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CLUB NOTES

Club Notes - June 2024

As summer approaches SAAA activity slows down in certain respects but speeds up in others. As I mentioned last month, we have two programs scheduled for this summer at Holland State Park, one in July and one in August (our regular program for June, Museum Under the Stars has been cancelled). In order for these programs to be successful, we need to have several members bring their telescopes to set up on the beach for visitors. Please let me know if you are able to participate in this program.

Our regular observing nights at Hemlock Crossing are unchanged and can be found on our web site. I look forward to working with members to accomplish our summer goals.

Peter Burkey
President, SAAA



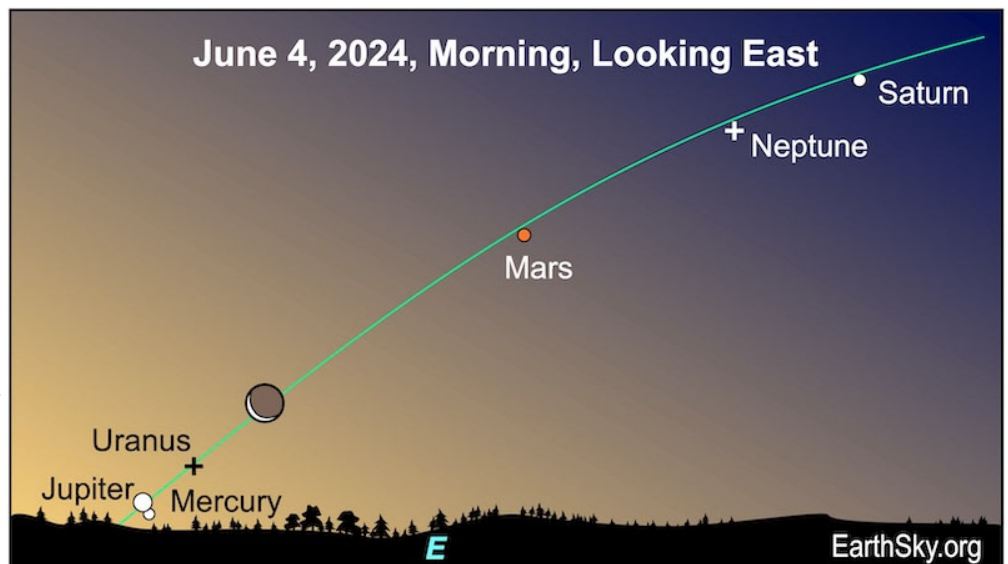
The Night Sky: June

This month the morning sky will include a number of planets and deep sky objects. For you early risers (sightings are more likely around 5:30 am), be sure to look toward the southeast portion of the sky, near the horizon. You should be able to spot both Mars and Saturn before the sky brightens too much. As the morning progresses, look for Jupiter to the lower left of Mars, near the horizon. Binoculars are recommended for spotting these objects.

Returning to the evening sky, as Leo drifts toward the western horizon, see if you can spot the constellations of summer, located in the eastern half of the sky. Bootes, Corona Borealis, and Hercules should be visible fairly high in the east. While you're at it, see if you can also spot both the Coma and the Hercules Clusters.

Hopefully the weather will cooperate and we'll be able to enjoy what's up in the sky.

[Ed: photo of morning is courtesy of EarthSky.org, and June sky pg 7, are also EarthSky.org; used without permission and provided for those of us who are still learning; editor made a donation.]



Calendar and Upcoming Events



Public Observing

When Weather Permitting Every FRI evening 7PM.

Where Hemlock Crossing Public Observatory, 8115 W Olive Rd, West Olive, MI 49460, USA

Description The observatory is open from our start time until 11 PM (weather and clear sky permitting, see note above after October 14th). There are no entry fees. Please be aware that the park gate closes automatically at 10 PM sharp, therefore visitors must arrive before 10 PM to enter the park. You will be able to leave as you wish.

Visible night sky objects: planets, the Moon, deep sky objects like galaxies, star clusters and planetary nebulae.

