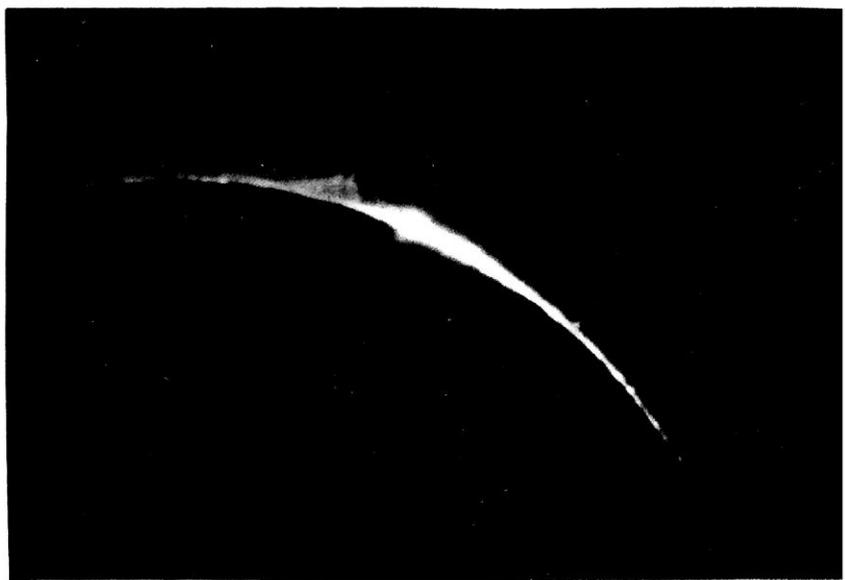
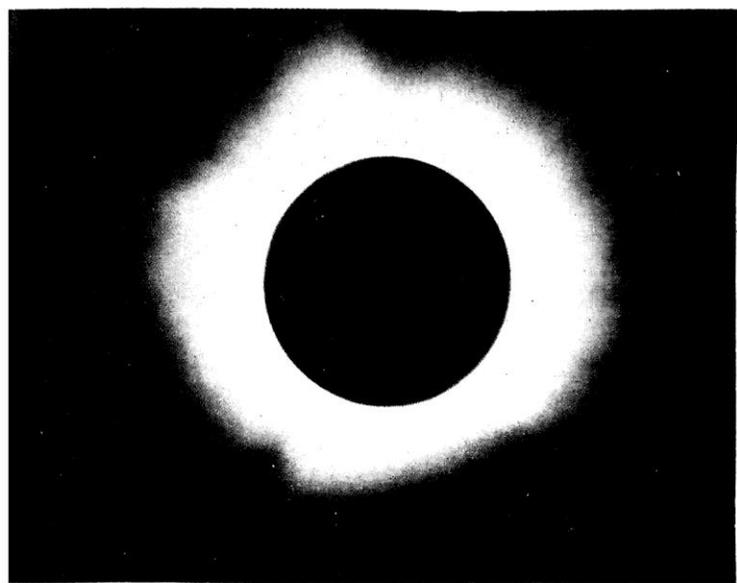
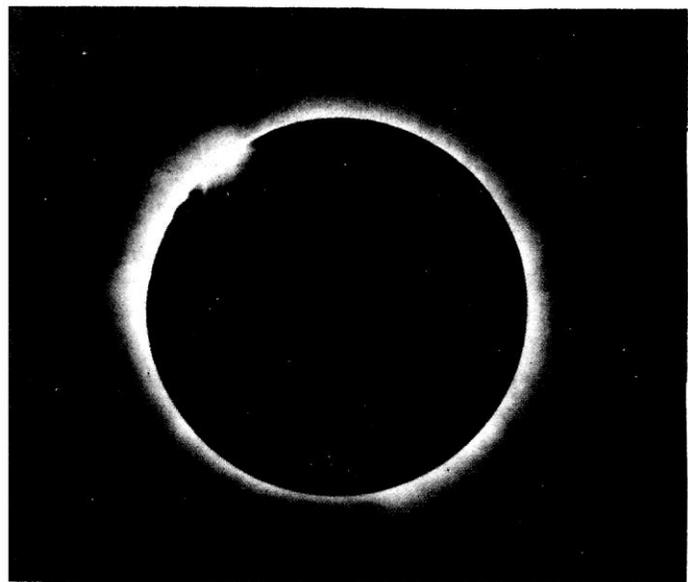
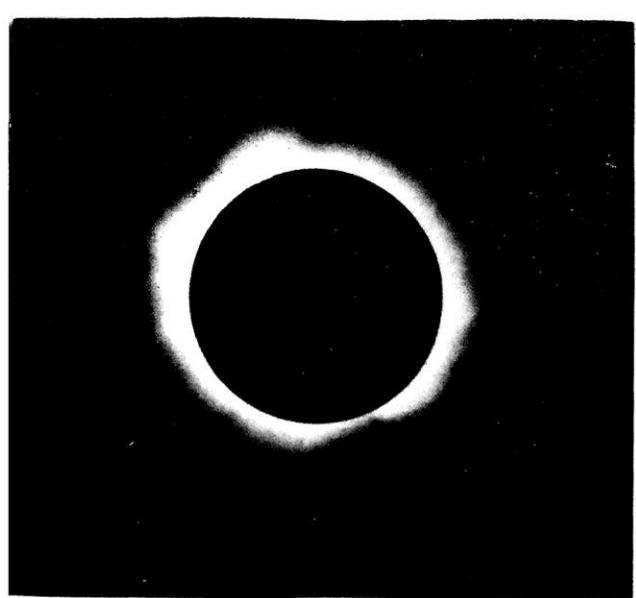


