8, 1972, at 8:00 p.m., EDT, Club Room, Buffalo Museum of Science) will feature an informal program entitled: TOTAL SOLAR ECLIPSE - ROUNDUP, and will be presented in the form of short (5-10 minutes each) slide-talks by a number of our members who successfully or unsuccessfully chased this eclipse. If you have not been contacted about giving a report, please be prepared to do so and bring your pictorial material (a slide projector will be available). If you were unsuccessful, tell us about it anyway. We will also have a chance to meet our new officers and discuss suggestions concerning the expansion of our association's activity. Refreshments as usual after the meeting in the Staff Lounge. If you are planning to give a report, please contact Darwin Christy before the meeting!

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OCTOBER MEETING: Our second meeting (October 13, 1972, same time and place) will feature our own Walter Semerau in a splendidly illustrated talk dealing with RECENT ACTIVITY ON THE SUN. Walter is internationally recognized for his solar instruments and observations. He possesses the most advanced solar instrumentation built by a single individual. During the summer the Sun showed unusually high levels of activity and it will be very interesting to hear from one who has followed this activity closely. It is our great pleasure to welcome our own WALTER SEMERAU!

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A MESSAGE FROM THE PRESIDENT

First of all I would like to thank all of the members who placed their confidence in me and elected me as their President. I am honored to have been selected for this office of the Buffalo Astronomical Association and I shall try, to the best of my ability, to fulfill my obligations as President. I know that I can count on my fellow officers: Tom Dessert, Vice President; John Riggs, Secretary; John Kartyas, Treasurer, and that I have the support of the members of the board. But in order to be a strong, active association which lives up to its full potential, we also need the full support of our general membership.

I am open to any and all suggestions which may help improve the status of our association. It has already been suggested and I fully agree that we need more publicity and we need to attract more members. Other suggestions will be discussed at our first meeting of the 1972-1973 season. Most important of all - we have to find ways of improving the financial condition of the B.A.A.

I would like to urge all members to share their observations and activities with their fellow members at the meetings to come. /continued on page 3/

* THE LIFE-SPAN OF ASTRONOMERS * By M. Ebell

(Adapted from the German journal Sirius 52:213-214, 1919)

The life-span of meteorologists was discussed by G. Hellmann (Met. Zeitschr. 1919, p. 87), who found an average life expectancy of 67.5 years. The sample he used was confined to 100 of the most distinguished representatives of that science. In his paper Hellmann remarks that "it is generally assumed that astronomers reach a ripe old age, although I have never seen any proof of that assumption." Inspired by this statement, the present author has investigated the problem, using obituaries contained in the Astronomische Nachrichten (vol. 100, June 1881 to vol. 208, March 1919, inclusive).

The sample used includes 233 astronomers as well as some members of closely related disciplines. It does not include those colleagues who died in action during the World War. Arranged according to countries one obtains the following averages:

Country	Number	Average Life
Austria	20	54.6
Belgium	6	65.3
Denmark	7	62.1
England	14	72.5
Finland	2	48.4
France	19	64.8
Germany	85	61.5
Hungary	4	69.3
Italy	15	59.8
Netherlands	3	69.5
Norway	4	64.7
Portugal	1	59.7
Russia	20	59.7
Sweden	9	71.3
Switzerland	6	63.7
United States	18	65.1
Total:	233	Mean: 62.6

According to this compilation, astronomers die on the average at the age of 62.6 years, nearly 5 years earlier than meteorologists. The highest age is reached by English and Swedish astronomers, followed by Dutch, Hungarians, Belgians, French, and Americans. Germany lies somewhat below the average. It may be that the life-span of non-Germans, especially English, French, and Americans appears too high compared to that of Germans because the death of a lesser-known, foreign astronomer may not be reported in a German journal (lesser-known and younger astronomer), while that of an older one, and hence usually more established in his field and recognized abroad, will most certainly be included. The sample is more representative in the case of German, Austrian, Scandinavian, and Swiss astronomers. The average of the Austrians is remarkably small. In recent years Austria has

lost a number of astronomers in the prime of their lives, including Th. and E. von Oppolzer.

Of the 233 astronomers used in this sample,
 2.1 % died between the ages of 20 and 30, 28.8 % died between the ages of 60 and 70,
 7.3 " " " " 30 " 40, 26.6 " " " " 70 " 80,
 9.9 " " " " 40 " 50, 6.9 " " " " 80 " 90,
 16.7 " " " " 50 " 60, 1.7 " " " " 90 " 100.

In the period under discussion (1881 - 1919), the highest age was reached by the discoverer of Neptune, J.G. Galle (98.1), followed by the comet discoverer L. Swift (92.8).* (Ed. Note: Here is a fruitful field for the budding historian of science or the statistician: One could do a similar analysis for American astronomers, for amateurs, members of the BAA, members of the Royal Astronomical Society, etc....).