Next Club Meeting September 12th

There are no club meetings in the summer months (June – July – August). Our next Club Meeting, which is open to all club members, is September

Have you missed a copy, or lost one, or just want to browse old issues of Astronomical League's *Reflector*?
Astronomical League's quarterly *Reflector* magazine:

<https://www.astroleague.org/reflector/>

SAAA events

Today ◀ ▶ June 2024 Print Week Month Agenda

Sun	Mon	Tue	Wed	Thu	Fri	Sat
26	27	28	29	30	31 9pm Public Obs	Jun 1
	3	4	5	6	7 9pm Public Obs	8 9pm Public Obs
		11	12	13	14 9pm Public Obs	15
16	17	18	19	20	21 9pm Public Obs	22
23	24	25	26	27	28 9pm Public Obs	29
30	Jul 1	2	3	4	5 9pm Public Obs	6

*For More Information on Any Event
 Please go to www.holland-saaa.org*



Space Place: <https://spaceplace.nasa.gov/> A place where kids and grown-ups have fun with space and technology.

NASA Climate Kids: It's all about climate.
<https://climatekids.nasa.gov/>



SciJinks: It's all about weather! <https://scijinks.gov/>

Club History Moment: From April 1991

the Dew Point Chart which appeared with this is printed on page 5 and see also, from SciJinks, a companion "kids" article page 6

The Dew Point

I would like to point out the significance of the dew point temperature, which I recommend you watch daily. The dew point is an accurate measure of the moisture content of the air and is a dependable indicator of the comfort levels of the air on any given day.

The dew point is the temperature at which the air becomes saturated (100% relative humidity) for the level of moisture in the local air mass. It will therefore show you the potential for the lowest value to which the temperature will drop overnight. How so? Because, when the temperature reaches the dew point, the air becomes saturated. Dew or fog will form at that temperature and the temperature fall stops as the moisture is condensing (all over your eyepieces, lenses, etc! Hence the expression 'dew point' in reference to that temperature reading.

When the dew point is below 32 F (or freezing) it becomes the 'frost point' temperature and cooling to that level produces frost on exposed surfaces. By the same token, flesh exposed to the air responds as much as to the dew point as it does to the air temperature. Recall that the body's natural air-conditioning system functions through the evaporation of perspiration. When dew points are high, i.e., in the upper 60s and 70s, there is

For example, as the temperature on any given day goes up, warmer air has a greater capacity to hold moisture. So the relative humidity goes down but the actual amount of moisture in the air remains the same with completely misleading results as far as comfort levels go.

On a typical summer day in Florida, the dew point in the pure tropical air is likely to be 75 F. Also, after overnight cooling, the air temperature could cool to 75 F. At that point the relative humidity is 100% - the temperature and dew point are the same. By mid-afternoon, however, the temperature may be up to 95 F with a corresponding drop in the relative humidity to as low as 50%. Now, are we going to feel more comfortable? Not likely! This is because the dew point will still be reading an oppressive 75 F. Excessive moisture in the air has not changed, only the number we call the relative humidity - and a number is not much relief from the smothering summer heat. If the dew point (or 'frost point') is below the freezing level (32 F), prolonged exposure to modest breezes can bring the threat of frostbite to exposed flesh. The lower the dew point and the stronger the wind, the greater the threat. This is the area in which the "wind chill" factor of which

you hear so much over the winter months comes into its own; as a predictor for potential frostbite in winter sports enthusiasts and other outdoor types.

See...now you can be your own forecaster...and be a lot more "weatherwise" than before, if you'll learn to watch the dew point!

WALLY KINNAN

2024 Lecture Schedule

Date	Time	Title	Presenter
Jun 8	dusk	Observatory: Public Night	SAAA Members
Jul 13	dusk	Observatory: Public Night	SAAA Members
Aug 10	dusk	Observatory: Public Night	SAAA Members
Sep 14	8 pm	Lecture: Astronomy in Art	Frank Roldan
Oct 12	7 pm	Lecture: Finding Things in the Night Sky	Barry Schoenfelner
Nov 9	7 pm	Lecture: Telescope Basics	Frank Roldan



Photograph left is from the Hubble Space Telescope/NASA ©. The image is from 5/18/24 and shows the Dawn of a Sun-like Star. This NASA Hubble Space Telescope image captures a triple-star star system.

