# THE FLINT RIVER OBSERVER



Vol. 1, No. 7

FLINT RIVER ASTRONOMY CLUB

September, 1997

Officers: President, Larry Higgins (227-2233); 1st Vice President/newsletter editor, Bill Warren (1212 Everee Inn Rd., Griffin, GA 30224 / 229-6108); 2nd Vice President/Secretary-Treasurer, Ken Walburn (954-9442); AlCor, Melanie Handy (228-6214); Librarian, Keith Cox (227-8171); Hospitality Chairman, Lee Russell (228-0704); Observing Chairman, Steven "Smitty" Smith (583-2200). Club mailing address: 2431 Old Atlanta Road, Griffin, GA 30223. All of these phone numbers have 770 area code prefixes, if it matters.

Please notify **Bill Warren** and **Melanie Handy** promptly if you have a change of address.

Club Calendar. Thurs., Sept. 11:
"Eatin', Greetin', Meetin' Night" at
Beaverbrook (6:00, see "Upcoming
Meetings/Activities"); Fri., Sept. 12:
"First Light" Beaverbrook Astronomy Club
meeting (BB media center, 7:00), followed
by FRAC club observing at dark; Fri.,
Sept. 26-Sun., Sept. 28: FRAC Star
Party, Cox Field.

President's Message. It was good to see so many people at our meteor shower party on Aug. 12th, a weeknight; it shows me that we've got a strong club with a lot of dedicated observers. We'll re-schedule the Villa Rica trip for later in the fall when the weather settles down.

As you know, we're having our weekend-long observing bash at the end of this month. I hope you'll plan to come and spend the night Friday and Saturday, Sept. 26-27. I've been to a lot of these events; they're always fun, and you'll learn more about your telescope and the night sky than you ever thought you could in so short a time. There are always surprises and unexpected treats in store, one of which this year will be the chance for you to see some of Rich Jakiel's drawings. Rich is the finest astronomical sketch artist in the world, having won last year's Graphics Award from the Webb Society, a British deep-sky observing organization. (Rich wrote the article on M33 in last month's newsletter; he also has an article in the current issue of Astronomy magazine.)

Use the checklist we've provided to help you prepare for FRAC Star Party I. Try to come early to get set up while it's light. We'll have a Port-O-Let available, and there's a faucet for drinking water in the hangar at the far end of the field. You can cook out if you want to; be sure to take your trash with you when you leave on Sunday morning. Mr. Cox has graciously allowed us to use his field; we want to leave the area as clean as we found it. Be sure to thank him if he comes down; he'll be riding a golf cart.

#### -Larry Higgins

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Working Together. Larry Higgins spent the afternoon at Beaverbrook during Open House on Thursday, Aug. 21st, talking to parents and children about joining the school's new astronomy club. Principal Ken Bozeman authorized Larry to buy the school a \$400 6" Dobsonian reflector for the children to use. (Any bets that a certain principal we know will be jockeying for position in line for his turn to look at the sky?)

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August Meeting/Observings. We had 16 members and guests at our July 25 Cox Field observing. The air was so humid you could squeeze moisture out of it like a sponge, but it was so good to be back out under the night sky again that we were like kids on Christmas morning.

Attendance was even better at our Aug. 12 Perseids meteor shower party, with 30 people showing up to find out what meteor watching is all about. Meteors aside, highlights of the evening included: Beaverbrook principal Ken Bozeman and his wife Viki trying to look for meteors and keep their young sons Zack and Nick corraled at the same time; Larry Higgins, not meaning it the way it sounded when he told Louise Warren that she was a big asset to the club; yr. nimble-footed reporter, displaying ballet-like agility in tripping over Ken Walburn's telescope; and Ken W., staying awake all evening to prove he could do it. (Or, more likely, to protect his telescope.) And Ken: you don't have to keep reminding us that you're awake for us to grasp that fact. Although we'll admit that sometimes it's hard to tell

the difference.

Our club meeting (the trip to Villa Rica) was called off due to bad weather. So was our Beaverbrook club observing the next night. Boo, hiss!

