



*PACKING FOR THE
BOTTOM OF THE WORLD*

1
00:00:21,100 --> 00:00:23,430
Hi my name is Dave Mittlefehldt, everyone

2
00:00:23,430 --> 00:00:25,890
knows me as "Duck" so you can feel free to

3
00:00:25,890 --> 00:00:27,480
refer to me by that name.

4
00:00:27,480 --> 00:00:29,100
I'm a planetary scientists working with

5
00:00:29,100 --> 00:00:31,920
NASA Johnson Space Center. I've been

6
00:00:31,920 --> 00:00:34,200
doing planetary research basically

7
00:00:34,200 --> 00:00:36,600
almost all my career since the mid

8
00:00:36,600 --> 00:00:39,840
seventies on and i'm about to get ready

9
00:00:39,840 --> 00:00:42,090
to go to Antarctica so I've gotta make

10
00:00:42,090 --> 00:00:44,580
sure I've got all the items i need. We're

11
00:00:44,580 --> 00:00:47,250
down there to collect meteorites that

12
00:00:47,250 --> 00:00:49,739
have been falling on Antarctica all over

13
00:00:49,739 --> 00:00:50,580

the place.

14

00:00:50,580 --> 00:00:53,550

These rocks are basically a poor man

15

00:00:53,550 --> 00:00:56,790

space probe for fairly low expense we

16

00:00:56,790 --> 00:00:59,220

can sample a multitude of bodies in the

17

00:00:59,220 --> 00:01:01,530

solar system and by studying them in the

18

00:01:01,530 --> 00:01:04,229

lab we can then learn quite a bit about

19

00:01:04,229 --> 00:01:06,780

the formation of the solar system and

20

00:01:06,780 --> 00:01:09,690

for the Moon and Mars how those bodies

21

00:01:09,690 --> 00:01:11,600

evolved over geologic times.

22

00:01:16,900 --> 00:01:19,600

Christchurch is just in late spring going

23

00:01:19,600 --> 00:01:21,430

on the summer so I've got to make sure

24

00:01:21,430 --> 00:01:25,360

I've got shorts t-shirts and sandals

25

00:01:25,360 --> 00:01:26,950

available because I don't want to be

26

00:01:26,950 --> 00:01:29,830

wearing sweatshirts flannel shirts and

27

00:01:29,830 --> 00:01:32,830

that sort of thing in 90 degrees in New

28

00:01:32,830 --> 00:01:34,660

Zealand when you're in Christchurch New

29

00:01:34,660 --> 00:01:38,170

Zealand you get almost all of the ECW or

30

00:01:38,170 --> 00:01:40,630

extreme cold weather here you need from

31

00:01:40,630 --> 00:01:44,530

the Antarctic terminal in Christchurch

32

00:01:44,530 --> 00:01:45,910

New Zealand so I don't need to worry

33

00:01:45,910 --> 00:01:47,950

about you know heavy boots for out in

34

00:01:47,950 --> 00:01:48,880

the field

35

00:01:48,880 --> 00:01:50,260

I don't need to worry about the fleece

36

00:01:50,260 --> 00:01:52,030

layers i don't need to learn to worry

37

00:01:52,030 --> 00:01:54,040

about parka, but what I do need to

38

00:01:54,040 --> 00:01:57,700

take is some personal gear woolen socks

39

00:01:57,700 --> 00:02:00,220

these will keep my feet warm in my boots

40

00:02:00,220 --> 00:02:02,620

they look kind of small but if they work

41

00:02:02,620 --> 00:02:05,440

not only have one pair with me and the

42

00:02:05,440 --> 00:02:07,300

reason is because I shipped my own

43

00:02:07,300 --> 00:02:11,200

personal ECW gear out from Houston so

44

00:02:11,200 --> 00:02:13,240

it's already in McMurdo waiting for me.

45

00:02:13,240 --> 00:02:15,490

I do have to have one set because they

46

00:02:15,490 --> 00:02:17,170

will not let you on the plane from

47

00:02:17,170 --> 00:02:19,690

Christchurch to McMurdo Station if you

48

00:02:19,690 --> 00:02:22,209

don't have the proper ECW gear with you.

