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Hideaway: Sunset at the North Pole

- Howard L. Cohen

A picture "too beautiful not to share," supposedly taken at the North Pole, shows a large crescent moon hovering above a much smaller Sun. This breathtaking image is circulating the Internet. Is it real many ask, or an outstanding fake?

rban legends never die or so it would seem. A remarkably beautiful and amazing picture has been circulating on the Internet for several years usually via e-mails and postings on web sites (Figure 1).



Figure 1. "Hideaway." A stunning picture purportedly taken of sunset at the North Pole with the crescent moon and setting Sun. This image has circulated on the Internet since at least 2006. See text for source.

This striking image often carries a caption containing words like:

"A scene you will probably never get to see in person. This is the sunset at the North Pole with the moon at its closest point, so take a moment and enjoy God at work at the North Pole. An amazing photo and not one easily duplicated." Sometimes additional words in the caption contain a request like this:

"You may want to pass it on to others so they can enjoy it. The Chinese have a saying 'When someone shares with you something of value, you have an obligation to share it with others!' "

Many people do share this image and the chain goes on and on. I recently received several e-mails with this picture and so this article results.

Most who see this picture probably accept this beautiful image as an amazing photograph.

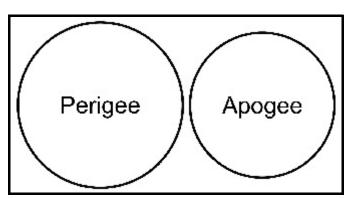


Figure 2. The perigee moon compared with the apogee moon. The variation in the apparent size of the Moon when closest and farthest from Earth is only about seven percent. The Sun's variation is but three percent.

Some wonder whether real or a fake but few bother to critically assess this image. Thus, they just pass it on, presumably as a real, extraordinary photograph.

Although this image is certainly a picture "too beautiful not to share," this surreal sight definitely shows a scene not duplicated in nature.

First, the Sun and Moon always appear nearly the same size in our sky whatever your location on Earth even when the Moon is closest to our planet. The Moon increases in apparent size

only about 1.14 times between nearest and farthest distances from Earth; the Sun's variation is even smaller, only 1.03 times. See Figure 2. Actually, the near equality of the Sun and Moon's apparent sizes makes possible the grand phenomenon of a total eclipse of the Sun!

Yes, the Sun and Moon often appear larger than "normal" when seen near the horizon. This is a phenomenon called the "moon illusion" and is an optical illusion of the mind. Is the Moon's enlargement in this image a consequence of this illusion? Not so for two reasons. First, the Sun should appear even larger than the Moon due to this illusion since the Sun's image is closer to the horizon than the Moon. Yet, in this image, the Sun appears much smaller than the Moon. Second, photographs of the Moon or Sun, when either high or low, should show no appreciable change in apparent size despite their elevation above the horizon. Why? Because this is an illusion of the mind and not photography.

Also, sunset does not happen at the poles as it does elsewhere on Earth. Sunset would take many days as the Sun circles the horizon gradually getting lower as the fall equinox date approaches. Here the Sun is still substantially above the Arctic horizon with sunset many days away. In addition, a crescent moon would not appear above the Sun's position at the poles; the crescent moon would be off to the side of the Sun due to the angles the paths of the Sun (*ecliptic*) and Moon on the sky make with each other.

Furthermore, if the crescent Moon was this close to the Sun in the sky, the Moon would be very difficult, probably impossible to see due to glare from the Sun and the brightness of



Figure 3. NOAA web cam view of the North Pole. Photo taken 2009 April 29, an unusually clear day. Note the absence of high ice ridges and the overexposed image of the Sun. See www.arctic.noaa.gov.

the still day sky. And why is the reflection of the Sun on the water brighter than the Sun on the sky? (Notice the Moon's reflection is dimmer than the Moon in the sky.)

Close inspection of the image also shows several faint stars. This is not likely with the still bright sky background.

This picture shows a large expanse of liquid water at the North Pole. This might be possible after summer (and global warming?) but the ice ridges seem too high for the North Pole. Also

the image looks too slick or crisp and possibly lacks real sunset hues and brightness. In fact, unlike the image of the Moon, Sun or landscape, a magnified image shows no pixilation of the background. Exceptionally clear skies at the pole as this picture depicts would be uncommon, especially occurring when the Sun and Moon are in this "unusual"

configuration. Figure 3 shows an NOAA web cam image of the North Pole take 2009 April 29 on an exceptionally clear day. Notice the overexposed image of the Sun compared with the properly exposed foreground.

So, the caption stating, "A scene you will probably never get to see" is essentially correct as you will never see this at the North Pole or elsewhere from Earth (at least not from our Earth)!

And the statement, "An amazing photo and not one easily duplicated" is wrong. One can easily duplicate this image using computer software if you have the talent for it!

In fact, this image (titled "Hideaway") was created by a young, twenty-six year old art student in Hamburg, Germany, Inga Nielson (Fig. 4), who is also studying astro



Figure 4. Inga Nielson. German artist and student who created the fantasy view, "Hideaway," using specialized landscape software. (Photo from artist's web site.)

and geophysics. Nielson uses a software program, *Terragan* (www.planetside.co.uk), a landscape or scenery generator for Windows and the Mac. An additional hobby is also creative writing and she composes poems, short stories, novels and songs. For example, see a small selection of her science fiction, mystery, horror and fantasy short stories, including a few poems at www.gatetonowhere.de/index.php?link=stories (only available in German).

Nielsen has a home page, "Gate To Nowhere" at www.gatetonowhere.de where you can see this image (www.gatetonowhere.de/gallery/details.php?image_id=63) and many other outstandingly beautiful and stunning, fanciful creations produced with *Terragan*, some also postworked with *Photoshop*. For example, Figure 5 shows her dazzling creation, "Eclipse." A link to Nielsen's home page is on the AAC's "Space Art" page at

www.floridastars.org/spaceart.html. However, note that her web site is in German. (Click on the UK icon to bring up an English version of some pages.)

Nielsen states she paints landscapes for portions of the scene or for the entire landscapes with a graphics tablet while some are painted entirely. Additionally, Nielsen writes that she uses matte painting to create scenes that come to her mind. Images on her web pages are available only for private, non-commercial purposes free of charge.



Figure 5. Eclipse. Another imaginative and beautiful fantasy scene by artist Inga Nielsen. Her website contains dozens of such surrealistic, stunning creations.

And, are you sure you have never seen her creation, "Hideaway," before? In fact, "The Astronomy Picture of the Day" web site (APOD) featured this image 2006 June 2 (antwrp.gsfc.nasa.gov/apod/ap 060620.html)!

So, this "photo" circulating on the Internet is a "hoax" in the sense that it shows a scene that cannot exist anywhere on Earth and misleads the viewer to think this is a real scene of the sky. Apparently someone deleted the artist's name, titled the picture "Sunset at the North Pole" and circulated the image as a real photo. Nielson, herself, wonders

how "anyone can think that this is a photo of a place that is earthly!"

Still, her picture is breathtaking. Rather, than critically judging this picture, we should perhaps continue to share it with others. Still, let people know it is a fictional, artistic creation by a young, talented and imaginative young women and not a real photograph.

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