

Through My Eyepiece

By Geoff Gaherty, Toronto Centre (geoff@foxmead.ca)

The Herschel Club

A few months ago, I was invited by the Montreal Centre to give their annual Townsend Memorial Lecture. I attended my first Townsend Lecture in 1958 when the speaker was Dr. Fred Whipple of “dirty snowball” fame, so I was in distinguished company. After the lecture, we retired to the nearest gourmet restaurant, named after an illustrious Sudbury hockey player.

I spent a bit (a Tim “bit”?) of time chatting with my old friend Constantine Papacosmas who, oddly enough, doesn’t seem to have changed much in the 50-plus years we’ve been friends. He was bemoaning the fact that nobody in the wider world of astronomy seems to be aware that the Herschel Club is a Canadian invention, specifically another product of the fertile mind of Isabel Williamson. Constantine urged me to write about the original Herschel Club, so here goes.

In an earlier column (*JRASC* August 2006: www.gaherty.ca/tme/TME0608_Cosmic_Birdwatching.pdf), I recounted the history of Isabel’s most famous invention, the Messier Club. When Tom Noseworthy was on the verge of becoming the Messier Club’s first graduate, he asked Isabel “What should I observe next?” to which she replied, “Well, there are always the Herschels!”

Most people took this as a joke, but a few of us, including Constantine and myself, actually made a start on observing the Herschels. Our main source of information in those days was *Norton’s Star Atlas*, which plotted a number of the brighter Herschels with their original designations. We also were beginning to use the *Skalnate Pleso Atlas* that used those new-fangled NGC numbers. Both were pretty unreliable sources compared to the beautiful atlases available today.

John’s father, Sir William Herschel compiled an impressive catalogue of some 2600 deep-sky objects over his lifetime. Unlike Messier, who threw everything together in one list, Herschel was more organized and divided his objects into eight categories based on their telescopic appearance:

- I. Bright Nebulae
- II. Faint Nebulae
- III. Very faint Nebulae
- IV. Planetary Nebulae
- V. Very large Nebulae
- VI. Very compressed and rich star clusters
- VII. Compressed clusters of small and large stars
- VIII. Coarsely scattered clusters of stars

At the time, Herschel was using the largest apertures that had ever been pointed at the sky, so he was able to detect much fainter



Sir John Herschel

objects than anyone previously, plus see detail in brighter objects that had escaped earlier observers. His categories were strictly based on observable differences, since he had no idea (at least in theory) exactly what any of these objects were in reality. I personally have a strong suspicion, from Herschel’s remarks, that he was really forming some quite accurate notions about the true nature and distance of the objects he studied.

My own observations of the Herschels were sporadic and unsystematic. In June 1959, when I was only seven objects shy of completing my Messiers, I started sneaking a few Herschels into my observing. On October 21, I completed my Messiers by observing M77 with the Montreal Centre’s 165-mm refractor up behind Molson Stadium. On October 29/30, I had my first official Herschel observing session, logging six open clusters in the northern Milky Way and the famous Sculptor Galaxy, NGC 253. On my 21st birthday, 1962 March 7, I logged seven more Herschels, again mostly open clusters. That was it until I completed my second run through the Messiers in 1999, when I finally resumed my Herschel hunting after a 37-year lapse. To date, I have observed 427 of Herschel’s 2600 objects. ●

Geoff Gaherty recently received the Toronto Centre’s Ostrander-Ramsay Award for excellence in writing, specifically for his JRASC column, Through My Eyepiece. Despite cold in the winter and mosquitoes in the summer, he still manages to pursue a variety of observations, particularly of Jupiter and variable stars. Besides this column, he writes regularly for the Starry Night Times and the Orion Sky Times. He recently started writing a weekly column on the Space.com Web site.