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# The Caldwell Objects – Deep Sky Companions

*Stephen James O'Meara*

4/2004 Tom Trusock - [Click to e-mail author](#)



**O**'Meara's at it again, and this time he tackles the Caldwell Objects.

The Caldwell Objects? What are those? Well, that's a fair question, seeing as how it's a fairly new list... If you ask Sky Publishing or Patrick Moore, the Caldwell Objects are the spiritual successor to the Messier Objects, and a list of targets for the amateur astronomer to move on to after completing their rite of initiation with the Messiers. If you ask an amateur astronomer that's been around for a while – you might get a bit of a different answer.

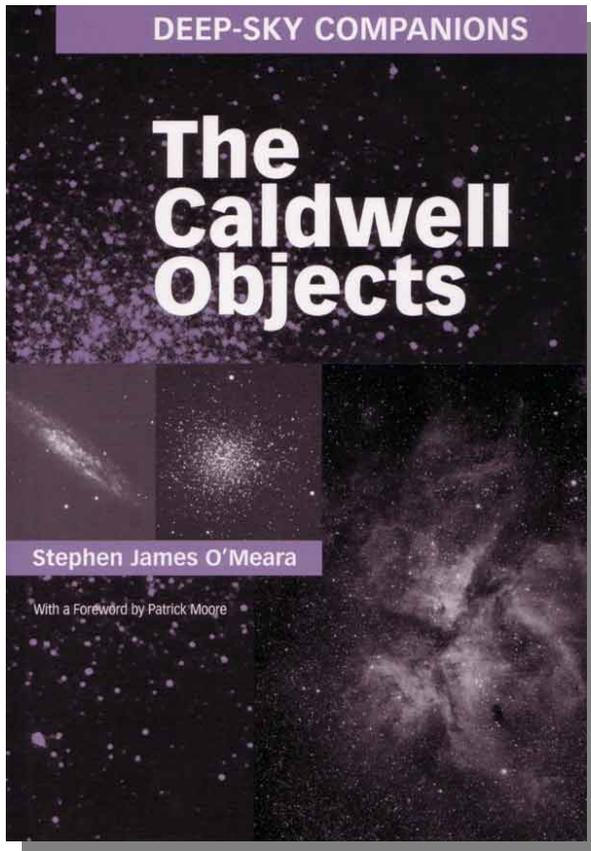
To begin with, let me give you a bit of the back-story involving the Caldwell objects – all of which is presented in O'Meara book – most of it in a forward written by the lists creator – Sir Patrick Moore, a venerable icon

of British amateur astronomy, and long-time astro-outreach pundit. Moore wondered why Messier's list was so incomplete, and that some seemingly obvious items had been left out (the Double Cluster, the Helix, ext..) Where did the amateur astronomer turn after observing the Messiers? His goal in drawing up the catalog was that all the objects had to be accessible to amateurs using modern 4-inch and larger telescopes under a dark sky. Since the M designation was in use, calling them the Moore Objects was out, but "Fortunately" (he writes) "my proper name is a double barreled one: I am officially Patrick Alfred Caldwell-Moore." And so it became the Caldwell catalog.

While I don't subscribe to the somewhat popular trend of "beating up on the Caldwell" list myself (personally, while I do question some of the targets on the list, I think it a laudable attempt to popularize some of the brighter and more interesting objects that were not included on the Messier list), I'd be a little remiss if I didn't bring you up to date on this somewhat controversial topic. There's been a bit of a debate over the Caldwell's to say the least. I suspect that most amateurs would have been placated if the various parties

<b>Level</b>	Armchair astronomer and observer / beginner through advanced
<b>Age</b>	15 and up
<b>Pages</b>	484 pages
<b>Type / Price</b>	Hardback / \$39.95
<b>Publisher</b>	Sky and Cambridge
<b>Summary</b>	The next title in the Deep Sky Companions series, O'Meara chooses not to change the formula – much. Readers will find the Caldwell objects crammed with eyepiece impressions, photos, drawings, finder charts, and historical data

involved had referred to it as the Caldwell List rather than the Caldwell Catalog or the Caldwell Objects. Using either of the last two tends to indicate that the person whose name accompanies the catalog had some hand in initially discovering or cataloging the objects. Moore, simply took objects that already existed and moved them onto his catalog. Other Amateurs feel it's a bit presumptuous to take well known objects like the North American Nebula (NGC 7000) the Double Cluster(NGC884/869, and rename it C20 or C14 – claiming (somewhat rightly so in my opinion) that no one will remember the new designation – and why do they need a new designation in the first place?



Couldn't Moore simply have used the existing catalog numbers from whatever catalog they happen to be in rather than rename objects that have been cataloged for hundreds of years? What's to stop any observer from doing the same thing and coming up with their own list? (Nothing – and why should it?) I suspect that the bulk of the real objection was at least partly due to the feeling – rightly or wrongly – that sky publishing and Patrick Moore were driving the Caldwell list down their throats mainly as a commercial venture.

