

1
00:00:05,960 --> 00:00:13,969
welcome to the skeptic zone the podcast

2
00:00:09,119 --> 00:00:13,968
from Australia for science and reason

3
00:00:17,160 --> 00:00:24,359
[Music]

4
00:00:22,989 --> 00:00:27,538
[Applause]

5
00:00:24,359 --> 00:00:34,350
yes it's the skeptic zone podcast

6
00:00:27,539 --> 00:00:39,850
episode number 535 the 20th of January

7
00:00:34,350 --> 00:00:42,100
2019 Richardson is coming to you along a

8
00:00:39,850 --> 00:00:46,719
country road side just outside of Bend

9
00:00:42,100 --> 00:00:49,149
Oregon I was spending a few days chillin

10
00:00:46,719 --> 00:00:53,530
out and I mean chillin up with my good

11
00:00:49,149 --> 00:00:55,390
friend Brian Dunning from skeptoid later

12
00:00:53,530 --> 00:00:57,308
on in the show we catch up with Brian's

13
00:00:55,390 --> 00:01:01,299
project who will news about Brian's

14
00:00:57,308 --> 00:01:07,019
project science friction to see how

15
00:01:01,299 --> 00:01:10,149
that's going along this is where he or

16
00:01:07,019 --> 00:01:11,739
the documentary will interview

17
00:01:10,149 --> 00:01:17,469
scientists who have been misrepresented

18
00:01:11,739 --> 00:01:20,109
in the media poor so a couple of degrees

19
00:01:17,469 --> 00:01:21,789
above zero I'm just out walking along

20
00:01:20,109 --> 00:01:26,228
the roadside here for exercise really

21
00:01:21,789 --> 00:01:29,079
and tramping on snow which is great fun

22
00:01:26,228 --> 00:01:31,239
for somebody from Sydney Australia also

23
00:01:29,078 --> 00:01:34,149
in this week's podcast the report of the

24
00:01:31,239 --> 00:01:35,769
live show of oh no Ross and Carrie which

25
00:01:34,149 --> 00:01:39,460
was a couple of days ago in Portland

26
00:01:35,769 --> 00:01:42,699
Oregon and we chat to rust Blocher after

27
00:01:39,459 --> 00:01:44,349
the show what a fantastic show was and

28
00:01:42,700 --> 00:01:46,810
great to see a live recording of a

29

00:01:44,349 --> 00:01:49,890
podcast in front of a very very

30
00:01:46,810 --> 00:01:49,890
enthusiastic audience

31
00:01:50,969 --> 00:02:02,709
hello dog you look a bit cold hey it's

32
00:01:59,170 --> 00:02:04,840
alright it's behind a fence hmm I don't

33
00:02:02,709 --> 00:02:08,280
think I'll get any closer I'm actually

34
00:02:04,840 --> 00:02:16,569
passing a paddock with no horses grazing

35
00:02:08,280 --> 00:02:20,729
just by the roadside here and I'm not

36
00:02:16,569 --> 00:02:22,959
used to seeing chains on car tires huh

37
00:02:20,729 --> 00:02:24,849
people who live in colder climates or

38
00:02:22,960 --> 00:02:28,930
think I'm I've lost the plot but to me

39
00:02:24,849 --> 00:02:31,930
it's very interesting and ahead to this

40
00:02:28,930 --> 00:02:34,030
week's show I go to the National Center

41
00:02:31,930 --> 00:02:37,140
for Science education in Oakland

42
00:02:34,030 --> 00:02:40,530
California and speak to Brad Hogg about

43
00:02:37,139 --> 00:02:43,329

the efforts of the center is making to

44

00:02:40,530 --> 00:02:45,879

help battle misinformation of climate

45

00:02:43,330 --> 00:02:47,920