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**Upcoming Meetings/Activities.** Please Read This Carefully. We won't have a regular club meeting in September; instead, Thurs., Sept. 11th will be an observing night held in conjunction with Beaverbrook PTA's "Eatin', Greetin', Meetin' Night". They're selling chicken dinners at the school cafeteria that evening to make money for school projects; you'll get a free chicken dinner if you'll call me or my wife Louise at 229-6108 to tell us that you're coming (and who, if anyone, you're bringing along). We'll eat at 6:00, and then go out back and set up our telescopes to let Beaverbrook parents and students see what's up there in the night sky (airplanes and contrails, at 6:30).

We do have three requests, however:
(1) Please RSVP by Fri., Sept. 4th if you plan to eat with us, so we can tell the PTA how many dinners to set aside; (2) Please bring along only those people who normally come with you, and not your in-laws, out-laws, pets, neighbors, friends, their friends, etc.; and (3) Please don't stay away or come late just because you might be asked to show the kids something in the sky; we'll give you all the help you'll need in finding and describing something interesting to show them.

On the following night, Fri., Sept. 12th, the Beaverbrook student astronomy club, "First Light," will hold its first meeting, at 7:00 in the media center. Afterwards, we'll take the kids out back and let them observe for awhile, after which we'll have our regular club observing. If you come after

dark, be sure to watch out for children on the field.

The weekend of Fri., Sept 26th-Sun., Sept. 28th will be devoted to FRAC Star Party I, our first annual weekend stargaze. The \$5.00 fee will pay for the Port-O-Let we'll be renting for the weekend. Pay Ken Walburn when you get there.

We're including with this newsletter a checklist for you to use in preparing to attend this fun event. We'll spend Friday and Saturday nights at Cox Field, camping out, observing 'til the wee hours of the morn, chewing the fat or just doing whatever strikes our fancy. We'll have several great Saturday afternoon workshops, including topics such as cleaning your mirrors; collimating your instrument(s); making gadgets; and drawing and sketching. We'll have a session on star-hopping on Saturday night.

Try to attend; after all, if you come we can't talk about you behind your back!

\* \* \*

Thanks for the Memories. Our club received a nice thank-you note from Liz Poole of the American Cancer Society regarding our participation in the 1997 "Relay For Life" walk-a-thon back in May. We enjoyed showing off the night sky, of course, but it's nice to know that our assistance in that worthy project was appreciated.

Scouting the Skies. Lee Russell, Mitch and Tammy Hammond, and yr. fearless reporter braved the wilds of SE Spalding Co. on Friday, Aug. 22nd, to stage a viewing for the cub scouts of Pack 4. The children were well behaved -- and, somewhat surprisingly, so was Lee. And

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the sky -- oh my!, the sky: the site had a deep southern exposure that covered at least 10° of sky south of Scorpius -- and for what seemed like the first time since 1947 there were no biting insects, stifling heat, sweltering humidity, or impenetrable haze to obscure the view. I hope you were out somewhere observing on that evening; it was the kind of night we've all been looking for since March -- at least, until 11:00, when the clouds predictably rolled in like a celestial high tide.

Until then, we showed about 35 scouts and their parents the glories of the summer night sky, plus Mars and Jupiter. Mitch, Tammy and Lee were *great* in their first special observing away from Beaverbrook, and I managed not to mangle any telescopes. I think Lee, Mitch and Tammy enjoyed the experience; I know the kids did, and I did, too. For me, at least, few moments in stargazing can compare with the gasps and squeals of delight uttered by children who are seeing for the first time via telescope the planets, star clusters, nebulae, galaxies, and other wonders of the cosmos that we tend to take for granted.

I hope you'll want to join us next time we have a special observing for some group; it's a great way to learn your way around the night sky while bringing the excitement and wonder of stargazing to those who have never experienced it.

The Planets in September. Mercury is visible in the eastern morning twilight, midand late September. Venus sets in the west at 9 p.m. Mars, also in the western sky, sets at 10 p.m. Jupiter, riding high astride the ecliptic, doesn't set until 3 p.m. Saturn rises at 8 p.m. and climbs slowly out of the east thereafter. At 5:49 a.m. on the morning of Sept. 18th, a nearly-full Moon

will occult (cross in front of) Saturn in the west; Saturn will reappear on the other side of the Moon 58 minutes later. The green disk of *Uranus* and *Neptune's* blue disk can be seen in binoculars throughout the month, high in the sky along the ecliptic, 8° and 16° respectively, west of Jupiter. Uranus is the brighter of the two.