Even more debate involves the choice of objects Moore selected (and didn't select). Caldwell 9 is better known as the Cave Nebula (Sharpless 2-155), and is notoriously difficult to see well, even in moderate aperture instruments under dark skies. And that's far from the only interesting choice.

However – this isn't an article about the strengths or the weaknesses of the Caldwell list, it's a review of O'Meara's *The Caldwell Objects*.

If you haven't read the CN review of *The Messier Objects* you might want to head over to the subscriber section and take a gander. *The Caldwell Objects* is number two in the Deep Sky Companion series while *The Messier Objects* is number one. You don't have to have *The Messier Objects* to enjoy *The Caldwell objects*, but there is a section intended to help newcomers get started in astronomy that's been left out of *The Caldwell Objects*. For most of us, that's probably not a big loss.

O'Meara's first chapter is about the book itself – his equipment, techniques, sources, corrections to the original S&T version of the Caldwell list (whew!), and details about observing site. I found the details about O'Meara's site particularly interesting. He typically observes from Mt. Kilauea's 4200 foot summit on the big island of Hawaii, and

has unobstructed views to the -70 degree latitudes, only four Caldwell objects are below his horizon – something the amateur who lives at a more typical latitude of 35-45 degrees should keep in mind. While dark his observing site is plagued by volcanic chemicals that have evidently taken a toll on his equipment. Incidentally, Steven laments it's not as dark as it used to be – while doing the research into this book, we were heading into solar max, and he remarks on the increase of *natural* light pollution – to be fair, human development has and is taking a toll on the pristine skies, but still – how many other observers have the opportunity to notice the natural light pollution due to the solar max? To log the remaining four Caldwells, O'Meara journeyed to New Zealand twice, and South Africa once. Now there's a research trip!

His goal was to observe the Caldwells with his 4" Genesis (when possible) or something that would provide similar views. One should note, that even with his fabled eyesight and dark sites, a couple of the Caldwell objects were barely visible and really require bigger scopes for the best views.

The second chapter takes up the bulk of the book and is made up of his observations, finder charts (somewhat better than the charts in the Messier objects, but I still feel they could be improved), eyepiece impressions, drawings, and historical anecdotes. Steven is also quick to point out other interesting targets in the general region (occasionally these targets are more interesting than the Caldwell objects) a trend he carries over from The Messier Objects.

Chapter three he introduces and gives his observations on 20 spectacular non-Caldwell objects (and some of these would do well to replace objects on the current list like Caldwell 9). It should be noted that while the pertinent information is given (RA, Dec, Mag, and Dim) there are no finders charts or drawings – sort of a “light” approach to the objects that are given star billing.

Appendix B gives us O'Meara's theory on why Messier did not include the double cluster and while intriguing (I'm not going to give it away here), I'm not sure I completely agree with all his reasoning, but the bulk of it is quite logical speculation, and makes for interesting reading.

While it's intended as an observing guidebook, I got more enjoyment out of *The Caldwell Objects* by employing it in armchair astronomy when the sun is high or the clouds rule the skies. *The Caldwell Objects* suffers from some of the same problems O'Meara's former book did; the biggest offender being the lack of decent finder charts. While it's something of an improvement, if this is intended to be an observing guide used at the telescope, there is still more work that needs to be done. Additionally, any work similar to this will (unintentionally) fire up the observers “averted imagination” and the amateur astronomer reading this while observing or shortly before should be aware of that, and make all efforts to be certain one is seeing what one is seeing.

*The Caldwell Objects* is quite a bit longer than *The Messier Objects* as well. While O'Meara is an entertaining writer, the sheer length of the tome may challenge some

readers patience – and this would be a terrible thing, as there is a plethora of good information inside.

For the amateur looking for a list of objects to attempt after the Messiers, the Caldwell catalog is just one of the many that are out there: The RASC's Finest N.G.C. Objects List and the Herschel 400 are two excellent ones in my opinion, but neither has been treated like the Caldwell's. O'Meara's book is an excellent companion for the observer who is looking to take the next step beyond the Messiers. Although some may have wished he'd picked a better catalog, one can't seriously fault his treatment.

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## ***Related Resources***

Cartes du Ciel: a truly first-rate free(!) sky charting program by Patrick Chevalley – use it to print off more appropriate finder charts for your own Caldwell hunt.

<http://www.stargazing.net/astrope/>

The RASC Finest N.G.C. Objects

<http://www.edmontonrasc.com/finengc.html>

The Herschel 400

<http://www.astroleague.org/al/obsclubs/herschel/h400lstn.html>

Alister Ling's - The Caldwell Catalogue; A Good Idea Gone Bad - Besides, Several Good Ideas Already Exist

<http://members.aol.com/anonglxy/lingmoor.htm>

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*O'Meara reports Caldwell 105 is the southern most Caldwell object visible from the United States.*