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*Editor is appointed by the SAAA board. Email: barbwbrown@hotmail.com
Previous Issues of our newsletters are found on our website at: Holland-saaa.org*

*Not sure received your copy of Reflector, or, looking for a past issue?
Digital copies of the Astronomical League's quarterly Reflector magazine: can be found at:*

<https://www.astroleague.org/reflector/>

This Month in History

June 2: Surveyor 1 lands on the Moon - 1965

June 5: Regular observations of Neptune begun by Voyager 2 - 1989

June 10: Mars rover "Spirit" launched - 2003

June 16: Valentina Tereshkova first (and only solo) woman in space - 1963

June 18: Sally Ride becomes first American woman in space - 1983

June 22: Evidence of liquid water on Mars announced by NASA - 2000

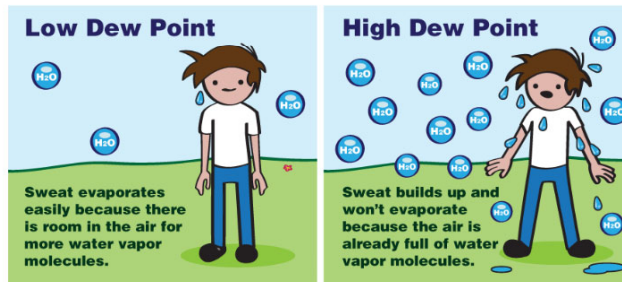
June 30: Tunguska impact flattens hundreds of miles of Siberian forrest - 1908