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AL Club Observing Projects. As a member of the Astronomical League, you're eligible to participate and earn certificates and pins in their various observing clubs, one of which is the Messier Club. (See my article, pp. 3-5.) But there are other AL projects you might be interested in. Smitty has information on the very difficult Herschel 400 Club, and on three other clubs that are ideally suited for beginners: the Lunar Club (100 naked-eye, binocular and telescopic lunar features, an ideal starting project; the Binocular Messier Club (60 objects within reach of small or large binoculars); and the Deep-Sky Binocular Club (also 60 objects, two of which are the Hyades and Coathanger. This is the toughest of the three clubs.).

If you're interested in becoming involved in one or more of these observing programs, ask Smitty for information next time you see him -- or send him a self-addressed, stamped envelope c/o Steven Smith, 1095 Allen Road, Grantville, GA 30220. The Lunar Club program is especially good because it gives you something to do on those clear nights when the Moon is so bright that it interferes with your seeing anything else. (It's also excellent if you have a lot of light pollution at your home observing site.)

You don't have to join these clubs, or even enroll in them. All you need to get started is a list of the objects and observing rules, and a map of the Moon or star charts. Unlike the Messier Club (which is handled through local clubs like ours), you'll send your completed observation records to the address listed for that club.

While we're on the subject, you should be receiving your first issue of the **Reflector**, the AL's newsletter. Our club and some of its members are recognized in the August issue: FRAC, as a new affiliate and **Melanie Handy** as our Alcor; **Larry Higgins** and **Joe Sheppard**, for earning their Messier pins; and **Art Russell**, for conquering the Herschel 400, which is more an ordeal of persistence and endurance than a labor of love.

\* \* \*

People You Should Know. Tim and Celia Astin live at 106 Woodmont Drive in Griffin, and attend practically all of our meetings and observings. They have one daughter, Melissa, 24. Tim works with the Ga. State Revenue Dept.; at observings, he decides how to find whatever they're looking for and Celia, whose observing eye rivals that of *Aquila* (the Eagle), finds it in their 8" Dob. If Celia's observing eye were any more acute, she wouldn't need a telescope at all!

In stargazing terms, Tim and Celia are the equivalent of the lovely little summer constellation *Delphimus* (the Dolphin): quiet and unobtrusive, but once you've found it, your observing is enriched by how very nice it is. If you haven't already done so, take time to meet the Astins at our next observing. They're very nice people.

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"What Are the M-Things?"

### humor by Bill Warren

Since it's all I ever seem to talk about, people who would be better off talking to Larry, Smitty, Art, Rich, Alex or Joe sometimes ask me, "What are the M-things?" Well, to put it simply they're things you can't find unless you use a telescope at least five inches larger than the one you're presently using. And even then, the only time you can see them is at 2 a.m. or three months from now.

Actually, they aren't "M-things," but "M-objects," the difference being that the latter sounds like you know what you're talking about.

The "M" part refers to Messier (Charles), a French comet hunter in the mid-to-late 1700s who compiled a list of small, faint, fuzzy "stars" that he kept mistaking for comets, despite the fact that many of them look about as much like comets as I look like Mel Gibson. The "object" part means that all of them actually exist and occupy space somewhere in the universe, as you'll quickly verify after buying a few hours of observing time with the Hubble Space Telescope.

In all, Messier (pronounced "messy-a") found 102 cometary look-alikes. His catalog was published in 1784, either before or after his death. Eight more objects were added from his observing notes by other people, bringing the total to 110, or 68.2 if you convert it to metrics. Or somewhere between 56-212 if you're using the "new-new" math techniques they're teaching in elementary schools today. (But don't you feel *good* about yourself for coming so *close*?)

