

What Am I Going to Observe Tonight?

By Mike Hotka

Have you ever asked yourself the question, what am I going to observe tonight? Even worse, did you ask yourself this question after you have your scope setup and evening twilight is ending?

If you are working towards an Astronomical League observing club certificate, you will have the answer to this question. There are currently 111 Astronomical League members, active and past, who have completed 10 or more Observing Clubs to receive the Master Observer Observing Club certificate. Ten current Astronomical League members have received 20 or more Observing Club certificates, three of those with 30 or more certificates. The top Observing Club certificate holder has 36 Observing Club certificates to his name.

Why should you complete more Observing Clubs? Here is how the top 10 certificate holders answered a questionnaire sent to each.

When asked: What motivates you to start and complete so many Observing Clubs?, Brad Young (Astronomy Club of Tulsa) said “the structure of the clubs allows me to plan, set goals, and feel accomplishment when I am finished.” Robert Pitt, (Birmingham Astronomical Society) likes “the challenge of the club requirements which gives direction to my limited viewing opportunities.” Mike Ramirez (Northeast Florida Astronomical Society) said “by starting with an Observing Club plan and setting goals to achieve that plan, I was able to keep going and complete the Observing Club”. Doug Brown (Minnesota Astronomical Society) indicates that “it’s a good structured way to observe. For me, if I don’t have a plan for observing, I tend to gab too much instead of observing”. “There’s never an evening sunset when I don’t know what I’ll be hunting down that coming night” said Scott Krantz (Astronomical Society of Kansas City).

For Mike Hotka (Longmont Astronomical Society), the motivation for completing so many Observing Clubs is “I like the hunt. Finding objects and actually seeing them.” For Aaron Clevenson (North Houston Astronomy Club), “I want to see it all! The problem is there are thousands and thousands of things to see. Where do I begin? The Observing Club lists obviously.” John Goar (Olympic Astronomical Society) said “There is something exciting about hunting down a list of related objects”. “Without the Observing Clubs I would be stuck in the mode of observing the same things over and over again”, said Young. For Krantz, “The Observing Clubs keeps me looking at new and off-the-beaten-track objects.”

When the top 10 certificate holders were asked: What Observing Club did you like the best?, Brown likes the Messier Observing Club the best. For Young, he liked the Earth

Orbiting Satellite Observing Club, while Hotka liked the Lunar II Club. "I had no idea you could see all kinds of subtle features on the lunar surface if the Sun angle was low enough. Shadows reveal a ton of lunar detail.". Clevenson's favorite Observing Club was the Planetary Observer's club. Ted Forte (Back Bay Amateur Astronomers) liked "the Herschel 400 the best. The main reason is this club was best suited to my usual observing style. I liked the varied types of objects represented and the broad range of difficulty embodied in the objects". Pitt likes all the Observing Clubs he has completed, while Ramirez liked "two, one personal and one for the teacher in me. First the personal club was Lunar I Club because I love to gaze back into time as to how Earth and other planets were formed. The second, which encompasses the first, is the Outreach Club, for I love sharing the lunar features with people and to see in their faces the awe that I see every time I look into the eyepiece". Krantz liked the Globular Cluster club the best. For Goar, "the Comet Observers Club was my favorite". Jim Ketchum's (Astronomical Society of Kansas City) "favorite was the Globular Cluster Club. It was relaxing, enjoyable and I'm partial to Globular Clusters".

Most of these ten observers all started out by receiving their Messier Certificate first. Since then, they have kept on going. And by completing more and more Observing Clubs, these people have become seasoned observers. Each Observing Club has something to teach you, whether you are more enlightened about the subject/objects or you learn new observing techniques to aid in your observing efforts.

When asked: What Club taught you the most? Hotka said "the Open Cluster Observing Club. It taught me to make sure I have what I need in the field to find and observe faint objects. If I know I will be looking for faint objects, I will make sure I have a picture of the star field or other references to help me find the faint fuzzy I am looking for". The Sunspotter Program taught Krantz "the most about the observing subject. I learned to categorize sunspots and sunspot groups. I learned that there was a lot more to see on the Sun than just random dark spots." As was the case for Clevenson. He indicated "although I know many things about many objects, I really found that I knew rather little about the Sun and its surface". Forte too liked "the Sunspotter Club, without a doubt. I found myself rather well versed in the particulars of the other clubs that I have done. Still, I was no stranger to the Sun either, for I had been casually observing the Sun for years. Doing the Sunspotter Club, however, opened up new questions for me and I became more interested in the mechanics of sunspots and the solar cycle. It made me a much bigger fan of our star." "The Earth Orbiting Satellite Observing Club, although the Dark Nebula Club was a very close second" said Young as he "had ignored both before the clubs were announced." Ketchum liked "both the Lunar and the Lunar II for they taught me so much about our closest neighbor. There is such a rich array of craters, mountains and plains that you can readily see and appreciate". Goar was able to "honed my star-hopping skills the most by completing the Herschel 400 Club. But just

about every club taught me a unique skill, which I think is the most valuable thing about completing these programs.” “The Messier Club primarily because it was my first attempt to learn how to use charts and star hopping techniques. It taught [Ramirez] to become proficient in navigating the night sky.” According to Pitt “both the Planetary Observer’s and Open Cluster Observing Clubs taught me the most about those objects. I liked the observing guides for these clubs and the descriptions of the characteristics to be documented. I appreciated the variety of these objects much more after gaining a better understanding of the classical descriptors applied to these objects and learning what features to look for when comparing different examples.”

Next, the top 10 were asked: What new techniques were learned while completing so many Clubs? “Doing these clubs has made [Forte] a much more disciplined note taker and has encouraged me to sketch objects much more than I ever had before. ” Goar has “learned the sky well. I am able to star-hop with ease wherever I want to go.” As is the case for Ramirez who “learned how to use charts and star hopping techniques. I have become proficient in navigating the night sky”. Ketchum “learned how to read star maps, whether hard copies or on a computer screen, to be able to pinpoint the exact location of some of the really hard objects to see. I learned how to coax an object out of the dark sky by using Averted Vision techniques. Both take lots of practice, but pay huge dividends”. For Hotka, “just being prepared for my observing session and making sure I have all the tools and references I need in the field to help me find faint objects.” Clevenson has “perfected the techniques of finding faint fuzzies. And although I am no artist, I sketch everything. If you are not sketching, then you are missing much detail.” “I have become more proficient at star hopping, averted vision, sketching, eyepiece / filter selection, planning, and the tracking and predictions required for satellites” said Young, but “most of all, I just have more confidence that I can see things that I might otherwise think too difficult.” For Brown, it was “learning how to use equipment to its best advantage”. Pitt learned that “patience and planning are the most important techniques that I have learned, along with dealing with frustrations. Most objects will come around again next year if you miss them this year. Many of my observing skills, including patience, were dramatically improved with the experience gained from the different clubs.” Krantz learned some valuable techniques he summarized as follows: “While hunting down faint and elusive objects, I learned scope tapping to get some movement in the field of view. Move your eye around the desired object to find your averted vision *sweet spot*. Use an eye patch on your non-observing eye and keep that eye open. Keep breathing! Without thinking about it, many times you’ll hold your breath trying to find something. Use a detailed image or digitized sky survey image in conjunction with a chart. Never give up! If you can’t see it tonight, try again tomorrow night.”

The Astronomical League has many great Observing Clubs for you to complete. All the information about these Clubs is on the League’s website. By looking at all the choices

and picking those Clubs that you are interested in, you too will be on your way to becoming a Master Observer, and beyond.