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WANTED: WANTED: A used Bausch and Lomb Ballscope in good condition. Call BILL WHALEN at 836-6550. He is interested in buying one. PHONE 836-6550.*****

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A MESSAGE FROM THE PRESIDENT /continued from page 1/

Time can always be allotted for such reports. Your experiences may be of help to others in their observations, in making telescopes, or even in writing articles for the Spectrum.

The Spectrum is one of the areas where expansion is planned. But we need more articles from the general membership, not just from the officers and board members. At one time Ernst Both requested that each board member contribute one article for publication. It was a worthwhile request. I for one gained from it since I would never have written any type of article, had I not been forced to do so. These articles need not be long - a simple paragraph, or if you wish a two or three page article. The editor would need help, though, if he were suddenly flooded with articles (HINT!).

Yours in the best of observing,

Darwin Christy, President.

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* DEEP-SKY OBSERVING FOR SEPTEMBER AND OCTOBER * By John Riggs

The summer stars are setting, but that is no reason to pack away one's telescope, for the autumn sky has its share of celestial wonders as well and should not be neglected. This is the time of the year for the Great Andromeda Galaxy and the Double Cluster in Perseus. However, whenever there is a bright, well known deep-sky object in a given constellation, the inevitable consequence occurs. The well known object is over-observed, while the other objects in the same constellation remain virtually unknown. The situation is roughly equivalent to the view people living in New York City are said to have of the rest of the United States. How many observers have seen M 31 and nothing else in the constellation of Andromeda? How many have seen the Double Cluster in Perseus and yet ignore other objects in this splendid region of the sky? If you are one of these people, the only thing that I can say to you in all truthfulness is that you don't know what you are missing! I would have lost interest in astronomy long ago if the only worthwhile deep-sky objects to see were M 13, M 57, the Double Cluster, M 31, and M 42. What could be more boring than to only observe five objects other than the Moon and planets? Variety and number are what give deep-sky observing its special appeal to amateur observers.

One of the most under-rated Messier objects in the sky is the one which sits right next to the Great Andromeda Nebula itself, namely M 32. Observers frequently spend a great deal of time looking at M 31, but when asked if they see M 32, merely reply to the affirmative and go on looking at M 31. If this poor galaxy were located anywhere but next to the Andromeda Spiral, it would attract much more attention. It is not difficult to locate, just put M 31 in the field of your telescope and look slightly south and M 32 should be visible. With my 10-inch at 62 X it appears as a small, almost circular, relatively faint hazy glow that rises to a very small, moderately bright nucleus. M 32 is visible in even the smallest telescopes, so take a closer look at the Great Spiral's companion next time you are out observing; it well repays the effort.

Another interesting galaxy in Andromeda that few observers have seen is NGC 404. One reason for its neglect is that it is not formally plotted in the Skalnate Pleso Atlas. But, you ask, if it is not plotted it must then be very faint? Ordinarily this is true; however, in this case, the galaxy is located so close to the second magnitude star Beta Andromedae, that the star's image on the map would cover up any galaxy