change about climate change and what

46

00:02:45,879 --> 00:02:51,460

resources and help they can offer

47

00:02:47,919 --> 00:02:54,750

teachers around the world really when it

48

00:02:51,460 --> 00:03:01,090

comes to helping them to convey the

49

00:02:54,750 --> 00:03:02,909

science of climate change oh wow there's

50

00:03:01,090 --> 00:03:06,069

another horse grazing I don't know how I

51

00:03:02,909 --> 00:03:09,310

look at new respect for horses and cows

52

00:03:06,069 --> 00:03:11,579

and things seem to be they don't care

53

00:03:09,310 --> 00:03:14,229

about this cold weather

54

00:03:11,580 --> 00:03:19,120

it's just beautiful here in Bend Oregon

55

00:03:14,229 --> 00:03:21,219

and with somebody who has to give digs

56

00:03:19,120 --> 00:03:23,590

our listeners will may well know realize

57

00:03:21,219 --> 00:03:26,379

remember I don't cope well in the heat

58
00:03:23,590 --> 00:03:32,069
and humidity and to be here in a cold

59
00:03:26,379 --> 00:03:34,659
crisp environment dressed up gloves and

60
00:03:32,069 --> 00:03:36,959
breathing the cold air well to me it's

61
00:03:34,659 --> 00:03:40,500
pretty good

62
00:03:36,959 --> 00:03:42,060
ha I don't know where I'm walking to now

63
00:03:40,500 --> 00:03:47,129
just

64
00:03:42,060 --> 00:03:49,650
just exploring and why not cross over to

65
00:03:47,129 --> 00:03:50,969
the other side of the road there's still

66
00:03:49,650 --> 00:03:58,110
lots of snow everywhere

67
00:03:50,969 --> 00:03:59,490
ah hello what's this big long patch of

68
00:03:58,110 --> 00:04:05,510
ice Wow

69
00:03:59,490 --> 00:04:08,700
better be careful well well I keep

70
00:04:05,509 --> 00:04:10,739
walking along this snowy road in search

71
00:04:08,699 --> 00:04:11,519
of something to eat he'll drink maybe a

72
00:04:10,740 --> 00:04:14,670
hot cup of coffee

73
00:04:11,520 --> 00:04:16,050
I hope you enjoy this week's skeptics

74
00:04:14,669 --> 00:04:23,349
urn

75
00:04:16,050 --> 00:04:26,389
[Music]

76
00:04:23,350 --> 00:04:26,389
[Applause]

77
00:04:26,399 --> 00:04:32,948
[Music]

78
00:04:28,110 --> 00:04:36,430
since 2011 the Oh No Ross and Carrie

79
00:04:32,949 --> 00:04:38,830
podcast with Ross Blocher and Gary poppy

80
00:04:36,430 --> 00:04:42,879
who has been investigating science

81
00:04:38,829 --> 00:04:45,008
spirituality medicine fringe beliefs the

82
00:04:42,879 --> 00:04:48,279
motto of the podcast is when we show up

83
00:04:45,009 --> 00:04:50,530
and say you don't have to I had the

84
00:04:48,279 --> 00:04:54,219
pleasure of interviewing Russell Harry

85
00:04:50,529 --> 00:04:57,728
way back I think in about 2011 when

86

00:04:54,220 --> 00:04:59,560
their podcast was relatively new and now

87
00:04:57,728 --> 00:05:01,300
they're taking their show on the road I

88
00:04:59,560 --> 00:05:04,180
had the great pleasure of attending

89
00:05:01,300 --> 00:05:06,910
their performance in Portland Oregon

90
00:05:04,180 --> 00:05:09,090
where I caught up with Ross after the

91
00:05:06,910 --> 00:05:09,090
show

92
00:05:10,720 --> 00:05:13,819
[Music]