DEW POINT TABLE

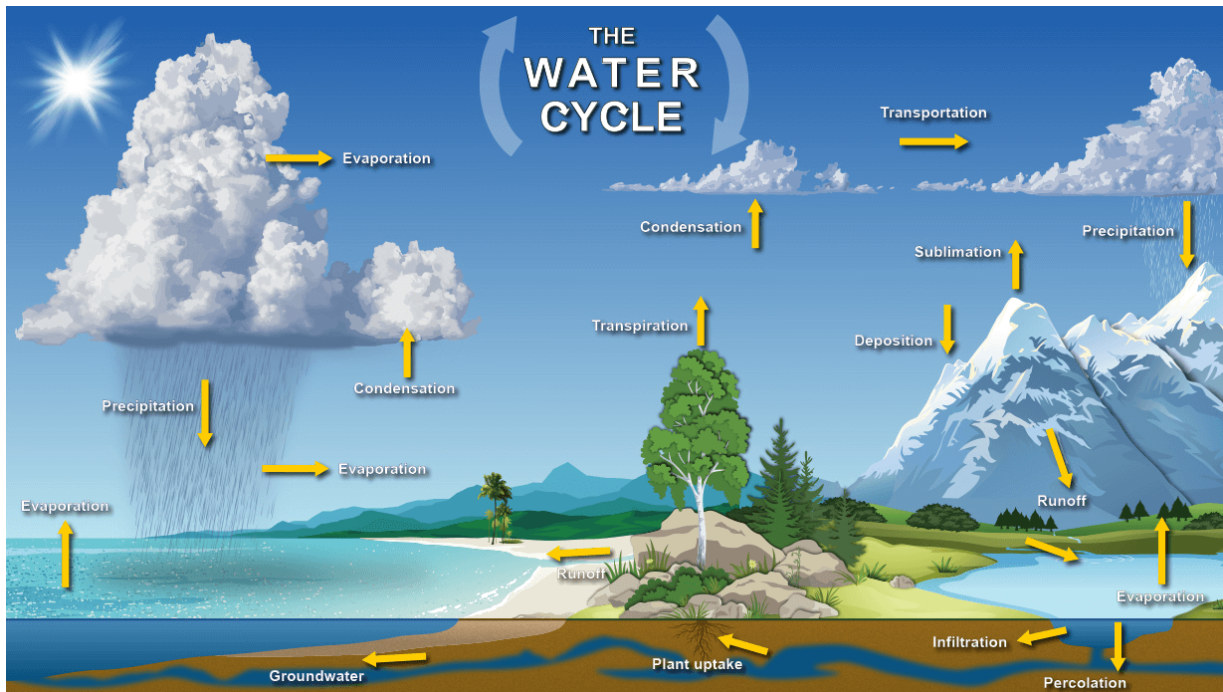
Temp	Relative Humidity															
	25	30	35	40	45	50	55	60	65	75	75	80	85	90	95	100
93	51	56	60	64	68	71	74	77	79							
92	50	55	59	63	67	70	73	76	78	79						
91	50	55	59	63	67	70	73	75	77	79						
90	49	54	58	62	66	69	72	74	77	78						
89	49	54	58	62	66	68	71	74	76	78						
88	47	53	57	61	65	66	70	73	74	77						
87	47	52	56	60	64	66	69	72	74	76						
86	46	51	55	59	62	66	68	71	73	75	77					
85	46	51	55	57	61	65	67	69	73	74	76					
84	44	49	54	58	60	63	67	68	71	73	75	77				
83	44	48	52	56	60	62	66	67	70	72	75	76				
82	44	48	51	55	60	61	64	66	69	71	74	75	77			
81	42	47	51	54	58	61	63	66	68	70	73	74	76	77		
80	41	45	50	54	56	60	62	65	67	69	72	73	75	76	79	
79	41	44	49	53	55	59	61	64	66	68	71	72	74	76	78	79
78	39	44	48	52	55	58	60	63	65	68	69	71	73	75	77	78
77	38	43	48	51	55	57	60	62	65	67	68	70	72	74	76	77
76	38	42	47	50	53	55	59	61	63	66	67	69	71	73	75	76
75	37	42	45	50	52	55	58	60	63	65	66	68	70	72	74	75
74	37	41	44	48	51	55	57	59	62	64	65	68	69	71	73	74
73	36	39	44	47	50	53	55	58	61	62	64	67	69	70	72	73
72	35	38	43	47	50	52	55	58	60	61	64	66	68	69	71	72
71	34	38	42	45	49	51	54	57	58	60	63	65	67	68	70	71
70	33	37	41	45	48	51	54	55	57	60	62	64	66	67	69	70
69	32	35	41	44	48	50	52	54	56	59	61	63	65	66	68	69
68	31	35	40	43	46	49	51	53	56	58	60	62	63	65	67	68
67	30	35	38	42	46	48	50	53	55	57	59	61	62	64	66	67
66	30	33	37	42	44	46	50	52	54	56	58	60	61	63	64	66
65	28	32	37	40	43	46	48	51	53	55	57	59	60	62	63	65
64	27	32	36	39	42	45	48	50	52	54	56	58	59	61	62	64
63	27	31	35	38	41	45	47	49	51	53	55	57	58	60	61	63
62	26	30	35	37	41	43	46	48	50	52	54	56	57	59	60	62
61	25	29	34	37	40	42	44	47	49	51	53	54	56	58	59	61
60	25	29	32	35	38	41	43	46	47	50	52	53	55	57	58	60

during the summer months!

