

*Shoreline Amateur  
Astronomical  
Association*

# **The Shoreline** **Observer**

**April 1995**

President - Phil Sherman

Vice President - Arlin Ten Kley

Secretary/Treasurer/Editor - Mike Henry

## **April Meeting**

The April meeting of SAAA will be held on Thursday April 20th at 7:00 PM in the West Ottawa Middle School Planetarium. Bring an accomplice.

- ♦ Business Meeting.
- ♦ Sandy will give a tour of the April night sky and hopefully an Easter Show.
- ♦ Jim Jipping will have a show on radio astronomy.
- ♦ Someone is bringing refreshments.

## **Messier Marathon Afterthought**

Well if you you're like me, you probably drove all the way to the monastery just to find out that know one was there, because of clouds. Sure looked nice in Holland when I left town, though. But that didn't stop me and my neighbor from observing over 50 messier objects.

It was glorious! It was just as I expected too. The Ring Nebula was easily discernible and in full color. I still can't believe we saw the Horsehead Nebula so well. But alas, it didn't last forever. I was tired of looking, and he was tired of holding up the book and turning pages as I viewed them from 50 yards away. Oh well, better luck next month or year.

# **Binocular Messier Club Info**

The Astronomical League is pleased to introduce its new Binocular Messier Club. The Binocular Messier Club is for beginning observers as well as experienced amateurs. Beginning observers will find that it doesn't take an expensive telescope but only a simple pair of binoculars, no matter what size, cost or condition, to do serious astronomy. On the other hand, experienced amateurs, even though they may already have the A.L.'s telescopic Messier and Herschel certificates, will enjoy the new perspective binocular observing gives them as they pull back from an object and observe the area around that object as well as the object itself. Seeing the object and its relationship to the sky around it will put that object in its proper context in the sky.

## **RULES AND REGULATIONS:**

To qualify for the A.L.'s Binocular Messier Certificate, you need only be a member of the Astronomical League, through either an affiliated club or as a member-at-large, and observe 50 or more Messier objects using only binoculars. Any 50 of the 110 recognized Messier objects may be observed. Any pair of binoculars may be used, but those with objectives between 20MM and 80MM in diameter are recommended. To record your observations, you may use the log sheets found in the back of the Astronomical League's manual "Observe: A Guide to the Messier Objects", or any similar log sheet. To receive your Binocular Messier Certificate, simply give your observations to Phil, Arlin, or Mike.

Upon verification of your observations, your certificate will be forwarded to either you or your club's "Awards Co-ordinator", whomever you choose.

## **THE APPENDICES:**

For those of you who are uncertain as to which Messier objects to observe, or who need a formal program to follow, we have included Appendix A and Appendix B for your use. Appendix A is for binoculars between 20MM and 50MM in

*(Continued on page 6)*

# SOMETHING IS EATING THE STARS - AND IT'S HEADED TOWARD EARTH!!

TUCSON, Ariz. - Scientists have discovered an aggressive object in space that moves at the speed of light and gobbles up stars and planets!



Dr. Carl Jevolin

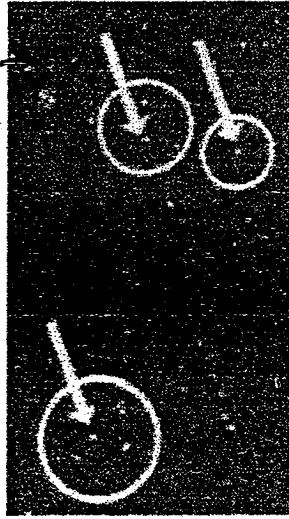
The violent star-eater is a mere 10,000 light-years from Earth and experts say it's headed toward our sun - possibly with the idea of devouring our entire solar system.

"This thing is like nothing I've ever seen," says noted astronomer Dr. Carl Jevolin who's - studied stellar and planetary phenomena for 20 years.

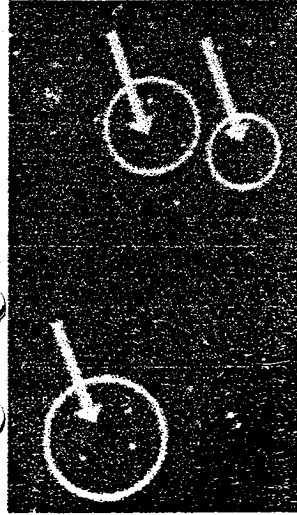
"At first we thought it was a black hole - a star that collapses and creates strong gravity, sucking other heavenly bodies in and destroying them.

"But now that we've had a chance to observe it for a while we notice lots of differences. The main difference is that this object actually goes after stars - stalking them for thousands of miles across the universe as a wolf stalks its prey.

"Stars are fixed in the heavens and cannot 'run,'



NASA photo above shows Milky Way Galaxy taken in early Dec 94. Photo below was taken Feb 95. Circles with arrows point to stars that have vanished, absorbed by the star eating object.



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making them sitting ducks for this monstrous thing."

The object was discovered last July by the National Aeronautics and Space Administration's Compton Gamma Ray Observatory, a satellite that orbits Earth and transmits data to scientists. Dr. Jevolin and others have watched it since then and have seen it strike repeatedly.