93
00:05:25,730 --> 00:05:28,509
oh man

94
00:05:28,879 --> 00:05:33,499
tweet us your eyes like theoretically

95
00:05:31,759 --> 00:05:38,259
Alma right and obviously I think this

96
00:05:33,499 --> 00:05:38,259
picture between us

97
00:05:43,000 --> 00:05:47,180
all right I feel like I feel like

98
00:05:45,589 --> 00:05:53,888
something just brewing up in the

99
00:05:47,180 --> 00:05:53,889
audience here and remember

100
00:05:54,389 --> 00:05:57,469

[Applause]

101

00:06:03,500 --> 00:06:10,100

I was stepping out now I'm with a rush

102

00:06:07,759 --> 00:06:12,199

from ona rhosync a great show Ross thank

103

00:06:10,100 --> 00:06:14,420

you so much Richard thank you for coming

104

00:06:12,199 --> 00:06:16,159

out tonight yeah a big it was a full

105

00:06:14,420 --> 00:06:17,569

house I don't know how many people with

106

00:06:16,160 --> 00:06:20,330

that but it was a nice theater with a

107

00:06:17,569 --> 00:06:22,819

full house up up and down and you and

108

00:06:20,329 --> 00:06:24,709

Carrie came out and singing I did a

109

00:06:22,819 --> 00:06:27,889

really great show hey this is Carrie's

110

00:06:24,709 --> 00:06:29,269

idea that we come out singing part we're

111

00:06:27,889 --> 00:06:31,579

now not part of your world that's Little

112

00:06:29,269 --> 00:06:34,189

Mermaid this is a lot in a whole new

113

00:06:31,579 --> 00:06:35,779

world yes with the flat earth behind us

114

00:06:34,189 --> 00:06:37,670

which won't make any sense to people

115
00:06:35,779 --> 00:06:38,989
listening to it later but hopefully at

116
00:06:37,670 --> 00:06:40,670
least it made sense to everyone in the

117
00:06:38,990 --> 00:06:41,889
audience that's freezing cold out here

118
00:06:40,670 --> 00:06:44,360
on the street we were to put out our

119
00:06:41,889 --> 00:06:48,169
bags away and we'll have a chat in a

120
00:06:44,360 --> 00:06:49,730
minute Ross great to see you again we

121
00:06:48,170 --> 00:06:51,890
haven't seen each other for a few years

122
00:06:49,730 --> 00:06:52,250
likewise always wonderful to see you

123
00:06:51,889 --> 00:06:55,310
Richard

124
00:06:52,250 --> 00:06:56,779
and it's interesting only you know six

125
00:06:55,310 --> 00:06:58,490
or seven weeks ago Maynard was

126
00:06:56,779 --> 00:07:00,829
interviewing Carrie because she came to

127
00:06:58,490 --> 00:07:03,199
the convention in Australia I think

128
00:07:00,829 --> 00:07:05,509
we're gonna have to try and wrangle it

129
00:07:03,199 --> 00:07:08,029
so you come to visit too yes please

130
00:07:05,509 --> 00:07:10,039
oh yeah I I'm really excited to come

131
00:07:08,029 --> 00:07:13,489
down to Australia so please give me an

132
00:07:10,040 --> 00:07:15,020
excuse look into that but at a plane

133
00:07:13,490 --> 00:07:16,550
ticket and a plane ticket that always

134
00:07:15,019 --> 00:07:18,978
helps but as I was saying it was a

135
00:07:16,550 --> 00:07:20,449
really yeah it was a full venue tonight

136
00:07:18,978 --> 00:07:22,250
and when the crowd loving it though

137
00:07:20,449 --> 00:07:25,899
really into the show tonight thank you

138
00:07:22,250 --> 00:07:28,040
so much yeah it's you know you

139
00:07:25,899 --> 00:07:30,289
podcasting you know this you you talk

140
00:07:28,040 --> 00:07:32,120
into a microphone and you put it out

141
00:07:30,290 --> 00:07:33,800
somewhere as a file and you know

142
00:07:32,120 --> 00:07:36,019
eventually you hear that people listen

143

