TONIGHT'S SKY

June 2018

1
00:00:07,140 --> 00:00:09,480
Your guide to constellations,

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

3
00:00:14,420 --> 00:00:22,200
Tonight’s Sky. Highlights of the June sky:

4
00:00:44,480 --> 00:00:48,520
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 --> 00:00:59,120
With a backyard telescope,

8
00:00:59,120 --> 00:01:02,460
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
00:01:21,080 --> 00:01:23,740
Jupiter dominates the southern sky,

11
00:01:23,740 --> 00:01:30,660
shining in the dim constellation of Libra, the scales.

12
00:01:32,960 --> 00:01:36,800
A backyard telescope readily reveals its cloud bands

13
00:01:36,800 --> 00:01:42,500

and orbiting moons.

14
00:01:50,320 --> 00:01:54,780
Saturn rises later in the evening, and on June 27

15
00:01:54,780 --> 00:02:00,300
it comes into opposition.

16
00:02:00,300 --> 00:02:05,100
On this night, Saturn lies opposite the Sun in the sky—

17
00:02:05,100 --> 00:02:08,920
at its brightest, rising with the full moon at sunset,

18
00:02:08,920 --> 00:02:13,340
and visible throughout the night.

19
00:02:13,340 --> 00:02:16,960
During opposition, Saturn is closer to Earth

20
00:02:16,960 --> 00:02:22,380
than at any other time of year.

21
00:02:23,840 --> 00:02:27,780
Appearing at its largest for the year,

22
00:02:27,780 --> 00:02:29,800
its rings and perhaps a faint cloud band or two

23
00:02:29,800 --> 00:02:37,740
may be visible with a modest telescope.

24
00:02:49,040 --> 00:02:51,400
Turn your gaze upward to find

25
00:02:51,400 --> 00:02:56,880
four distinctive constellations.

26
00:02:58,500 --> 00:03:04,520
High overhead lies Boötes, the Herdsman.

27
00:03:04,520 --> 00:03:07,580
Find it by looking for its prominent kite shape,

28
00:03:07,580 --> 00:03:14,220
which was noted by many ancient cultures.

29
00:03:18,100 --> 00:03:24,200
Arcturus is the fourth-brightest star in the night sky.

30
00:03:24,200 --> 00:03:31,560
The star Epsilon Boötis is also known as Izar.

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

32
00:03:35,060 --> 00:03:39,540
finest double stars in the sky.

33
00:03:39,540 --> 00:03:47,180
The color contrast between the stars is striking.

34
00:04:03,600 --> 00:04:07,840
Just to the left of Boötes lies the Northern Crown,

35
00:04:07,840 --> 00:04:12,980
Corona Borealis.

36
00:04:12,980 --> 00:04:16,320
This lovely circlet of stars represents the

37
00:04:16,320 --> 00:04:18,520
wedding crown of Ariadne,

38
00:04:18,520 --> 00:04:22,740

the daughter of King Minos of Crete.

39
00:04:22,740 --> 00:04:24,960
While the stars are not very bright,

40
00:04:24,960 --> 00:04:31,380
their pattern is easy to pick out.

41
00:04:49,660 --> 00:04:52,360
The mythical strongman Hercules

42
00:04:52,360 --> 00:04:55,600
is also found high in the summer night sky,

43
00:04:55,600 --> 00:05:00,840
wielding his mighty weapons.

44
00:05:00,840 --> 00:05:04,440
The constellation is rather dim.

45
00:05:04,440 --> 00:05:08,000
Look for its lopsided square of four stars,

46
00:05:08,000 --> 00:05:10,600
called the Keystone.

47
00:05:10,600 --> 00:05:14,400
The Keystone in Hercules is the “key” to finding

48
00:05:14,400 --> 00:05:17,440
one of the brightest globular star clusters

49
00:05:17,440 --> 00:05:19,900
in the summer night sky.

50
00:05:19,900 --> 00:05:24,960
The wonderful Hercules Cluster, also known as M13,

51
00:05:24,960 --> 00:05:28,920
contains about a million stars.

52
00:05:28,920 --> 00:05:32,660
Outside the Keystone lies another magnificent

53
00:05:32,660 --> 00:05:37,020
globular cluster of stars, M92.

54
00:05:37,020 --> 00:05:40,660
Globular clusters are collections of closely packed,

55
00:05:40,660 --> 00:05:47,740
gravitationally bound stars.

56
00:06:06,440 --> 00:06:09,540
Draco, the Dragon, winds his way

57
00:06:09,540 --> 00:06:11,900
through the northern sky.

58
00:06:11,900 --> 00:06:16,140
The Dragon’s head is a skewed square of stars.

59
00:06:16,140 --> 00:06:19,820
Look for the dimmest of the corner stars.

60
00:06:19,820 --> 00:06:23,440
In binoculars, it resolves into two stars,

61
00:06:23,440 --> 00:06:30,960
which look like a bright pair of headlights.

62
00:06:45,500 --> 00:06:47,740
Mars, shining like a bright,

63
00:06:47,740 --> 00:06:50,940

red coal in the constellation Capricornus,

64
00:06:50,940 --> 00:06:56,400
rises around midnight.

65
00:06:57,900 --> 00:07:01,640
As Mars approaches opposition next month

66
00:07:01,640 --> 00:07:05,640
and the distance between it and Earth shrinks,

67
00:07:05,640 --> 00:07:08,680
its image grows larger.

68
00:07:08,680 --> 00:07:11,500
It may be possible to see large-scale

69
00:07:11,500 --> 00:07:15,920
details on the surface.