

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

2
00:00:07,160 --> 00:00:15,240
your guide to constellations deep-sky

3
00:00:10,400 --> 00:00:18,530
objects planets and events tonight's sky

4
00:00:15,240 --> 00:00:42,140
highlights of the November sky

5
00:00:18,530 --> 00:00:45,600
[Music]

6
00:00:42,140 --> 00:00:49,018
Saturn shines clear above the Southwest

7
00:00:45,600 --> 00:00:52,050
horizon at nightfall watch as it shifts

8
00:00:49,018 --> 00:00:59,189
lower in the sky each night preparing to

9
00:00:52,049 --> 00:01:01,140
depart the evening sky small telescopes

10
00:00:59,189 --> 00:01:08,280
show off its rings

11
00:01:01,140 --> 00:01:11,650
[Music]

12
00:01:08,280 --> 00:01:15,129
red Mars retains its position in the

13
00:01:11,650 --> 00:01:24,368
south as it moves into Aquarius recedes

14
00:01:15,129 --> 00:01:27,310
and dims backyard telescopes still show

15
00:01:24,368 --> 00:01:29,370
a tiny disc but surface features may be

16
00:01:27,310 --> 00:01:43,200
difficult to resolve

17
00:01:29,370 --> 00:01:47,770
[Music]

18
00:01:43,200 --> 00:01:51,570
some fish a ram and a triangle can all

19
00:01:47,769 --> 00:01:55,090
be found in the November night sky

20
00:01:51,569 --> 00:02:00,699
Pisces in ancient mythology our twin

21
00:01:55,090 --> 00:02:06,219
fish tied together they represent two

22
00:02:00,700 --> 00:02:08,618
Greek gods fleeing fire look for the

23
00:02:06,219 --> 00:02:09,419
circlets of stars high in the southern

24
00:02:08,618 --> 00:02:12,508
sky

25
00:02:09,419 --> 00:02:12,509
[Music]

26
00:02:15,550 --> 00:02:21,800
just to the east of Pisces lies Aries

27
00:02:18,789 --> 00:02:29,269
the golden Ram of the Greek gods

28
00:02:21,800 --> 00:02:29,269
[Music]

29

00:02:29,990 --> 00:02:39,990
it is a dim constellation Pisces and

30
00:02:36,539 --> 00:02:44,629
Aries are in the zodiac the band of sky

31
00:02:39,990 --> 00:02:44,629
through which the Sun appears to travel

32
00:02:44,680 --> 00:02:47,740
[Music]

33
00:02:48,949 --> 00:02:54,329
Triangulum a simple geometric

34
00:02:51,560 --> 00:02:57,210
constellation has been identified since

35
00:02:54,330 --> 00:03:00,500
ancient times look for it next to the

36
00:02:57,210 --> 00:03:00,500
RAM and the fish

37
00:03:00,979 --> 00:03:07,060
[Music]

38
00:03:04,060 --> 00:03:11,140
the lovely Triangulum galaxy resides

39
00:03:07,060 --> 00:03:14,250
here it belongs to the same cluster of

40
00:03:11,139 --> 00:03:18,189
galaxies that includes our own Milky Way

41
00:03:14,250 --> 00:03:21,430
also known as m33 the galaxy is about

42
00:03:18,189 --> 00:03:24,620
three million light-years distant it can

43
00:03:21,430 --> 00:03:43,129

be seen in a dark sky with binoculars

44

00:03:24,620 --> 00:03:46,530

[Music]

45

00:03:43,129 --> 00:03:48,629

Venus pops back into the pre-dawn sky in

46

00:03:46,530 --> 00:03:51,449

November spending the month in the

47

00:03:48,629 --> 00:03:59,789

vicinity of the bright star Spica in

48

00:03:51,449 --> 00:04:02,250

Virgo especially around mid month modest

49

00:03:59,789 --> 00:04:03,229

telescopes will reveal its crescent moon

50

00:04:02,250 --> 00:04:16,230

like phase

51

00:04:03,229 --> 00:04:20,319

[Music]

52

00:04:16,230 --> 00:04:22,720

November boasts two meteor showers the

53

00:04:20,319 --> 00:04:26,019

torrid meteor shower spread over weeks

54

00:04:22,720 --> 00:04:29,770

features 5 to 10 meteors per hour on its

55

00:04:26,019 --> 00:04:32,259

peak night of November 5th to 6th the

56

00:04:29,769 --> 00:04:34,930

meteors will streak across the sky from

57

00:04:32,259 --> 00:04:37,899

the direction of Taurus the Bull in the

58
00:04:34,930 --> 00:04:40,600
eastern sky at nightfall while the

59
00:04:37,899 --> 00:04:43,239
shower is fairly minor it is known for

60
00:04:40,600 --> 00:04:46,600
bright fireballs and the sky will be

61
00:04:43,240 --> 00:04:48,970
dark with the moon out of the way the

62
00:04:46,600 --> 00:04:51,340
Leonid meteor shower is the result of

63
00:04:48,970 --> 00:04:54,400
Earth's annual passage through the dust

64
00:04:51,339 --> 00:04:57,009
trails left by comet tempel-tuttle which

65
00:04:54,399 --> 00:05:01,239
returns to the inner solar system every

66
00:04:57,009 --> 00:05:04,120
33 years look for meteors radiating from

67
00:05:01,240 --> 00:05:06,879
the constellation of Leo the Lion in the

68
00:05:04,120 --> 00:05:11,470
evening of November 17th and early

69
00:05:06,879 --> 00:05:15,569
morning of November 18th the night sky

70
00:05:11,470 --> 00:05:15,570
is always a celestial showcase

71
00:05:16,319 --> 00:05:20,790
explore its wonders from your own

72
00:05:18,668 --> 00:05:20,789
backyard

73
00:05:22,269 --> 00:05:32,329
[Music]

74
00:05:38,500 --> 00:05:40,560
you