Messier made a few mistakes along the way, one of which was listing the same object twice (M101 and M102). Another was M40, which is actually a double star in Ursa Major called Winnecke 4 --

presumably named after Mr. or Ms. Winnecke, or maybe a '60s rock group. Another Messier mess-up was M73, a Y-shaped "cluster" of four stars in Aquarius. Maybe he thought M73 was four comets -- or maybe he was smoking a joint of primo Colombian Gold. Whatever the case, Messier might have profited by attending our Star Party workshop on "Cleaning Your Lenses."

Those problems aside, the "M-things" are deep-sky objects. There are four categories of deep-sky objects: open clusters (groups of scattered stars such as the Pleiades [M45] and Praesepe, the Bee Hive [M44], both of which are at least marginally naked-eye visible to everyone in the universe except Lee Russell and me; globular clusters (e.g., M13 in Hercules), which contain hundreds of thousands of stars in pencil point-sized areas of sky and look like fuzzy tennis balls in binoculars or small telescopes; nebulae (interstellar gas clouds such as the Great Nebula in Orion [M42] and Crab Nebula [M1]; and galaxies -- massive star systems which, with the exception of Andromeda Galaxy (M31) and a few others, are harder to find than honest politicians or fast-food establishments that get your order right.

I'm a big fan of globulars -- at least, I was until I heard **Art Russell** referring to Waffle House hash browns as "globular clusters."

Words commonly used to describe nebulae and galaxies include: dim; faint; tiny; hazy; fuzzy; very dim; very faint; etc.

Chasing down the Messiers is a popular pastime among backyard stargazers. The Astronomical League offers achievement certificates and pins for finding all 109. If you're interested in joining the chase, all you need are a simple set of star charts, a telescope, a clear night, and a pencil and paper to record your observations.

Detailed suggestions for recording what you see appeared in Art's June FRAC Observer article, "Recording Deep-Sky Observations;" if you've joined the club since then and are interested in starting your own quest for Messiers, ask me and I'll run you off a copy of the article.

It took Charlie Messier over a decade to compile his list; it took Alex Langoussis 17 years to complete his search and earn his pin -- but Alex was hindered by the fact that he slept occasionally and he couldn't look for them in the daytime. (I'm kidding: it took Alex 17 years, all right, but for most of that time he wasn't looking for Messiers. He found them quickly once he started looking in earnest -- and you will, too, if you start now and get out and observe whenever the sky permits.)

The search will take you at least a year, since the M-things are spaced out over the four seasons. It'll take you longer if (a) your telescopic aperture is much smaller than 5", or (b) you're a beginner and insist on doing it on your own. But what the hey, if it was easy everybody in the universe would have a Messier pin! Anyway, Messier never used a telescope larger than 4" -- and didn't Larry and I say in the August newsletter that we'd be glad to help you? So will Smitty, Art, Joe, Keith, John, and practically everybody else in the club who is familiar with the night sky.

The <u>real</u> benefit of tracking down the Messiers lies in the **learning** involved: learning how to use your telescope; learning to recognize -- and navigate among -- the constellations and bright stars; learning to organize your viewing sessions by setting and pursuing specific observing goals (i.e., <u>preparing an observing schedule</u>); learning to recognize what different types of deep-sky objects look like in <u>your observing instrument(s)</u>; and

learning to record your observations in writing or by drawing, either of which requires you to study details in what you see.

Now is the perfect time of year to start, since the summer night sky holds 44 M-things, most of which can still be seen. (The Fall sky has only16.). Even if you don't get them all this time around, next summer is only a year away; if you start tonight, you'll be a year wiser and more experienced by then. (And only an unthinking clod would remind you that you'll also be a year older.

Steven Smith -- Smitty, to you -- is our club's observing chairman. He'll check your records when you're finished, to validate your claims. Melanie Handy will order your Messier Certificate and pin. Larry Higgins will lead us in giving you a polite round of applause. Remember, though: Smitty won't count any Messiers you claim to have seen in the Star Trek movies or Contact.