49

00:02:22,209 --> 00:02:25,630

One pair of expedition weight thermal

50

00:02:25,630 --> 00:02:28,390

underwear and i've got, I think I took

51
00:02:28,390 --> 00:02:30,550
four, shipped four other pair down

52
00:02:30,550 --> 00:02:32,700
there so I'm all set.

53
00:02:38,700 --> 00:02:41,860
McMurdo Station is yes it's going to be

54
00:02:41,860 --> 00:02:43,540
cold down there it is the summer

55
00:02:43,540 --> 00:02:45,460
temperatures will be below freezing

56
00:02:45,460 --> 00:02:49,690
almost the entire time but it's not like

57
00:02:49,690 --> 00:02:51,190
you're out in the middle of nowhere

58
00:02:51,190 --> 00:02:53,950
you're kind of in a you know any town in

59
00:02:53,950 --> 00:02:56,350
Minnesota in the winter so you want to

60
00:02:56,350 --> 00:02:59,380
have stuff to keep warm outside so I

61
00:02:59,380 --> 00:03:03,190
might include the fleece pullover that's

62
00:03:03,190 --> 00:03:06,580
always good to have you need flannel

63
00:03:06,580 --> 00:03:07,300

shirts

64

00:03:07,300 --> 00:03:10,390

the other thing is you need a good pair

65

00:03:10,390 --> 00:03:12,430

of hiking boots these are mine

66

00:03:12,430 --> 00:03:14,440

the dust there's from Death Valley I was

67

00:03:14,440 --> 00:03:15,200

there last March.

68

00:03:20,500 --> 00:03:24,010

Now sleeping in the tent in Antarctica, you're sleeping

69

00:03:24,010 --> 00:03:25,450

in a sleeping bag

70

00:03:25,450 --> 00:03:26,980

the only time I really change down there

71

00:03:26,980 --> 00:03:29,170

is at night I take shed my daytime

72

00:03:29,170 --> 00:03:31,330

clothes and wear what I'm going to sleep

73

00:03:31,330 --> 00:03:31,900

in.

74

00:03:31,900 --> 00:03:34,570

What I like is a sweatshirt and

75

00:03:34,570 --> 00:03:39,070

basically some kind of running pants

76
00:03:39,070 --> 00:03:41,620
type things that are warm. You know the

77
00:03:41,620 --> 00:03:46,840
sun's up 24-7 so what I do is I take a

78
00:03:46,840 --> 00:03:48,880
heavy knit hat you need to keep your

79
00:03:48,880 --> 00:03:50,709
head warm when you're sleeping and then

80
00:03:50,709 --> 00:03:52,930
I just pull it over my eyes and it's

81
00:03:52,930 --> 00:03:55,630
dark and I can go to sleep no problems.

82
00:03:55,630 --> 00:03:57,910
I can't do without coffee but i'm not

83
00:03:57,910 --> 00:04:00,760
going to drink instant coffee so this is

84
00:04:00,760 --> 00:04:03,370
a coffee comb I will ship this actually

85
00:04:03,370 --> 00:04:06,790
I'll take this with me and cone

86
00:04:06,790 --> 00:04:07,810
filters

87
00:04:07,810 --> 00:04:10,780
I've also already shipped cans of coffee

88
00:04:10,780 --> 00:04:14,290

already ground that I like so I can

89

00:04:14,290 --> 00:04:17,590

enjoy all the comforts of home

90

00:04:17,590 --> 00:04:20,290

minus the heat while i'm in Antarctica.

91

00:04:20,290 --> 00:04:22,439

One of the things you probably never

92

00:04:22,449 --> 00:04:24,550

thought about for Antarctica is

93

00:04:24,550 --> 00:04:26,260

sunburn.

94

00:04:26,260 --> 00:04:29,560

Like I said the Sun's up 24-7 the scene

95

00:04:29,560 --> 00:04:32,110

around you is extremely bright

96

00:04:32,110 --> 00:04:35,320

it's all of ice light blue ice or white

97

00:04:35,320 --> 00:04:38,740

snow sunlight reflects off of all that

98

00:04:38,740 --> 00:04:40,900

and even though the sun is at a low

99

00:04:40,900 --> 00:04:43,180

angle to the horizon you can get a

100

00:04:43,180 --> 00:04:46,200

wicked sunburn on anything that's exposed.