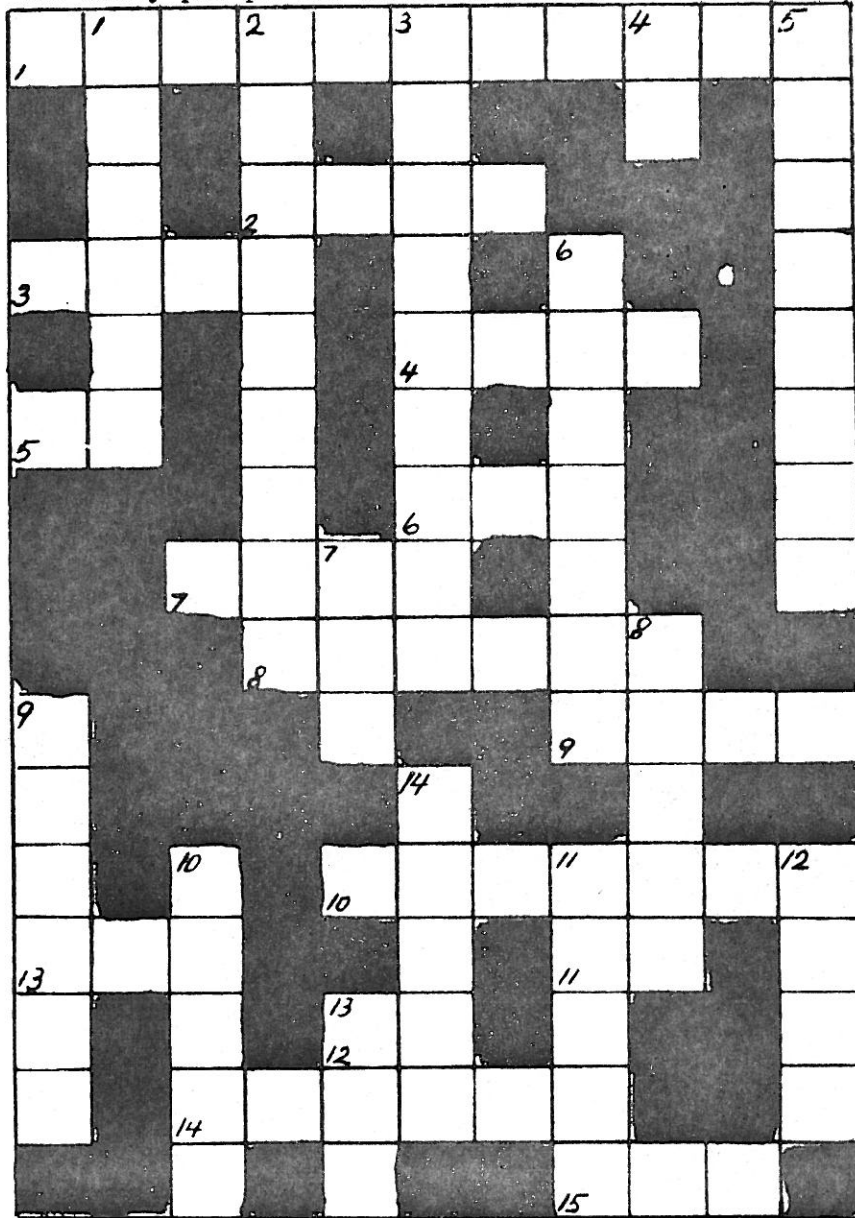
symbol. I don't know if you could say that NGC 404 is the easiest deep-sky object to find, but it certainly is not very hard. Place Beta in the field of a low powered eyepiece and look about 7 minutes southward and you should be able to see it. With small apertures it will be necessary to place an occulting bar in the eyepiece to hide the bright star. The intense yellow-orange color of Beta forms a nice contrast with this grayish little galaxy.

Just across the Andromeda border in Perseus lies the last object that I would like to mention, the miniature dumb-bell nebula, M 76. This beautiful planetary is easily visible with smaller telescopes even though it is assigned a magnitude of only 12.2 in the handbooks. It is not difficult to find, located about one degree north of the fourth magnitude star Phi Persei. Even from the city, M 76 can be seen well, and is worth looking for. Seen under a country sky with a moderate sized telescope it is a striking sight. My 10-inch shows a small, rectangular shaped cloud that will bear much magnification. Find it with your own telescope after you have tired of looking at the Double Cluster.

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* SPY AND TELL (at length) * Lillian Von Gerichten paid a visit to the observatory of our President elect. Lill brought her brother (to protect her?) *** A number of our members went to the Stellafane telescope makers convention in Vermont. Among them were: Rudy Buecking, Orrin and Darwin Christy, Dale Hankin, Bob Kartyas, Ed Lindberg, and Warren Steinberg. Rudy had his smaller-than-six-inch reflecting telescope in the competition (competition must have been fierce - even though Ed was one of the judges, Rudy did not win); Warren froze two nights in a row = 37°F, a record for that area. Bob sure ~~knew how to pack away the corn and hotdogs~~ - he did need the energy, though, to get up the hill. Dale was trying to sell more subscriptions (naturally). Our radio astronomer was seen sopping up some sun with Walter Scott Houston - were you trying to convince him that your radio t. "sees" flares, Orrin? Our President elect (bless his soul) was taking color pictures of the telescopes merrily munching away between takes. If you want Darwin, just scan the lunch line. Two nights of near perfect observing were enjoyed. Before the aurora became bright, stellar observing was excellent. Friday night's fan-tastic display brought ooo's and aaa's, and although Saturday's was not as spectacular, there were some beautiful streamers above the northern horizon. *** +++ *** We hear that Vern Siegel got some excellent shots of the total solar eclipse - hope to see them at the September meeting. *** Dale Hankin wishes he had never chased that infernal eclipse - not only was it cloudy, but he had his wallet stolen! *** Bob Burdick has been touring the country in a new camper (fold-out variety) - which telescope did you take along, Bob? *** Walt Semerau has finished a new and truly unique solar telescope. It's mounted inside his outside observatory (or is it outside his inside observatory?). Hopefully members will hear about it at the October meeting. *** +++ *** John Riggs took superb black and white photos of the aurora. John is also writing a book about deep-sky objects. Did you know John is related to Daniel Boone? *** Mike Dlugosz, one of our newer members, is the proud co-owner of a 16-inch reflector - largest, we believe, in the Buffalo area. Hope to hear from him at one of our meetings. *** Richard Janas is still with VISTA in Huntsville, Alabama - he's been touring some astronomical facilities, so he still has some astronomy bug left. He'll be organizing a construction company, having finished his training. Good luck, Rick! *** Rumor has it that Larry Hazel has given up variables for the Sun. We can't believe those rumors, though. Last we heard he had bought some land for an observatory. How is it coming, Larry? *** IF YOU DIDN'T READ ANYTHING ABOUT YOURSELF OR YOUR FRIEND IN THIS COLUMN, IT'S BECAUSE YOU DIDN'T LET US KNOW. SO WHY DON'T YOU LET US KNOW FOR THE NEXT ISSUE? WE NEED MATERIAL FOR THIS COLUMN DESPERATELY. SEND US SOME, P L E A S E.*