00:07:33,800 --> 00:07:39,710
to it but it's so great to meet people

144
00:07:36,019 --> 00:07:42,560
in person and and know that our message

145
00:07:39,709 --> 00:07:44,239
you know silly thing about this was

146
00:07:42,560 --> 00:07:46,069
haunted dolls in this particular case

147
00:07:44,240 --> 00:07:48,918
but just the the selling message of

148
00:07:46,069 --> 00:07:51,800
having fun with these kind of zany

149
00:07:48,918 --> 00:07:53,839
beliefs and exploring them from

150
00:07:51,800 --> 00:07:57,199
different angles resonates with people

151
00:07:53,839 --> 00:07:58,310
well it does and I could I could tell

152
00:07:57,199 --> 00:07:59,990
that by the reaction from the audience

153
00:07:58,310 --> 00:08:02,038
especially when they ask personal

154
00:07:59,990 --> 00:08:04,588
questions about children and pets

155
00:08:02,038 --> 00:08:06,568
yeah and that's always the amazing thing

156
00:08:04,588 --> 00:08:09,240
as people will stop by afterwards to

157
00:08:06,569 --> 00:08:10,408

tell us that you know maybe hearing us

158

00:08:09,240 --> 00:08:13,348

go through one of these adventures

159

00:08:10,408 --> 00:08:16,348

helped them as they were dealing with a

160

00:08:13,348 --> 00:08:17,968

sick loved one or going through a really

161

00:08:16,348 --> 00:08:19,438

hard time in their lives and you don't

162

00:08:17,968 --> 00:08:21,838

you don't anticipate something like that

163

00:08:19,439 --> 00:08:24,539

when you're talking about these issues

164

00:08:21,838 --> 00:08:27,269

and your haunted houses and Scientology

165

00:08:24,538 --> 00:08:29,639

and firewalking and all that but I guess

166

00:08:27,269 --> 00:08:32,610

sometimes that can just help people to

167

00:08:29,639 --> 00:08:34,709

sort of stay grounded and and maybe get

168

00:08:32,610 --> 00:08:36,568

out of get outside of whatever troubles

169

00:08:34,708 --> 00:08:38,549

they're facing now how long is the

170

00:08:36,568 --> 00:08:41,908

podcast I've never seen Carrie bean with

171

00:08:38,549 --> 00:08:45,509

the maximum fund it's it's a network of

172
00:08:41,908 --> 00:08:48,778
podcasters yeah since 2014 beginning of

173
00:08:45,509 --> 00:08:52,039
2014 so five years now Wow and yeah it's

174
00:08:48,778 --> 00:08:54,509
a great family with a lot of fantastic

175
00:08:52,039 --> 00:08:56,099
comedy and culture shows so you've got

176
00:08:54,509 --> 00:08:57,990
the McElroy brothers with a bunch of

177
00:08:56,100 --> 00:09:00,028
their shows Sawbones is one of my

178
00:08:57,990 --> 00:09:02,639
favorites looking for good

179
00:09:00,028 --> 00:09:04,500
recommendation reading glasses is

180
00:09:02,639 --> 00:09:06,810
another favorite there's my brother my

181
00:09:04,500 --> 00:09:08,399
brother and me judge John Hodgman all

182
00:09:06,809 --> 00:09:10,198
kinds of great content on that network

183
00:09:08,399 --> 00:09:12,269
so we're proud to be part of it I

184
00:09:10,198 --> 00:09:14,129
getting ready to see you again Russ

185
00:09:12,269 --> 00:09:15,929
thanks for doing the live show it was

186
00:09:14,129 --> 00:09:18,088
nice to catch up with Carrie papi as

187
00:09:15,929 --> 00:09:19,979
well and folks there's the message of

188
00:09:18,089 --> 00:09:22,680
course we wrote regular promos for

189
00:09:19,980 --> 00:09:24,420
Ross and Carrie and we look forward to

190
00:09:22,679 --> 00:09:26,819
your next adventure thank you so much

191
00:09:24,419 --> 00:09:28,259