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#### **BEGINNER'S STAR-HOP: AUGUST 1997**

By Art Russell

The first fresh breaths of the coming Fall season have already been felt in Atlanta, heralding clear skies and the much awaited departure of our ever present summer haze and humidity. This comes with mixed blessings in that it typically also means the departure of some of the more striking deep sky wonders located in our southern skies as the constellations of Scorpius, Ophiuchus, Sagittarius and Scutum draw ever closer to the western horizon. However, there is still time just after dark to get a good look at a few of these interesting objects. This month we'll take a look at four of them: the globular clusters M55 and M75 in Sagittarius, and the open clusters M11 and M26 in Scutum, astride the summer Milky Way.

As with all deepsky astronomy, you'll want to head for the darkest possible skies. This month's objects can be located from the constellation <u>Sagittarius</u>. Get yourself properly oriented by locating <u>Sagittarius</u>' "Teapot", about 30 degrees (about one and a half times the distance spanned by your thumb and little finger spread against the night sky at arms length) or a bit more from the southern horizon. It is there that we begin our star-hops.

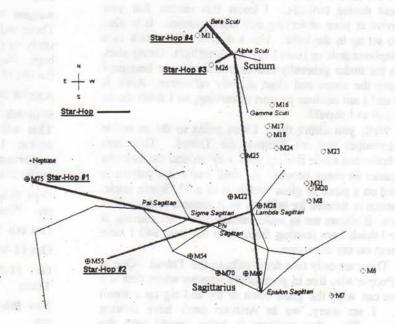
Star-Hop #1; M75, NGC 6864. This is our toughest target for this month. Of all of Messier's cataloged globular clusters, this is probably the one I had the most difficulty finding. It is located almost by itself in the middle of a relatively dim star-field. Finding it will take a bit of perseverance. However, you'll be glad if you do as you'll be rewarded with a small, but very rich globular cluster, and will have enhanced your ability to star-hop as well.

Beginning in the "Teapot": Locate the star Phi Sagittari. Extend an imaginary line from Phi Sagittari east-northeast past the star Sigma Sagittari to the star Psi Sagittari, a distance of a little less than 7 degrees, or about the distance spanned by your 4 fingers held together at arm's length against the night sky. From there, continue the line in the same direction for another 12 degrees, or a bit more than the distance spanned by your fist held at arm's length against the night sky. Scan this area with your telescope at low power, or a set of binoculars and you should find the dim haze of M75. This cluster will handle magnification well, so take the time to examine it with your highest power eyepiece. You'll be glad you did as you find hints of apparent lanes throughout this globular cluster. While you are in the area, scan about 2 and a half degrees northwest (about the distance spanned by 2 fingers held together at arm's length against the night sky) and search for small, dim, bluish disk, the planet NEPTUNE! You won't be able to see any details, but you will be looking at one of the gas giants of our outer solar system.

#### Star-Hop #2; M55, NGC

6809. Locating the globular cluster M55 is considerably easier than M75 as it is located just to the southeast of the "Teapot."

Beginning in the "Teapot": Locate the star Lambda Sagittari, and extend a line to Phi Sagittari, a distance of about 4 degrees. Using this distance as a scale, extend your line from Lambda Sagittari, past Phi Sagittari for a little more than 16 degrees (4 X the distance between Lambda and Phi Sagittari), or a little more than the distance spanned by your index and little fingers spread against the night sky at arm's length. Search this area with a pair of binoculars or a telescope at low power and M55 should be visible as a moderately bright, but not well concentrated globular cluster.



are the Moon, planets, and bright stars, then a small refractor will suffice.

Moving up to an 8 X 50 or 11 X 80 finder will start to show brighter deep sky objects and will allow the user to star hop using much fainter stars. These two sizes of finder are very popular with deep sky observers and I have an 11 X 80 myself. Besides being able to see dimmer stars and objects, there is another advantage. They make great RFT telescopes! The view of the Sword of Orion in the 11 X 80 with a UHC or Oxygen III filter is beautiful. The entire region is nebulous, with M42 showing dark markings and a large loop of nebulosity which leads to Iota Orionis. The Rosette, Lagoon and North America nebulae are also glorious in a small telescope that can show some of the area around the main object.

The last step up is a small Newtonian telescope as a finder for a larger instrument. I have used a 4.25" f/4 as the finder on my old 17.5" on a few outings when I was looking for something very faint. The problem here is that even a small Newtonian only has a field of about 2 degrees. That can be a problem unless you have a small finder on the large finder.

