

Article Title: **Your Next Observing Outing**

By Mike Hotka

You are ready to drive to your chosen observing location. At this point, you have prepared the list of objects you will observe. You have been watching the weather of your observing location and picked a night that will be clear and transparent. You have your laptop/phone loaded with your observing list(s), additional resources gathered to support your planned observing, and your car loaded. You are as prepared for this upcoming outing as you can be.

I like to arrive at my chosen observing location in the afternoon. This gives me plenty of time to setup my equipment while it is still light enough to see. I also enjoy being immersed in nature, relaxing in my chair and scanning the prairie with my binoculars. I enjoy finding wild animals to watch or watching a local farmer harvesting his crops in a field adjacent to one of my observing locations. This is a time for me to escape the hustle and bustle of the city and just relax.

I bought a 2 x 4 foot collapsible table to aid me in recording my observations. I like this table because I can extend the legs about 40 inches, which puts the table at a comfortable height. I don't have to bend my lower back to write my observations in my logbook, as I would have too if I had a lower table.



I have all the items on this table that I will need to support my night of observing. The table is located near my telescope so that I can clearly see the screen of the laptop that is running my Standard Edition of SkyTools 4 (ST4) ([SkyTools 4 Standard Edition \(skyhound.com\)](http://skyhound.com)). I have the observing list, I prepared at home, open in ST4 and with hotkeys, I can display the next object to observe in its associated star field, thus helping me identify that I am viewing the exact object that is on the observing list.



I use a spiral bound notebook, I call my field logbook, to capture all my thoughts about the observing site, the details of the objects I view, the sky conditions throughout the night and any other thoughts about the observing session that occur to me. I like this hard copy of my field notes because it is easy to reference it when I am home, completing my post observing activities. I've also developed a short hand notation that allows me to write a very descriptive narrative of the object I am observing, with very few words and characters. This speed of recording my observations allows me to spend time viewing more objects during the night because I am not spending excessive time electronically recording my observations.

Early on in the recording of my observations, I thought a tape recorder would be an efficient way to record my observations. This worked out well until one night. Instead of recording my observations, I recorded all the conversations between observations and not one word was recorded about the objects I was viewing. I had the record/pause cycle reversed. That was the last night I used a recorder to record my observations at the eyepiece. I have used my field logbook since that night.

My rule of thumb of what to record about my observations is to put enough information in my logbook so that if I reread my entries from a certain night, in my mind's eye, I can recreate the observing outing and see the objects I observed that night. I record: where I went; what time I got there; anything about the location that caught my eye throughout the outing; who was there observing with me that night; detailed descriptions of all the objects I observed; any last thoughts of the night before I pack everything back in the car at the end of the night.

Here is an example from my field logbook of how I record my night of observing:

Star party on CDT \$4.5

Olac Tex 9/25/19
 arrived ~ 7pm. Sun setting
 Clear light breeze from SE. will use Mike's scope + look at what he looks at.

- Saturn was awesome. Cassini division clear.
- Jupiter good

7:45 saw supply craft ahead of SS station. on same orbit but supply ship disappeared almost over head. SS followed ~ 2 min later + it was bright all across the sky

9:58 IC 1276 13 A small gl. see 3-4 brighter stars surrounded by a dim halo of glow. Above = 2l of a brighter FS = near.

9:08 IC 1257 9mm A very small round of glow w/ 2-3 hb stars on glow
 ST very good
 MW very nice well defined across the sky

9:35 N6749 13 A small round glow w/ hb star in center. VF
 seen w/ AI only.

9:40 M13 9mm nice. Very good view.

9:54 N6482 13 A v small round dim glow w/ brighter FS 2l of center of glow.

9:56 N6487 13 A v small oval. dim. hard to see. Has 2 FS on glow which bridges the glow.

9:59 N6501 13 A nice tilted oval dim. has brighter stellar core. then below + near is 6500. A bit smaller fatter oval w/ hb stellar core.
 6500 Then above + 2l = in same fov 6495 a v small VF oval glow. 2l is 6490 a tiny sliver of v glow

11:30 N6903 13 A small round v glow. Just above + near a dim FS + near Comet A. in Breda's Scope. In Peg A nice round brighter coma w/ bright stellar core in center.

11:34 N6958 13. in an arc of 3 stars 2l is a v small v of v glow


11:36 N7135 13 A small roundish v dim glow.

11:41 IC 5105 13 A v small round of halo w/ tiny brighter stellar core

11:42 N7097 13 A small of v sol. saw it as I panned scope around. Just above horizon in south

In the above logbook page, you can see that if something catches my eye in the field of view of the object I am looking at, I quickly sketch it in my logbook. In the above example, there was a second galaxy next to NGC 6501. I sketched this to show the closeness of the pair.

On a subsequent night, a page from my logbook shows the sketch and my shorthand notation for the Grus NGC 7590 galaxy group. I annotated the sketch so I could note the brightness of each member galaxy. The sketch showed their relative positions to each other and the cores of the galaxy if it was present:

Thus
 9/26/19
 Clear But brisk wind ~~from~~ from S.
 10:16 N6760 A small dim w.l. gb.
 10:18 N6749 A large round vt glow w/ 6-8 ^{foreground} bars on glow.
 ST Good wind still very brisk from SW
 10:23 N6822 A large vt tall fat oval. w.l. moves w/ FOV = eye follows it.
 1:20

 Grus 7590 Group
 12:40 - Saw Titan moon of neptune
 1:28 N7456 13 A very long, fat cigar of vt glow.
 Orion is rising along eastern horizon
 1:45 N271 - a small lens shape faint w/ larger hb core ^{inner}
 1:48 N309 A vt vt med fat oval glow
 1:50 N45 an ef small vt oval glow
 S & T OIR for last part of night

At the end of the night, before I start to pack up my car and head home, I put any final thoughts about my night of observing in the logbook.

When I get home, there is more to do before I have completed this observing session. This will be the topic of next month's article.