Richard and yeah I'm sure our next

192
00:09:26,820 --> 00:09:31,610
adventure will be somewhere here in the

193
00:09:28,259 --> 00:09:31,610
Portland area I hope

194
00:09:35,049 --> 00:09:41,028
this is NASA Hoshi a flat earth but we

195
00:09:39,320 --> 00:09:43,879
should lie to everybody about it and say

196
00:09:41,028 --> 00:09:46,730
it's round 10 for maximum fun brings you

197
00:09:43,879 --> 00:09:49,639
the latest podcasts and expose aren't

198
00:09:46,730 --> 00:09:52,100
the Flat Earth I want to take advantage

199
00:09:49,639 --> 00:09:53,480
of humankind and make them believe a lie

200

00:09:52,100 --> 00:09:55,250
so that they will trust us at the

201
00:09:53,480 --> 00:09:56,570
government it's all an elaborate lie and

202
00:09:55,250 --> 00:09:58,429
when you get on a plane they

203
00:09:56,570 --> 00:10:00,170
purposefully fly you farther than you

204
00:09:58,429 --> 00:10:02,209
need to go it's disgusting

205
00:10:00,169 --> 00:10:04,069
it needs to be stopped and if you listen

206
00:10:02,210 --> 00:10:09,980
to onna Ross and Carrie we will tell you

207
00:10:04,070 --> 00:10:11,450
the truth behind the lies we will just

208
00:10:09,980 --> 00:10:12,860
tell you the truth behind the truth

209
00:10:11,450 --> 00:10:15,110
because what we do is we look at

210
00:10:12,860 --> 00:10:17,778
extraordinary claims that's right we've

211
00:10:15,110 --> 00:10:19,610
gone undercover with alternative medical

212
00:10:17,778 --> 00:10:22,159
treatments fringe religious groups

213
00:10:19,610 --> 00:10:24,379
fringe science claims spiritual

214
00:10:22,159 --> 00:10:26,120

paranormal were there to check it out

215

00:10:24,379 --> 00:10:28,370

and let you know what happens is the

216

00:10:26,120 --> 00:10:31,610

Queen Mary haunted I don't know find out

217

00:10:28,370 --> 00:10:33,259

we show up we make friends we learn what

218

00:10:31,610 --> 00:10:35,300

happens when you ask questions and we

219

00:10:33,259 --> 00:10:37,850

tell you all about it and we get all

220

00:10:35,299 --> 00:10:41,179

that funky stuff done to us it's oh no

221

00:10:37,850 --> 00:10:50,139

Ross and Carrie maximumfun.org

222

00:10:41,179 --> 00:10:53,778

[Music]

223

00:10:50,139 --> 00:10:56,209

Brad hagh is the director of teacher

224

00:10:53,778 --> 00:10:58,879

support at the National Center for

225

00:10:56,208 --> 00:11:00,879

Science education Brad joined the

226

00:10:58,879 --> 00:11:05,299

National Center for Science education in

227

00:11:00,879 --> 00:11:08,208

2017 to help steward the NCSE teach into

228

00:11:05,299 --> 00:11:11,179

its next phase he has been a classroom

229
00:11:08,208 --> 00:11:14,000
teacher a children's museum curator

230
00:11:11,179 --> 00:11:16,818
a research scientist and a science

231
00:11:14,000 --> 00:11:19,028
educator including working as associate

232
00:11:16,818 --> 00:11:23,679
professor at the University of Houston

233
00:11:19,028 --> 00:11:26,179
downtown he holds a PhD in ecology and

234
00:11:23,679 --> 00:11:29,689
evolutionary biology from Rice

235
00:11:26,179 --> 00:11:31,879
University and Masters of Education in

236
00:11:29,690 --> 00:11:34,810
curriculum and instruction from Texas

237
00:11:31,879 --> 00:11:34,809
A&M

238
00:11:35,549 --> 00:11:41,709
I decided to take the local transport

239
00:11:38,159 --> 00:11:43,179
options to meet with Brad Hoke

240
00:11:41,710 --> 00:11:49,090
you

241
00:11:43,179 --> 00:11:53,179
[Music]

