

1
00:00:01,899 --> 00:00:06,380
[Music]

2
00:00:06,859 --> 00:00:15,210
your guide to constellations deep-sky

3
00:00:10,099 --> 00:00:18,550
objects planets and events tonight's sky

4
00:00:15,210 --> 00:00:37,570
highlights of the April sky

5
00:00:18,550 --> 00:00:41,539
[Music]

6
00:00:37,570 --> 00:00:44,649
Venus blazes brightly low in the western

7
00:00:41,539 --> 00:00:44,649
sky at nightfall

8
00:00:52,009 --> 00:00:57,839
with a backyard telescope we can clearly

9
00:00:55,560 --> 00:01:01,140
see the sunlight reflecting off the

10
00:00:57,840 --> 00:01:10,069
thick clouds that shrouded surface

11
00:01:01,140 --> 00:01:10,069
[Music]

12
00:01:14,129 --> 00:01:29,019
bright jupiter rises in the east before

13
00:01:17,799 --> 00:01:31,450
midnight even a small telescope can

14
00:01:29,019 --> 00:01:32,119
reveal its two most prominent cloud

15
00:01:31,450 --> 00:01:54,849
bands

16
00:01:32,120 --> 00:01:54,849
[Music]

17
00:01:55,439 --> 00:02:02,179
late in the evening high in the northern

18
00:01:58,290 --> 00:02:05,180
sky lies the Great Bear or some major

19
00:02:02,180 --> 00:02:08,819
[Music]

20
00:02:05,180 --> 00:02:11,340
the constellation of Ursa Major contains

21
00:02:08,819 --> 00:02:12,409
the well-known star pattern called the

22
00:02:11,340 --> 00:02:16,050
Big Dipper

23
00:02:12,409 --> 00:02:19,829
it resembles a large drinking cup with a

24
00:02:16,050 --> 00:02:21,870
handle the two stars that make up the

25
00:02:19,830 --> 00:02:24,690
front side of the cup are called

26
00:02:21,870 --> 00:02:29,670
pointer stars because they point toward

27
00:02:24,689 --> 00:02:32,120
the star Polaris also known as the North

28
00:02:29,669 --> 00:02:32,119
Star

29

00:02:39,659 --> 00:02:41,719

you

30

00:02:42,139 --> 00:02:47,029

[Music]

31

00:02:44,030 --> 00:02:50,640

the Big Dipper overflows with

32

00:02:47,030 --> 00:02:53,919

interesting stars and deep sky objects

33

00:02:50,639 --> 00:02:57,949

[Music]

34

00:02:53,919 --> 00:03:00,469

the stars Mizar and Alcor make up a

35

00:02:57,949 --> 00:03:04,250

double star system that can be seen

36

00:03:00,469 --> 00:03:06,979

without a telescope in ancient times

37

00:03:04,250 --> 00:03:09,469

when Mizar and Alcor were even closer

38

00:03:06,979 --> 00:03:17,589

together they were used as a test of

39

00:03:09,469 --> 00:03:20,750

keen eyesight m81 and m82 are a

40

00:03:17,590 --> 00:03:25,250

magnificent pair of galaxies show pieces

41

00:03:20,750 --> 00:03:28,280

of the northern night sky m82 has an

42

00:03:25,250 --> 00:03:32,680

irregular shape bestowed by a collision

43

00:03:28,280 --> 00:03:32,680

with its larger neighbor m81

44

00:03:33,849 --> 00:03:43,318
[Music]

45

00:03:46,780 --> 00:03:56,270
turning to the south we see Leo the Lion

46

00:03:50,590 --> 00:03:59,750
heralding the coming of spring in Greek

47

00:03:56,270 --> 00:04:03,740
mythology Leo is the Great Beast slain

48

00:03:59,750 --> 00:04:06,560
by Hercules the star Denebola which in

49

00:04:03,740 --> 00:04:10,969
Arabic means tail represents exactly

50

00:04:06,560 --> 00:04:15,259
that the bright star Regulus is the

51

00:04:10,969 --> 00:04:22,779
heart of the lion leo has several

52

00:04:15,259 --> 00:04:26,269
galaxies in his belly M 65 m 66 and NGC

53

00:04:22,779 --> 00:04:29,449
3628 make up the Leo triplet

54

00:04:26,269 --> 00:04:33,199
a lovely grouping of galaxies easily

55

00:04:29,449 --> 00:04:42,979
seen with a telescope close by is

56

00:04:33,199 --> 00:04:49,430
another group M 95 and M 96 are large

57

00:04:42,980 --> 00:04:52,759
spiral galaxies between the Big Dipper

58
00:04:49,430 --> 00:04:55,490
and the head of Leo are three pairs of

59
00:04:52,759 --> 00:04:58,009
bright stars known to ancient Arab

60
00:04:55,490 --> 00:04:58,550
astronomers as the three leaps of the

61
00:04:58,009 --> 00:05:21,209
gazelle

62
00:04:58,550 --> 00:05:24,968
[Music]

63
00:05:21,209 --> 00:05:27,369
in the hours before dawn Saturn and Mars

64
00:05:24,968 --> 00:05:31,558
rise in the summer constellation of

65
00:05:27,369 --> 00:05:34,809
Sagittarius joining Jupiter in the sky

66
00:05:31,559 --> 00:05:41,830
the three planets differ in apparent

67
00:05:34,809 --> 00:05:45,309
brightness and size the distinctive

68
00:05:41,829 --> 00:05:48,188
color of Mars rings of Saturn and cloud

69
00:05:45,309 --> 00:05:52,860
bands of Jupiter make these planets easy

70
00:05:48,189 --> 00:05:52,860
to distinguish with a backyard telescope

71
00:05:58,730 --> 00:06:04,379
[Music]

72
00:06:01,199 --> 00:06:09,810
the Lyrid meteor shower will peak in the

73
00:06:04,379 --> 00:06:12,689
early morning hours of April 22nd expect

74
00:06:09,810 --> 00:06:20,278
to see up to 20 bright meteors per hour

75
00:06:12,689 --> 00:06:22,800
after midnight the night sky is always a

76
00:06:20,278 --> 00:06:24,319
celestial showcase

77
00:06:22,800 --> 00:06:26,639
[Music]

78
00:06:24,319 --> 00:06:27,580
explore its wonders from your own

79
00:06:26,639 --> 00:06:35,478
backyard

80
00:06:27,579 --> 00:06:35,478
[Music]

81
00:06:37,939 --> 00:06:42,240
[Music]

82
00:06:42,819 --> 00:06:44,879
you

83
00:06:45,170 --> 00:06:48,480
[Music]