

1
00:00:05,889 --> 00:00:15,199
your guide to constellations deep-sky

2
00:00:09,099 --> 00:00:19,929
objects planets and events tonight's sky

3
00:00:15,199 --> 00:00:19,929
highlights of the January sky

4
00:00:24,030 --> 00:00:36,310
[Music]

5
00:00:37,030 --> 00:00:42,420
the winter sky is filled with brilliant

6
00:00:40,030 --> 00:00:42,420
stars

7
00:00:44,469 --> 00:00:49,510
an ancient constellation Auriga was

8
00:00:47,439 --> 00:00:55,420
pictured as a goat herder by the Greeks

9
00:00:49,509 --> 00:00:58,238
and Romans moraga is a beautiful circlet

10
00:00:55,420 --> 00:01:03,879
of jeweled stars gracing the sky

11
00:00:58,238 --> 00:01:08,560
overhead capella the sixth brightest

12
00:01:03,878 --> 00:01:11,079
star in the sky is a double star the two

13
00:01:08,560 --> 00:01:14,379
stars are yellow stars like our own Sun

14
00:01:11,079 --> 00:01:18,868
but they are about 10 times larger and

15
00:01:14,379 --> 00:01:18,868
50 and 80 times brighter

16
00:01:23,030 --> 00:01:36,460
[Music]

17
00:01:33,030 --> 00:01:42,819
near araga is the large constellation

18
00:01:36,459 --> 00:01:45,489
Taurus the Bull in Greek legend this

19
00:01:42,819 --> 00:01:48,099
group of stars represented Zeus in the

20
00:01:45,489 --> 00:01:53,769
disguise of a white bowl with golden

21
00:01:48,099 --> 00:01:56,530
horns his eye is the orange Aldebaran a

22
00:01:53,769 --> 00:02:05,199
red giant star nearing the end of its

23
00:01:56,530 --> 00:02:08,019
life the bull's v-shaped head is created

24
00:02:05,200 --> 00:02:12,500
by the Hyades a beautiful cluster of

25
00:02:08,019 --> 00:02:18,090
stars easily seen with a naked eye

26
00:02:12,500 --> 00:02:18,090
[Music]

27
00:02:18,209 --> 00:02:27,069
the Pleiades star cluster lies near the

28
00:02:21,579 --> 00:02:29,500
head of the bowl large and bright this

29

00:02:27,068 --> 00:02:32,078
star cluster is the best known in the

30
00:02:29,500 --> 00:02:37,539
sky and is often called the Seven

31
00:02:32,079 --> 00:02:40,480
Sisters the unaided eye can see just six

32
00:02:37,539 --> 00:02:43,500
or seven stars but the Pleiades cluster

33
00:02:40,479 --> 00:02:49,810
contains over 250

34
00:02:43,500 --> 00:02:52,669
[Music]

35
00:02:49,810 --> 00:02:57,920
binoculars showcase the cluster at its

36
00:02:52,669 --> 00:03:02,449
best the stars in this stellar swarm are

37
00:02:57,919 --> 00:03:05,239
hot and young they are passing through a

38
00:03:02,449 --> 00:03:07,539
dusty cloud that reflects their blue

39
00:03:05,240 --> 00:03:07,540
light

40
00:03:11,490 --> 00:03:19,419
[Music]

41
00:03:24,189 --> 00:03:31,219
Saturn and Mercury rise together every

42
00:03:27,439 --> 00:03:33,469
morning before sunrise over the course

43
00:03:31,219 --> 00:03:38,419

of the month the two planets shift

44

00:03:33,469 --> 00:03:40,310

position in the pre-dawn sky they appear

45

00:03:38,419 --> 00:03:46,339

to converge in the middle of the month

46

00:03:40,310 --> 00:03:49,370

and then slowly swap places with a

47

00:03:46,340 --> 00:03:50,270

backyard telescope the two are easy to

48

00:03:49,370 --> 00:03:53,539

distinguish

49

00:03:50,270 --> 00:03:53,539

[Music]

50

00:04:02,840 --> 00:04:11,400

bright jupiter and reddish mars rise

51

00:04:06,300 --> 00:04:15,689

together a few hours before the Sun on

52

00:04:11,400 --> 00:04:18,840

the morning of January 6th they appear

53

00:04:15,689 --> 00:04:21,238

less than half a degree apart and can be

54

00:04:18,839 --> 00:04:22,889

seen in the same field of view in a

55

00:04:21,238 --> 00:04:41,679

backyard telescope

56

00:04:22,889 --> 00:04:44,620

[Music]

57

00:04:41,680 --> 00:04:49,050

the Quadrantid meteor shower peaks on

58
00:04:44,620 --> 00:04:52,300
the night spanning January 3rd and 4th

59
00:04:49,050 --> 00:04:58,660
sky watchers who brave the cold night

60
00:04:52,300 --> 00:05:03,180
spot up to 40 meteors per hour the night

61
00:04:58,660 --> 00:05:03,180
sky is always a celestial showcase

62
00:05:03,720 --> 00:05:08,250
explore its wonders from your own

63
00:05:06,100 --> 00:05:08,250
backyard

64
00:05:12,050 --> 00:05:21,918
[Music]

65
00:05:19,860 --> 00:05:21,919
you

66
00:05:23,350 --> 00:05:26,429
[Music]