242
00:11:49,090 --> 00:11:56,120
do the sounds of traffic roaring down a

243
00:11:53,179 --> 00:12:00,079
California Highway I'm at the Orang

244
00:11:56,120 --> 00:12:03,139
depart station but they Area Rapid

245
00:12:00,080 --> 00:12:07,850
Transit it's the local train system here

246
00:12:03,139 --> 00:12:09,590
in the San Francisco Bay Area and I'm on

247
00:12:07,850 --> 00:12:12,470
my way to the National Center for

248
00:12:09,590 --> 00:12:13,820
Science education in Oakland and looking

249
00:12:12,470 --> 00:12:16,430
forward to this I've been visiting the

250
00:12:13,820 --> 00:12:19,270
National Center now for Wow

251
00:12:16,429 --> 00:12:21,589
over ten years it's hard to remember

252
00:12:19,269 --> 00:12:24,949
certainly if you search the archives of

253
00:12:21,590 --> 00:12:27,740
the skeptic zone you'll see many times

254
00:12:24,950 --> 00:12:29,990
I've interviewed dr. eugenie Scott over

255
00:12:27,740 --> 00:12:34,100
Anne Reed who is the current director

256
00:12:29,990 --> 00:12:35,840
I'm on my way there now once again but

257

00:12:34,100 --> 00:12:38,409
this time the angle is going to be on

258
00:12:35,840 --> 00:12:38,410
climate change

259
00:12:57,039 --> 00:13:00,168
[Applause]

