

1
00:00:06,639 --> 00:00:10,179
Your guide to constellations, deep-sky objects,

2
00:00:10,179 --> 00:00:15,339
planets, and events.

3
00:00:15,339 --> 00:00:23,679
Tonight's Sky, highlights of the July Sky.

4
00:00:35,219 --> 00:00:43,100
Giant planets rule the evening skies in July.

5
00:00:43,100 --> 00:00:51,920
The solar system's largest planet, Jupiter,
dominates the southwestern sky.

6
00:00:51,920 --> 00:00:55,020
Use a telescope to spy its cloud bands

7
00:00:55,020 --> 00:01:01,000
or perhaps even the Great Red Spot.

8
00:01:04,099 --> 00:01:06,719
The next-largest planet, Saturn,

9
00:01:06,719 --> 00:01:11,980
presides over the southern sky.

10
00:01:14,719 --> 00:01:21,340
Its splendid rings are an awe-inspiring sight.

11
00:01:41,159 --> 00:01:43,319
The summer night sky is

12
00:01:43,319 --> 00:01:49,619
filled with a treasure chest of bright jewels.

13
00:01:49,620 --> 00:01:52,660
Scorpius is a striking constellation,

14
00:01:52,659 --> 00:01:56,239
one of the few that distinctly resembles the object

15
00:01:56,239 --> 00:01:58,299
after which it was named.

16
00:01:58,299 --> 00:02:02,019
The Scorpion is easy to trace in the sky.

17
00:02:02,019 --> 00:02:05,780
Its head, curved tail, and venomous stinger

18
00:02:05,780 --> 00:02:07,359
are prominent.

19
00:02:07,359 --> 00:02:11,199
At the Scorpion's heart lies a reddish star.

20
00:02:11,199 --> 00:02:14,239
Its color closely resembles that of Mars,

21
00:02:14,240 --> 00:02:17,340
known to the Greeks as Ares.

22
00:02:17,340 --> 00:02:20,599
Ancient Greek stargazers, contemplating these

23
00:02:20,599 --> 00:02:25,099
two crimson objects, named the star Antares,

24
00:02:25,099 --> 00:02:30,299
which means "rival of Ares."

25
00:02:30,300 --> 00:02:33,340
A prominent and lovely globular cluster

26
00:02:33,340 --> 00:02:35,140
in small telescopes,

27
00:02:35,139 --> 00:02:40,319
M4 lies just to the right of Antares in Scorpius.

28
00:02:40,319 --> 00:02:43,799
Globular clusters are collections of hundreds of

29

00:02:43,800 --> 00:02:45,780
thousands of closely packed

30
00:02:45,780 --> 00:02:52,039
and gravitationally bound stars.

31
00:03:13,020 --> 00:03:16,719
The center of our galaxy lies in the direction of the

32
00:03:16,719 --> 00:03:21,500
great constellation Sagittarius, the Archer.

33
00:03:21,500 --> 00:03:25,520
This area of the sky overflows with stars,

34
00:03:25,520 --> 00:03:32,260
globular star clusters, and bright and dark nebulae.

35
00:03:32,259 --> 00:03:34,780
Look for Sagittarius by finding the

36
00:03:34,780 --> 00:03:38,659
group of stars commonly known as the Teapot.

37
00:03:38,659 --> 00:03:43,259
The handle, top, and spout are easy to find.

38
00:03:43,259 --> 00:03:44,840
Under dark skies,

39
00:03:44,840 --> 00:03:49,520
the Milky Way seems to rise out of the Teapot's spout.

40
00:03:49,520 --> 00:03:52,140
Many deep-sky targets reside in

41
00:03:52,139 --> 00:03:55,799
this area of the summer night sky.

42
00:03:55,800 --> 00:03:58,700
A quick glance with binoculars reveals

43
00:03:58,699 --> 00:04:01,500

some spectacular objects.

44

00:04:01,500 --> 00:04:04,340

The Lagoon Nebula's gas and dust

45

00:04:04,340 --> 00:04:07,939

is brilliantly illuminated by the energy of the hot,

46

00:04:07,939 --> 00:04:13,740

young stars inside it.

47

00:04:19,459 --> 00:04:21,939

In the three-lobed Trifid Nebula,

48

00:04:21,939 --> 00:04:24,719

dark dust lanes appear etched against

49

00:04:24,720 --> 00:04:30,560

the radiance of glowing gas.

50

00:04:37,519 --> 00:04:41,079

The Omega Nebula glows brightly but we cannot

51

00:04:41,079 --> 00:04:45,899

see its hottest stars, embedded deep inside.

52

00:04:45,899 --> 00:04:49,799

Infrared telescopes, peering through the gas and dust,

53

00:04:49,800 --> 00:04:55,259

can detect them.

54

00:04:55,259 --> 00:04:59,920

M22, one of the brightest globular clusters in the sky,

55

00:04:59,920 --> 00:05:02,759

is visible to the naked eye.

56

00:05:02,759 --> 00:05:05,920

It is a relatively nearby globular cluster,

57

00:05:05,920 --> 00:05:12,340

only about 10,000 light-years distant.

58

00:05:29,019 --> 00:05:30,479

Low in the east,

59

00:05:30,480 --> 00:05:36,960

Venus shines like a beacon in the pre-dawn sky.

60

00:05:41,439 --> 00:06:07,019

Try to identify its phase with the aid of a telescope.

61

00:06:07,019 --> 00:06:09,899

The annual Delta Aquarid meteor shower

62

00:06:09,899 --> 00:06:15,839

peaks on the night of July 27th to the 28th.

63

00:06:15,839 --> 00:06:19,139

Look for meteors radiating from the southeast

64

00:06:19,139 --> 00:06:21,199

after midnight.

65

00:06:21,199 --> 00:06:28,180

Expect to see 10-15 faint, yellowish meteors per hour.

66

00:06:28,180 --> 00:06:35,060

The night sky is always a celestial showcase.

67

00:06:35,060 --> 00:06:41,959

Explore its wonders from your own backyard.