

1
00:00:07,139 --> 00:00:09,480
Your guide to constellations,

2
00:00:09,480 --> 00:00:14,420
deep-sky objects, planets, and events:

3
00:00:14,419 --> 00:00:22,199
Tonight's Sky. Highlights of the June sky:

4
00:00:44,479 --> 00:00:48,519
Brilliant Venus dominates the western sky at dusk,

5
00:00:48,520 --> 00:00:50,520
joined by the crescent moon

6
00:00:50,520 --> 00:00:57,320
during the middle of the month.

7
00:00:57,320 --> 00:00:59,119
With a backyard telescope,

8
00:00:59,119 --> 00:01:02,459
Venus looks like a miniature moon.

9
00:01:02,460 --> 00:01:04,540
It is clear that we see only part of the sunlit side of the planet.

10
00:01:04,540 --> 00:01:07,780

11
00:01:21,079 --> 00:01:23,739
Jupiter dominates the southern sky,

12
00:01:23,739 --> 00:01:30,659
shining in the dim constellation of Libra, the scales.

13
00:01:32,959 --> 00:01:36,799
A backyard telescope readily reveals its cloud bands

14
00:01:36,799 --> 00:01:42,500
and orbiting moons.

15
00:01:50,319 --> 00:01:54,779
Saturn rises later in the evening, and on June 27

16
00:01:54,780 --> 00:02:00,299
it comes into opposition.

17
00:02:00,299 --> 00:02:05,099
On this night, Saturn lies opposite the Sun in the sky—

18
00:02:05,099 --> 00:02:08,919
at its brightest, rising with the full moon at sunset,

19
00:02:08,919 --> 00:02:13,339
and visible throughout the night.

20
00:02:13,340 --> 00:02:16,960
During opposition, Saturn is closer to Earth

21
00:02:16,960 --> 00:02:22,379
than at any other time of year.

22
00:02:23,840 --> 00:02:27,780
Appearing at its largest for the year,

23
00:02:27,780 --> 00:02:29,800
its rings and perhaps a faint cloud band or two

24
00:02:29,800 --> 00:02:37,740
may be visible with a modest telescope.

25
00:02:49,039 --> 00:02:51,400
Turn your gaze upward to find

26
00:02:51,400 --> 00:02:56,879
four distinctive constellations.

27
00:02:58,500 --> 00:03:04,520
High overhead lies Boötes, the Herdsman.

28
00:03:04,520 --> 00:03:07,580
Find it by looking for its prominent kite shape,

29

00:03:07,580 --> 00:03:14,219
which was noted by many ancient cultures.

30
00:03:18,099 --> 00:03:24,199
Arcturus is the fourth-brightest star in the night sky.

31
00:03:24,199 --> 00:03:31,560
The star Epsilon Boötis is also known as Izar.

32
00:03:31,560 --> 00:03:35,060
In binoculars, Izar resolves into one of the

33
00:03:35,060 --> 00:03:39,539
finest double stars in the sky.

34
00:03:39,539 --> 00:03:47,179
The color contrast between the stars is striking.

35
00:04:03,599 --> 00:04:07,840
Just to the left of Boötes lies the Northern Crown,

36
00:04:07,840 --> 00:04:12,979
Corona Borealis.

37
00:04:12,979 --> 00:04:16,319
This lovely circlet of stars represents the

38
00:04:16,319 --> 00:04:18,519
wedding crown of Ariadne,

39
00:04:18,519 --> 00:04:22,740
the daughter of King Minos of Crete.

40
00:04:22,740 --> 00:04:24,960
While the stars are not very bright,

41
00:04:24,959 --> 00:04:31,379
their pattern is easy to pick out.

42
00:04:49,660 --> 00:04:52,360
The mythical strongman Hercules

43
00:04:52,360 --> 00:04:55,600

is also found high in the summer night sky,

44

00:04:55,600 --> 00:05:00,840
wielding his mighty weapons.

45

00:05:00,839 --> 00:05:04,439
The constellation is rather dim.

46

00:05:04,439 --> 00:05:08,000
Look for its lopsided square of four stars,

47

00:05:08,000 --> 00:05:10,600
called the Keystone.

48

00:05:10,600 --> 00:05:14,400
The Keystone in Hercules is the "key" to finding

49

00:05:14,399 --> 00:05:17,439
one of the brightest globular star clusters

50

00:05:17,439 --> 00:05:19,899
in the summer night sky.

51

00:05:19,899 --> 00:05:24,959
The wonderful Hercules Cluster, also known as M13,

52

00:05:24,959 --> 00:05:28,919
contains about a million stars.

53

00:05:28,920 --> 00:05:32,660
Outside the Keystone lies another magnificent

54

00:05:32,660 --> 00:05:37,020
globular cluster of stars, M92.

55

00:05:37,019 --> 00:05:40,659
Globular clusters are collections of closely packed,

56

00:05:40,660 --> 00:05:47,740
gravitationally bound stars.

57

00:06:06,439 --> 00:06:09,540
Draco, the Dragon, winds his way

58

00:06:09,540 --> 00:06:11,900
through the northern sky.

59

00:06:11,899 --> 00:06:16,139
The Dragon's head is a skewed square of stars.

60

00:06:16,139 --> 00:06:19,819
Look for the dimmest of the corner stars.

61

00:06:19,819 --> 00:06:23,439
In binoculars, it resolves into two stars,

62

00:06:23,439 --> 00:06:30,959
which look like a bright pair of headlights.

63

00:06:45,500 --> 00:06:47,740
Mars, shining like a bright,

64

00:06:47,740 --> 00:06:50,939
red coal in the constellation Capricornus,

65

00:06:50,939 --> 00:06:56,399
rises around midnight.

66

00:06:57,899 --> 00:07:01,639
As Mars approaches opposition next month

67

00:07:01,639 --> 00:07:05,639
and the distance between it and Earth shrinks,

68

00:07:05,639 --> 00:07:08,680
its image grows larger.

69

00:07:08,680 --> 00:07:11,500
It may be possible to see large-scale

70

00:07:11,500 --> 00:07:15,920
details on the surface.

71

00:07:15,920 --> 00:07:22,879
The night sky is always a celestial showcase.

72

00:07:22,879 --> 00:07:30,680

Explore its wonders from your own backyard.