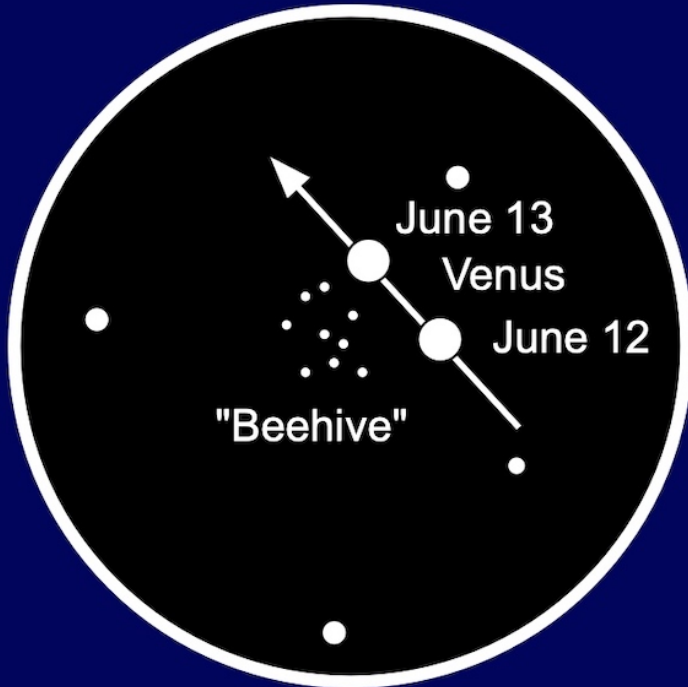
Dew Point	Feeling
Less than or equal to 55	Dry and comfortable
Between 55 and 65	Becoming "sticky" with muggy evenings
Greater than or equal to 65	A lot of moisture in the air, very humid and uncomfortable



Have you ever been sweaty on a hot, muggy day? Maybe you noticed that the sweat didn't completely evaporate off your skin! This is probably because of the high dew point. When the dew point is high and it is really hot out, sweat builds up on our skin and has a hard time evaporating because the air is already pretty full of water vapor molecules! If you compare hot summertime days in a humid place (like Florida) and a dry place (like Arizona), you will be more sweaty in Florida because the relative humidity is closer to 100%, meaning it doesn't evaporate as efficiently as in the dry, low relative humidity air of Arizona. Credit: NOAA/JPL

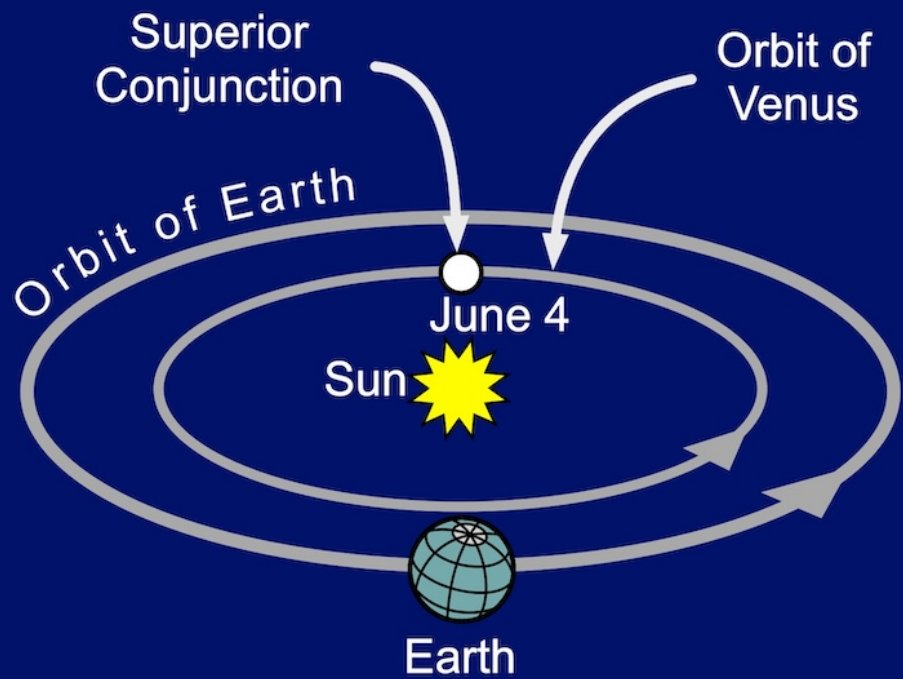


June 12 and 13 Venus in Beehive Looking through binoculars



EarthSky.org

Venus at Superior Conjunction



EarthSky.org