101
00:04:46,200 --> 00:04:48,250
The other thing you need these

102
00:04:48,250 --> 00:04:51,340
are my glacier glasses I bought these

103
00:04:51,340 --> 00:04:54,340
the frames and had my prescription put

104
00:04:54,340 --> 00:04:57,070
in them. They come with the side shields

105
00:04:57,070 --> 00:05:00,970
they're very dark so when I put upon

106
00:05:00,970 --> 00:05:03,880
basically the light is blocked all the

107
00:05:03,880 --> 00:05:07,200
way around that way I won't get snow blindness.

108
00:05:07,200 --> 00:05:08,860
One of the times I was down

109
00:05:08,860 --> 00:05:11,650
there this was would have been in 2001

110
00:05:11,650 --> 00:05:15,669
trip we spent four days solid stuck in

111
00:05:15,669 --> 00:05:18,789
our tents with basically hurricane-force

112
00:05:18,789 --> 00:05:22,660
winds blowing. So we didn't go out unless

113
00:05:22,660 --> 00:05:25,630

we had to and we certainly didn't go out

114

00:05:25,630 --> 00:05:27,729

and work so you need something to read.

115

00:05:27,729 --> 00:05:32,169

The advantage of this is that this right

116

00:05:32,169 --> 00:05:34,450

here which weighs almost nothing is

117

00:05:34,450 --> 00:05:36,250

equivalent to you know whole suitcase

118

00:05:36,250 --> 00:05:38,919

full of books. Sometimes power is that a

119

00:05:38,919 --> 00:05:40,960

short supply we take solar panels so

120

00:05:40,960 --> 00:05:43,570

that I can recharge my kindle but

121

00:05:43,570 --> 00:05:46,000

sometimes need paper copies so I like

122

00:05:46,000 --> 00:05:49,200

taking cryptogram books they occupy my mind.

123

00:05:49,200 --> 00:05:51,550

I lived in Israel for six years.

124

00:05:51,550 --> 00:05:55,840

I'm taking a novel in Hebrew and the

125

00:05:55,840 --> 00:05:58,510

English Hebrew dictionary. This time if

126

00:05:58,510 --> 00:05:59,889

we have 10 days I'm going to try and

127

00:05:59,889 --> 00:06:02,900

refresh my memory and how to read Hebrew.

128

00:06:08,400 --> 00:06:10,670

Everything is frozen no surprise there.

129

00:06:10,670 --> 00:06:12,590

The good news is you don't have to

130

00:06:12,590 --> 00:06:14,390

refrigerate anything you just leave it

131

00:06:14,390 --> 00:06:16,460

in a box outside your tent and I'll stay

132

00:06:16,460 --> 00:06:18,320

nicely frozen the whole time,

133

00:06:18,320 --> 00:06:20,180

you never have to worry about it.

134

00:06:20,180 --> 00:06:22,700

There's tons of water all around you. If you want

135

00:06:22,700 --> 00:06:24,140

to make a cup of coffee

136

00:06:24,140 --> 00:06:25,520

the first thing you do is you go outside

137

00:06:25,520 --> 00:06:28,280

your tent chip a block of ice put in the

138

00:06:28,280 --> 00:06:30,800

pot turn on the gas stove and wait until

139

00:06:30,800 --> 00:06:32,840

the ice melts and then boils and then

140

00:06:32,840 --> 00:06:34,520

you can make yourself a cup of coffee.

141

00:06:34,520 --> 00:06:37,220

But there's no shortage of water out

142

00:06:37,220 --> 00:06:37,900

there that's for sure.

143

00:06:42,870 --> 00:06:45,690

Come about 4 or 5 months from now will

144

00:06:45,690 --> 00:06:47,880

hopefully bring back maybe a thousand

145

00:06:47,880 --> 00:06:50,100

meteorites here, store them over there in

146

00:06:50,100 --> 00:06:52,560

Building 31 North and then have him go

147

00:06:52,560 --> 00:06:54,390

through with processing and distribution