The

WASP



eclipse  
time!!

JOURNAL of the W.A.S.

JULY 1972

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COVER BY: Frank McCullough

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The W.A.S. holds correspondence (sometimes intermittently) with the following organizations. Others are encouraged to join this list:

- THE ASTRONOMICAL LEAGUE
- THE DETROIT ASTRONOMICAL SOCIETY
- THE DETROIT OBSERVATIONAL and ASTRONOMICAL ASSOCIATION
- THE JACKSON ASTRONOMICAL SOCIETY (MISSISSIPPI)
- THE KALAMAZOO ASTRONOMICAL SOCIETY
- THE MIAMI VALLEY ASTRONOMICAL SOCIETY

The characters in this paper are fictitious. Any similarity between them and any persons living or dead is purely coincidental.

NEWS ITEMS  
By  
Kenneth Wilson

New Supernova!

Charles T. Kowal, on May 15th, discovered a new supernova at the Palomar observatory. It is located in the nearby, irregular dwarf galaxy NGC 5253. This galaxy is located in the constellation Centaurus, the centaur. NGC 5253 is charted on Map 10 of Norton's Star Atlas and Telescopic Handbook near the 10<sup>th</sup> magnitude galaxy M 83. In 1895 another supernova was also observed in NGC 5253. The new one is a Type I supernova of magnitude 8. This makes it easily visible with amateur telescopes, even from Michigan (granted a good southern horizon). The 1950 coordinates of the supernova are: Right Ascension-  $13^{\text{h}}37^{\text{m}}00^{\text{s}}$ , Declination-  $-31^{\circ}24'32''$ .

Essay Contest

The Griffith Observatory, in the interest of stimulating the flow of information between scientists and the lay public is offering nine awards for the best essays on astronomy and related fields. Stipulations are:

- 1.) Awards will be made on November 1, 1972 for the best essays written for the general public on topics of current or historical interest in astronomy, astro-physics, and space science.
- 2.) Essays must be submitted typewritten, in English, double spaced, with a brief biographical sketch of the author. Diagrams and graphs should be inked. A suggested length of the essays is between 10 to 15 pages.
- 3.) Awards are as follows:

1st prize	-	\$250.00
2nd "	-	\$100.00
3rd "	-	\$ 50.00
4 <sup>th</sup> "	-	\$ 25.00

and five honorable mentions of \$10.00 each.
- 4.) Essays must- be received by September 1, 1972.
- 5.) All essays become the property of the Griffith Observatory and will not be returned. All winning essays will be published in the "Griffith Observer".

