

# Bright retreat for comet of the century

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Comet Hale-Bopp, now regarded as the brightest comet this century, is about to become visible in our evening sky. Around the middle of the month, even sooner for those favourably situated, it will be seen emerging tail first from the glow of evening twilight.

It is not marked on our current sky chart for the simple reason that at the moment it is still below the horizon, visible only from the northern hemisphere where it is putting on quite a show.

Astronomer Clark Chapman, who lives in Tucson, Arizona, has a bedroom with a large picture window facing east. He says that waking up before sunrise treats him to a fabulous view of the comet and its tail soaring upwards from the glow of morning twilight.

A few days ago the comet was at its closest to the sun, a time when comets usually attain their greatest brilliance, and soon after it reached its closest point to Earth. Only a mere 200million kilometres away.

But this also means that it is passing from the pre-dawn sky into the evening sky, and as its orbital path is passing from north to south it will soon be our turn to see the comet.

The brightness of Comet Hale-Bopp seems to be exceeding predictions.

For a while last year it was fainter than predicted but has more than made up for deficit.

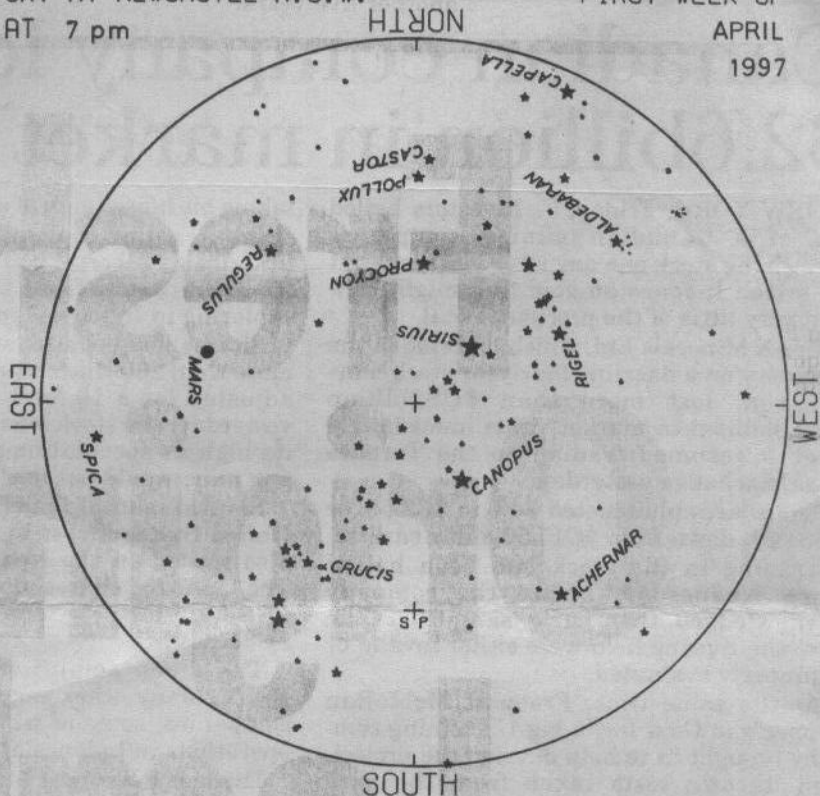
This is great from our point of view. Instead of being about the brightness of Alpha Centauri (the third brightest star in the sky) when we first see it, Comet Hale-Bopp may even outshine Canopus (the second brightest star in the sky — check our sky chart for the position of these two stars).

To see the comet in mid-April one must be somewhere with a clear view to the northwest and have no lights to spoil the darkness.

Then its tail will be visible,

SKY AT NEWCASTLE N.S.W.  
AT 7 pm

FIRST WEEK OF  
APRIL  
1997



sweeping to the right in the fading glow of evening twilight.

Towards the end of April the nucleus should be visible as well.

As the weeks go by the comet will climb higher and higher in the night sky as it moves back towards the outer reaches of the solar system.

We in the south will have the best view of its retreat. At this stage it is not possible to say with certainty how long it will remain visible before it fades from view to the unaided eye, not to be seen again for 2380 years.

When Comet Hale-Bopp was rediscovered it was travelling in a somewhat larger orbit, taking 4210 years to complete a single journey around the sun.

This means that it would have been first discovered around 2213BC, frightening the heck out of the ancient Egyptians, the wandering tribes of Israel, the Druids, the early Chinese and everyone else fearful of their gods.

Most of them would have taken the comet as signalling the advent of a new boss (emperor or king, whatever) and I shudder to think how many innocents would have been slaughtered in appeasement.

But those were the days when astrology was all the rage.

Now we are much more enlightened and the science of astronomy is what tells us that Comet Hale-Bopp's change in orbit, from a period of 4210 to 2380 years, is happening now as the comet passes at its closest to Jupiter, whose powerful gravity is deflecting its orbital path (and doing dreadful things to your horoscope!).

So over the next few months enjoy the comet of the century, just as three years ago we saw the amazing impacts of Comet Shoemaker-Levy on Jupiter and 10 years ago we enjoyed the brightest supernova seen in three centuries.