Experts say it grabs pieces of matter from stars and planets a little at a time like a crocodile yanking hunks of flesh off a dead wildebeest.

Dr. Jevolin will not go so far as to say our world will be in danger in the near future, but neither will he rule out the possibility.

"It's been traveling at the speed of light," said the respected researcher. "At that rate it will take 10,000 years to get here. "But we don't know what this thing is so we have no idea how fast it might be capable of moving. It

could be able to go 10, 100, even thousands of times the speed of light.

"If so, it could be here within months."

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diameter. Appendix B is for binoculars between 56MM and 80MM in diameter. Each appendix lists the appropriate Messier objects that can be observed with that size instrument, and is divided into three categories: Easy, Tough, and Challenge objects. Easy objects are those that appear large and bright in the field of view, and are easily located. Tougher objects are small and dim in the field of view and require identifying the fields around them with the help of some sort of star chart to verify their location. Challenge objects are those that are small and faint, sometimes requiring averted vision, and need to be pinpointed exactly on a good star atlas to identify.

You'll notice that in the small binocular category (Appendix A), 42 objects are classified as easy. You need only choose 8 of the objects in the tougher category to receive your certificate. For larger binoculars (Appendix B), all 50 objects needed to receive the certificate can be chosen out of the easy category. The point is that anyone, with any pair of binoculars, no matter what their size, shape, condition, or cost, can do serious astronomy, and acquire a Binocular Messier Club certificate. To prove that point, all 76 objects in Appendix A (Easy, Tough, and Challenge objects) were observed with a pair of 7x35 Tasco binoculars purchased at Wal-Mart for \$19.00.

Appendix C is for reference purposes, listing all 110 of the Messier objects at the times when they are best observed, and in constellation sequence. So, if you are wondering what is the best time of the year to observe a Messier object, refer to Appendix C. Appendix C tells you which season to observe each object, each object's coordinates, their NGC numbers, the constellation they are located in, and their sizes and magnitudes. Also, Appendix C lists all of the Messier objects in the exact same order as the Astronomical League's Observe manual "Observe: A Guide to the Messier Objects", in case you are using that as an observing aide.

I look forward to your sharing your binocular Messier observations with me. I think you will find that this is a worthwhile program that will not only give you a whole new perspective on the universe in which we live, but a more comfortable feeling for the night sky that we all enjoy so much. Good luck.

Clear skies, and good observing.

## APPENDIX A - 7x35, 7x50, AND 10x50 BINOCULARS

### I. EASY MESSIER OBJECTS:

2, 3, 4, 5, 6, 7, 8, 10, 11, 12, 13, 15, 16, 17, 18, 22, 23, 24, 25, 27, 29, 31, 34, 35, 36, 37, 38, 39, 41, 42, 44, 45, 46, 47, 48, 50, 52, 55, 67, 92, 93, 103.  
TOTAL = 42.

### II. TOUGHER MESSIER OBJECTS:

14, 19, 28, 30, 33, 40, 49, 53, 62, 63, 64, 78, 79, 80, 81, 82, 83, 94.  
TOTAL = 18.

### III. CHALLENGE MESSIER OBJECTS:

1, 9, 26, 32, 51, 54, 56, 65, 66, 68, 71, 75, 97, 101, 104, 106.  
TOTAL = 16.  
GRAND TOTAL = 76.

## APPENDIX B - 11x80 BINOCULARS

### I. EASY MESSIER OBJECTS:

2, 3, 4, 5, 6, 7, 8, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 34, 35, 36, 37, 38, 39, 40, 41, 42, 44, 45, 46, 47, 48, 50, 52, 53, 55, 62, 67, 71, 78, 79, 80, 81, 82, 92, 93, 94, 103.  
TOTAL = 58.

### II. TOUGHER MESSIER OBJECTS:

1, 9, 33, 49, 51, 54, 56, 60, 61, 63, 64, 65, 66, 68, 75, 77, 83, 87, 97, 101, 102, 104, 106.  
TOTAL = 23.

### III. CHALLENGE MESSIER OBJECTS:

20, 58, 59, 69, 70, 72, 84, 85, 86, 88, 89, 90, 95, 96, 99, 100, 105, 107, 108, 109, 110.  
TOTAL = 21.  
GRAND TOTAL = 102.

## APPENDIX C - THE ENTIRE MESSIER LIST

If you would like a copy of Appendix C, ask Mike at the next meeting. I didn't print it because it took up 6 pages.

# QUIZ TIME

- 1) What is a starlike object called that is too small to achieve nuclear reactions in its center? *Brown Dwarf*
- 2) What is the composition of "Population II" stars? *Carbon / Iron*
- 3) When Ford Prefect, a descendant of Betelgeuse Seven, sent a revised article about Earth to the editors of "The Hitchhikers Guide to the Galaxy", it was edited down to two words. What are they?
- 4) How old are the youngest Moon rocks that have been collected? *4.6 billion*
- 5) What must the phase of the Moon be in order for a full eclipse of the Sun to occur? *New*
- 6) What is the difference in kilometers of the diameter between North and South poles, and the equatorial diameter?
- 7) What is the spectral class of the sun? *G*
- 8) What Galaxy is pictured on the cover?