Mail entries to:                   Essay Awards Committee, Seydoux Memorial Fund  
  c/o Griffith Observatory  
  PO Box 27787  
  Los Angeles, California, 90027

The Next Ten Years in Astronomy

The National Academy of Sciences formed a panel of experts to report, on the present state of astronomy and to make recommendations for the next ten years. They recommended, among other things, two new radio telescopes (one with a 215 foot dish and the other with a 440 foot one), development of video-electronic devices, for the improvement of telescopic image sensitivities, possible construction of a new 200-inch telescope, a. new ground based infrared telescope of three to four meters diameter, continued space and high altitude observations in various wavelengths, more support for theoretical studies, and new astrometric devices.

The panel estimates the cost of all of their recommendations over the next ten years to be 8884 million, or less than the total cost of one new aircraft carrier!

Fred Hoyle in the U.S.?

Due to some recent conflicts and misunderstandings at the University of Cambridge (England), Fred Hoyle, the distinguished astronomer and cosmologist, has resigned his post as Plumian Professor of Astronomy and Experimental Philosophy and director of the Institute of Theoretical Astronomy (IOTA). Hoyle is famous for his Steady-State Theory of the Universe. It is rumored that he may move to the United States, which would be a prize catch for U.S. astronomy.

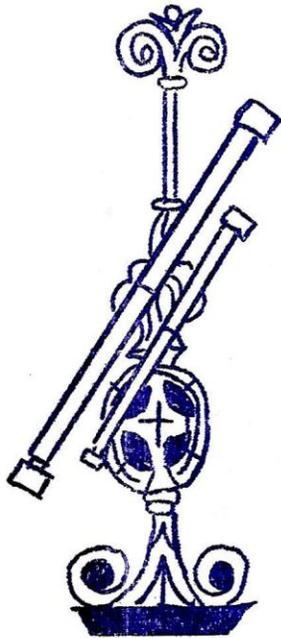
The

# POET'S SCORNER

conducted by:  
ken wilson

## Galileo

He was a man with starlight in his heart.  
 On any spangled night, with lifted face,  
 He searched the heavens from his tower apart,  
 His feet in Italy, his mind in space.  
 With handmade telescope he would explore-  
 Discovering lunar mountains, spots on sun,  
 Jupiter's moons, why lovely Venus were  
 A changing face, and galaxies spun.



When prejudice would cloud the path he trod,  
 It could not daunt this scientist inventor,  
 Cast into prison because he and God  
 Had given the universe another center.  
 Three centuries have passed, yet men hold high  
 This brilliant, brave Columbus of the sky

-Esther Baldwin York

## The Rhyme of the Zodiac

The Ram, the Bull, the Heavenly Twins,  
 And, next the Crab, the Lion shines,  
 The Virgin, and the Scales.  
 Scorpion, Archer, and the Goat,  
 The Man who pours the Water out,  
 And Fish with glittering tails.



## THE OBSERVER'S LIBRARY

By

Kenneth Wilson  
STAR CHARTS – IV

The next atlas in this series is the Skalnate Pleso Atlas (1950.0) by Antonin Becvar. Its magnitude limit is 7.75 (fainter for clusters, galaxies, nebulae, etc.), which makes it ideally suited to binoculars or telescopic finder. There are sixteen charts covering the whole sky in polar, north, south and equatorial regions. These charts show over 35,000 celestial objects including all of the Messier and a lot of the NGC objects. Stars are charted with various size dots progressing in half magnitude jumps, with the brighter stars bearing Greek and Flamsteed designations. Visual and spectroscopic binaries, globular and open clusters, diffuse and planetary nebulae, and radio sources are all plotted in this atlas.