* A SORT-OF CROSS-WORD PUZZLE * The first five correct solutions received by the editor (send post-card to: E. Both, Astronomy, Buffalo Museum of Science, Humboldt Park, Buffalo, N.Y. 14211) will be awarded a beautiful color slide of astronomical interest. Only one entry per person allowed. Awards at October meeting. * * * * *



DOWN (numbers upper left of square): 1 = moon of Neptune; 2 = famed for his work in relativity and cosmology; 3 = Scottish geologist, lunar crater; 4 = moon of Jupiter; 5 = constellation and nearby dwarf galaxy; 6 = Roman natural historian, lunar crater; 7 = structure of retina; 8 = famed Austrian geologist, lunar crater; 9 = moon of Jupiter; 10 = Japanese comet discoverer; 11 = eclipse cycle; 12 = German word for one of cardinal points of compass; 13 = constellation; 14 = constellation.

ACROSS (numbers lower left of square): 1 = Meteor shower; 2 = English selenographer, lunar crater; 3 = Greek word for "far"; 4 = Austrian Jesuit astronomer, lunar crater; 5 = abbreviation for a time period; 6 = nearest star; 7 = recently discovered asteroid with peculiar orbit; 8 = Portuguese mathematician, lunar crater; 9 = condition of an ATM when his wife discovers that he smeared rouge over her best tablecloth - rhymes with condition he should not be in when grinding mirrors; 10 = famed French mathematician, lunar crater; 11 = Roman coin; 12 = portion of day; 13 = artificial satellite; 14 = constellation; 15 = Roman name for nearest star.

* THIRD ANNUAL B.A.A. ASTROPHOTOGRAPHY EXHIBIT *

The third annual (? we missed last year) B.A.A. Astrophotography Exhibit will take place in January and February 1973, at the Buffalo Museum of Science. Entries must include the following: Name, Address, Telescope used, Camera used, Exposure time, Date and Time. Photographs of any astronomical object are acceptable. Recommended sizes: 8 X 10 inches or larger (smaller only in exceptional cases). All entries will be returned to their owners when the show closes. Each participant is entitled to submit one photograph of his/her observatory and/or telescopic equipment. Color photographs are particularly desirable. ALL ENTRIES MUST BE IN THE HANDS OF ERNST BOTH PRIOR TO DECEMBER 1, 1972, to allow time for proper mounting. PHOTOGRAPHS SHOULD BE SUBMITTED UNMOUNTED. This is to permit uniform mounting of all photographs. ENTRIES ARE RESTRICTED TO MEMBERS OF THE BUFFALO ASTRONOMICAL ASSOC. This is your chance to exhibit your work in a recognized museum, before a substantial audience. We want a good cross-section of all of our members' work, not just the best. There will be no prizes but we hope to award paper prizes in several categories which will be announced in the next issue. We hope to have good publicity for this show. Try to submit your entry as early as possible so that we may plan this exhibit carefully. If your photographs are not ready yet, please drop me a line to let me know at least how many photos you intend to enter. There is no limit to the number you may enter, but we reserve the right to make a selection if there are many. We are looking forward to a large number from many members. E. Roth.

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WANTED: SOMEONE TO HELP WITH THE SPECTRUM, ESPECIALLY SPY AND TELL COLUMN AND SOME-ONE FOR CELESTIAL EVENTS (UPCOMING) COLUMN. ALSO INDIVIDUAL ARTICLES, ETC. ETC.

The Buffalo Astronomical Association, Inc.
c/o Buffalo Museum of Science
Humboldt Park
Buffalo, N.Y. 14211



FIRST CLASS

Mr. Walter Whyman
193 Oak St.
Batavia, N. Y. 14020