The one thing that must be done before a finderscope can be used to its' full potential is to align it to the main scope. The two telescope must point at the same spot so that when the cross hairs are on a location in the finder, the main scope point precisely at the same location. The most common way to do this is a set of rings which support the finder and allow the user to align the finder by adjusting the set screws on the rings. I have found a problem with this system. Using the larger 11 X 80 finder, the rings will move with the increased weight of the finder as I swing the telescope around. I have considered going to a platform mount, like the one offered by Lumicon, but I have not given it a try yet.

Now for one of my best tips on finderscopes. Do the alignment during twilight. I know this means that you must arrive at your observing site before sunset. It is also easier to set up in daylight. Use a distant object such as a hill, telephone pole or (dare I say it) streetlight. Using stars to align the finder generally makes trouble for me because I will bump the scope and align slightly off center. Also, it is dark and I am anxious to start observing, so I don't do as

good a job as I should.

Well, you didn't think I was going to do an article on finderscopes and not mention the Telrad. This zero power finder has made finding your way around the heavens much easier for many people. A small bull's eye pattern is projected on a piece of glass which is at a 45 degree angle. The pattern is focused for infinity, so it appears projected on the stars. It allows me to make certain that I am starting at the star I think I am starting from. It is the best \$40 I have ever spent on my telescope.

There are only two drawbacks to the Telrad. One is dew. People who live in parts of the country where dew is a problem can wipe the glass often or try and rig up a small heater. I am sorry, we in Arizona don't have dewing problems. The other problem is being careful with the device. Make certain you return it to its' case after every trip. Otherwise, you will eventually break the glass. Because the only current draw on the batteries is a small LED to light the pattern, batteries last a long time. I

change mine once a year or so, just because I am guilty by then.

So, I use a Telrad in conjunction with an 11 X 80 finderscope on a 13" f/5.6 Newtonian. I find that the Telrad lets me make certain where I am starting and the large finder lets me see dimmer stars to use for star hopping. This works very well when I am using the Uranometria 2000 star charts. Their limiting magnitude is easily seen in the 11 X 80 and only glimpsed in an 8 X 50 finder. I feel much more confident finding my way around with this system than any other combination I have used in the past. I have the Telrad and 11 X 80 on opposite sides of the focuser. That way neither of them gets too far under or on top of the tube as I rotate the tube for most comfortable eyepiece position.

The other tip that I can pass on concerns Amici prism diagonals. This set up on a finderscope will correct the field of view so that the orientation on the star charts is the same as the view in the finder. It makes your finder into a true monocular (half a binocular). The advantage is that the user does not have to try and re-orient the star pattern from the star chart. I found it very difficult to flip the field in my mind, the Amici prism alleviates that problem. The disadvantage is that there are some light losses in the prism, so it works better with the larger finders.

Well, that about wraps it up. As in any new piece of equipment, you might find out some more by going to an astronomy club star party in your area and looking over the equipment other amateurs are using.

-Steve Coe (taken from internet)

### Observing Schedule through Dec.

August 8th-Villa Rica, Beginners Moon Gaze and Constellation hop. Come on out and learn some Mythology about your favorite constellations. Bring your scopes and binoculars for instruction. 8 pm.

August 9th-Villa Rica, Beginners Orientation and Gaze. These will be standard events, highlighting the naked eye study of the constellations, their mythology, and binocular hops. Beginners bringing their scopes will be instructed in the use of them. Start time 7 pm sharp.

August 30th-Turkey Farm, DSG.

Sept 5th-Villa Rica. Beginners Observing Session. 8 pm. This will be the last scheduled Friday night session unless I get some volunteers! This is a Great opportunity for Newcomers and Beginners alike to really learn the sky....!

Sept 6th-Villa Rica, Beginners Orientation and Gaze. 7 pm. Please remember those stools and blankets.

Oct 4th-Turkey Farm, DSG

Oct 11-Villa Rica, Beginners Orientation and Gaze. 7 pm.

Oct 31-Nov 2nd-Die Hard observing session at Dauset Trails

Nov 8th-Villa Rica, Beginners Orientation and Gaze. 7 pm.