The deluxe edition of the Skalnate Pleso Atlas measures 16 ½ by 23 inches. It has all of the aforementioned objects plotted in six various colors on white backgrounds. This edition is spiral bound and includes a plastic grid overlay. The deluxe edition costs \$12.50.

The field edition has the same objects plotted as does the deluxe edition, but they are not in color and the charts are unbound. The objects are instead charted in white on a black background, which makes them easy to see at the telescope. The charts of the field edition measure 18 by 12½ inches and come without a grid. They cost a mere \$4.00.

I have the field edition. Despite its almost bulky size and lack of binding, I find it an extremely good and economical atlas for finding deep-sky objects. It is better than Norton's in that the symbols for deep sky objects also tell what type of object (diffuse or planetary nebula, closed or open cluster, etc.) is represented. Norton's only uses one symbol which can be very confusing, if not frustrating. The field edition of the Skalnate also has fainter stars and costs \$3.25 less than Norton's.

Both the deluxe and field editions of the Skalnate Pleso Atlas of the heavens are available from: Sky Publishing Corporation  
49-50-51 Bay State Road  
Cambridge, Mass., 02138 and others.

\*\*\*\*\*

HAVE YOU BOUGHT ANY NEW ASTRONOMICAL PRODUCTS LATELY (I.E. EYEPIECES, CLOCK DRIVE, MIRROR KITS, TELESCOPES, CAMERAS, ETC.) ? DID YOU GET A WORTHWHILE PRODUCT AT A REASONABLE PRICE OR DID YOU GET RIPPED OFF? HAVE YOU FOUND ANY BARGAINS OR NEW PRODUCTS THAT FELLOW AMATEURS WOULD BE INTERESTED? IF YOU HAVE LET US KNOW ABOUT IT AND WE WILL LET OTHERS KNOW THROUGH "THE W.A.S.P."

P.S. ANY OTHER ARTICLES FOR "THE W.A.S.P." ARE GRATEFULLY RECEIVED.

Observational Astronomy  
and  
Early Morning Star Party by W.A.S. Members  
By Frank McCullough

Last Sunday the famous W.A.S. members got their wheels rolling for the first time this year to a spot nearly 45 miles from the warren area. It took us approximately one half hour to drive.

The site was a place my sister and I had found early one morning when we decided it was too early to go to bed. We drove until we started to just barely make out a little bit of sky glow on the northern horizon from Port Huron.

Now I will get back to our star party now that I have filled you in on how this spot came about.

We got off at St. Clair Highway exit which is located off I-94 and headed west on it till we hit the first road with a suspended street light over it. This was Palms Rd. which we took north approximately a mile and a half. The first road we hit off of Palms was Trumbell Road which we took east. We drove two or three miles till we hit a road with a street sign and headed south a few hundred feet and set up. This was a dead end street which just falls short of the expressway.

It was a very fine night and everyone went their merry ways doing what interested them most. The time was nearly 1:15 a.m. Sunday when we all settled down and (excuse this expression probably not fit for astronomy) "doing our own thing!" Ken found Neptune with his 6" reflector, Mr. Kwentus had his 8" Cassegrain and his 6" Newtonian along and we saw some breath taking views of Jupiter through his Cass. We saw a transit of one of the moons and only two that were visible and the two were visible were very close to the planet. The only highlight of my night was reaffirming I saw the Triffid Nebula in Sagittarius. Tim was fogged out again with his refractor; Ron Kwentus and my sister were sawing logs.

This location has an excellent southern sky, the Milky Way runs through the Sagittarius, Scutum, and off the tail of Scorpius region superbly. So the object I will write about is the Triffid Nebula.

M-20 is the Triffid Nebula; it is small and quite faint and has a planetary type appearance. Look about 2° north of the Lagoon Nebula. (See Map)

---

*W.A.S. Eclipse Expedition*

*Leave July 7th or 8th.*

*If interested in coming call*

*778-6022*

# Camp Out

at

## Bald Mountain

at the

## Lone Pine Campers Resort

from

June 16th → the 18th

Activities — Fishing, hiking, swimming, baseball, cooking, eating, sleeping, burning, camp fires, weird music, jokes and puns by who else Frank McCallough, watching sunrise and sunset, killing mosquitoes, catching lightning bugs and taking time exposures of them. If you come up with better ideas then we'll try them out. Most of all Observing.

Sunday — June 18th at 3:00 p.m.

Work at Observatory

and

Pick-Nic

-Page 6 -

Work — brooms, dust pans, paint for doors, and crew bars. details at meeting.

ASTRO-ALMANAC

By  
Ken Wilson

JULY /	MOONS OF JUPITER <sup>1</sup> /	EVENT
1	41302	
2	42013	
3	41203	Last Quarter Moon at 22:25.
4	40123	
5	40#DD	Earth at Aphelion.
6	43210	
7	34012	Lunar perigee (226,950 mi.) at 18 hrs.
8	31042	Mercury at descending node, Moon 5°N of Saturn at 7 hrs. and 8°N of Venus at 13hrs., Venus Stationary at 21hrs., Twilight begins: 1:54- ends: 22:14 L.M.T.
9	20134	
10	12034	New Moon at 14:39 ( <u>TOTAL ECLIPSE OF THE SUN</u> ), greatest elong. E. of Mercury (26°) at 18 hrs., $\alpha$ Capricornid meteor shower begins (thru Aug. 5) radiant: 201612 (Very slow, bright).
11	01234	Greatest N. hel. lat of Mars.
12	10324	Moon 2°S of Mars at 2 hrs., Moon 1°S. of Mercury at 16 hrs.
13	3204D	
14	30214	
15	31042	Venus at aphelion, Mercury at 92214 06, Venus at 51317 53 (mag.-4.1), Mars at 85218 47, Jupiter at 180423 18 (mag. -2.2), Saturn at 4582 08 (mag. +0.3), Uranus at 125405 06, Neptune at 160419 04.
16	24031	
17	41203	Moon 6°S of Uranus at 9hrs.
18	40123	First Quarter Moon at 2:46, Twilight begins: 2:11-ends: 21:59 L.M.T.
19	41023	Mercury at aphelion, Moon at apogee (251,300 mi.) at 15hrs.
20	42301	
21	430##	Moon 6°S of Neptune at 7hrs. and .7°N of Antares (Occultation) at 18hrs.
22	43102	
23	4201#	Moon 2°S of Jupiter at 11hrs., Mercury stationary at 21hrs.
24	21403	Greatest brilliancy of Venus at 4hrs.
25	01243	Beginning of $\alpha$ - $\beta$ Perseids meteor shower (thru Aug. 4) radiant: 031243 Very fast persistent trails.
26	10234	Full Moon at 2:24, Lunar Eclipse, beginning of $\delta$ Aquarid meteor shower (thru 31 <sup>st</sup> ) radiant:223611 Slow, long trails.
27	23014	
28	3204#	Twilight begins: 2:30-ends: 21:40 L.M.T.
29	31024	Mars 6°N of Mercury at 10hrs
30	2014#	
31	21034	

(All the above listed times, unless otherwise noted, are in 24 hour Eastern Standard Time.)

<sup>1</sup>“O” represents the disc of Jupiter, “D” means the moon is on Jupiter’s disc, “#” means the moon is in shadow or behind the disc. The configurations are for the inverting telescope at 5hrs. E.S.T.

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ASTROPHOTOGRAPHERS

Save time and film. Twenty-page booklet (8½ by 11 in.) contains exposure data for the sun, moon and planets, and has a recently expanded eclipse section. Fifteen exposure guides list shutter speeds for all films (4 to 2000 ASA) and f ratios (1.4 to 256.0). Includes instructions for first focus, afocal, negative and positive projection telescope photography. Send \$2.00 to Larry F. Kalinowski, 15674 Flanagan Ave., Roseville, Mich. 48066. Phone (313)-776-9720. SPECIAL OFFER: \$1.00 off regular price of \$2.00 for all Warren Astronomical Society Members.