Nov 29th-Akins Field, DSG

Dec 6th-Villa Rica, Beginners Orientation and Gaze. 7 pm Dec 30th-Dahlonega, DSG.

-Phil Sacco

Star-Hop #3; M26, NGC 6694. Locating the open clusters M26 and M11 takes us out of Sagittarius and into the constellation Scutum and the summer Milky Way. Take time to wander about the Milky Way. You'll find uncounted numbers of stars here, as well as open clusters, nebula and planetary nebula in abundance.

Beginning in the "Teapot": Locate the star Epsilon Sagittari, and extend a line to the star Lambda Sagittari, a distance of about 9 degrees. From here, extend the line a little east of due north for about 17 degrees or a little less than twice the distance between Epsilon and Lambda Sagittari. Here you'll find the bright star Alpha Scuti which is often lost in the myriad stars of the summer Milky Way and the Scutum Star Cloud. Locate M26 from Alpha Scuti by scanning to the southeast for a distance of only a little less than 3 degrees, or about the distance spanned by 2 fingers held together against the night sky at arm's length. You'll notice M26 as a loosely concentrated grouping of stars, which at moderate power may resemble a flattened "Star of David" in appearance.

Star-Hop #4; M11, NGC 6705, "The Wild Duck Cluster." Our last object for this month is probably the most attractive of the month. As its name suggests, this open cluster has often been compared to a flight of wild ducks. Take a look. What does it remind you of?

Beginning at Alpha Scuti: Extend a line about 4 and a half degrees, a little less than the distance spanned by 3 fingers held together against the night sky at arm's length, to the northeast, to find the star Beta Scuti. M11 is located less than 2 degrees, about twice the distance spanned by your little finger against the night sky at arm's length, to the southeast. Binoculars and telescopes at high power will immediately reveal this splendid and bright cluster against the rich background of stars in the Milky Way. Take your time here. You'll enjoy the show!

## We're here to help! Here's how to reach us:

Address for New Memberships, Renewals, Magazine Subscriptions, and Book Orders:
Atlanta Astronomy Club
3595 Canton Road, Suite A9-305
Marietta, GA 30066

Atlanta Astronomy Club Information Line: 770-621-2661

Internet Home Page: http://stlspb.gtri.gatech.edu/astrotxt/atlastro.html

artrussell@mindspring.com
iakiel@crl.com
Philip.Sacco@sid.net
Psammons@aol.com
kthrivi@emory.edu kinneys@atl.mindspring.com dhanon@mindspring.com jmonroe007@aol.com
kemper@mindspring.com 0002015032@mcimail.com joeshep@mindspring.com
donhall@mindspring.com
ken.poshedly@mci2000.com
chesser@abraxis.com jakiel@crl.com
aleko@mindspring.com
Philip.Sacco@sid.net 0002015032@mcimail.com stephen.blalock@gtri.gatech.edu

# The Focal Point

Newsletter of The Atlanta Astronomy Club, Inc.

FROM: Tushar Thrivikraman 3629 Winbrooke lane Tucker, Georgia 30084 kthrivi@emory.edu

The Atlanta Astronomy Club Inc., the South's largest and oldest astronomical society, meets at 8:00 p.m. on the third Friday of each month at Emory University's White Hall or occasionally at other locations (check the hot line for details). Membership is open to all. Annual dues are \$25 (\$10 for students). Discounted subscriptions to Astronomy (\$20), and Sky & Telescope (\$27) magazines are available. Send dues to: The Atlanta Astronomy Club, Inc., 3595 Canton Road, Suite A9-305, Marietta, Ga. 30066.

Hot Line: Timely information on the night sky and astronomy in the Atlanta area is available on a twenty-four hour basis on the Atlanta Astronomy Club hot line: 770-621-2661.

Check out our ASTRO discussion list on the Internet: ASTRO@Mindspring.com. Also visit our Internet home-page: http://stlspb.gtri.gatech.edu/astrotxt/atlastro.html





## First Class

9805 Dr. William E. & Louise Warren 1212 Everee Inn Rd. Griffin, GA 30224