260
00:13:05,809 --> 00:13:10,379
the long steps up from the bots

261
00:13:08,580 --> 00:13:17,250
stationed at 19th Street here in

262
00:13:10,379 --> 00:13:20,600
Oklahoma miss this neighborhood has

263
00:13:17,250 --> 00:13:20,600
certainly changed over the years

264
00:13:33,179 --> 00:13:38,689
lots of construction going on

265
00:13:35,830 --> 00:13:40,790
very colorful here

266
00:13:38,690 --> 00:13:46,459
a lot of the buildings have very large

267
00:13:40,789 --> 00:13:50,599
murals as I make my way around the

268
00:13:46,458 --> 00:13:54,278
corner on some streets and head to the

269
00:13:50,600 --> 00:13:54,278
national say that the science education

270
00:13:56,779 --> 00:14:00,629
and yes I've made it I've made it to the

271
00:13:59,429 --> 00:14:03,989

National Center for science education

272

00:14:00,629 --> 00:14:06,059

once again and I'm delighted to be back

273

00:14:03,990 --> 00:14:07,919

here and of course skeptic zone fans

274

00:14:06,059 --> 00:14:09,359

will know that we've been here many

275

00:14:07,919 --> 00:14:10,889

times over the years to talk to all

276

00:14:09,360 --> 00:14:13,230

sorts of people including you genius

277

00:14:10,889 --> 00:14:15,330

cotton and Reed today I'm talking to

278

00:14:13,230 --> 00:14:17,519

Brad hog hello Brad hello how are you

279

00:14:15,330 --> 00:14:20,370

I'm really well I'm really happy to be

280

00:14:17,519 --> 00:14:21,990

here I love to visit the the center here

281

00:14:20,370 --> 00:14:24,179

in Oakland and we look out the windows

282

00:14:21,990 --> 00:14:28,379

massive building going on in Oakland at

283

00:14:24,179 --> 00:14:31,109

least but I am here today normally I'm

284

00:14:28,379 --> 00:14:33,899

here to talk about creationism which is

285

00:14:31,110 --> 00:14:36,509

the old chestnut of course and the the

286

00:14:33,899 --> 00:14:38,549

work the center does to battle

287

00:14:36,509 --> 00:14:40,740

creationism and promote good science and

288

00:14:38,549 --> 00:14:42,750

that's still ongoing of course but the

289

00:14:40,740 --> 00:14:45,299

more pressing issue now and something

290

00:14:42,750 --> 00:14:47,399

the center has taken on in the last four

291

00:14:45,299 --> 00:14:52,109

or five six years or so is climate

292

00:14:47,399 --> 00:14:53,730

change and it's far more pressing in my

293

00:14:52,110 --> 00:14:55,710

mind certainly in Australia than

294

00:14:53,730 --> 00:14:57,210

creationism although I don't want to put

295

00:14:55,710 --> 00:14:58,530

that into the background too much

296

00:14:57,210 --> 00:15:00,150

because it's still an important issue

297

00:14:58,529 --> 00:15:02,759

probably more important here in the

298

00:15:00,149 --> 00:15:04,470

United States so I'm very interested I'm

299

00:15:02,759 --> 00:15:06,809

sure that our listeners are interested

300
00:15:04,470 --> 00:15:09,629
to know exactly what the National Center

301
00:15:06,809 --> 00:15:11,339
for Science education is doing what do

302
00:15:09,629 --> 00:15:14,639
you have in place and how do you help

303
00:15:11,340 --> 00:15:16,440
especially teachers in this issue all

304
00:15:14,639 --> 00:15:18,059
right well we've recently established a

305
00:15:16,440 --> 00:15:19,740
program called our teacher ambassador

306
00:15:18,059 --> 00:15:22,919
program which is how we're addressing

307
00:15:19,740 --> 00:15:25,350
the issue directly and we're part of a

308
00:15:22,919 --> 00:15:27,059
larger network here that's called clean

309
00:15:25,350 --> 00:15:28,409
and there are people all across the

310
00:15:27,059 --> 00:15:30,179
country who are working on climate

311
00:15:28,409 --> 00:15:32,879
change issues from an education side of

312
00:15:30,179 --> 00:15:34,229
things so we're not looking to try to do

313
00:15:32,879 --> 00:15:35,939
everything ourselves we have a

314

00:15:34,230 --> 00:15:37,550
particular niche where we think we're

315
00:15:35,940 --> 00:15:39,930
really effective at communicating

316
00:15:37,549 --> 00:15:42,269
controversial issues without controversy

317
00:15:39,929 --> 00:15:44,309
and helping teachers know how to do that

318
00:15:42,269 --> 00:15:47,159
so the teacher ambassador program is

319
00:15:44,309 --> 00:15:50,009
sort of a three-phase program first we

320
00:15:47,159 --> 00:15:52,230
recruit really strong teachers who are

321
00:15:50,009 --> 00:15:53,730
in areas where it's difficult teaching

322
00:15:52,230 --> 00:15:54,930
climate change but they've figured out

323
00:15:53,730 --> 00:15:55,350
how to do it and they're really good at

324
00:15:54,929 --> 00:15:56,879
it

325
00:15:55,350 --> 00:15:58,710
we have a wonderful group of eight

326
00:15:56,879 --> 00:16:01,019
teacher ambassadors that we've recruited

327
00:15:58,710 --> 00:16:02,820
for climate change we've met with them

328
00:16:01,019 --> 00:16:05,159

at George Mason University and working

329

00:16:02,820 --> 00:16:08,129

with John Cook there to develop a series

330

00:16:05,159 --> 00:16:09,399

of five lessons so it's a five unit five

331

00:16:08,129 --> 00:16:12,669

lesson unit

332

00:16:09,399 --> 00:16:14,289

that focuses on misconceptions this was

333

00:16:12,669 --> 00:16:16,319

kind of in response to that Heartland

334

00:16:14,289 --> 00:16:18,730

mailing with that challenge teachers

335

00:16:16,320 --> 00:16:22,030

with misinformation it was a very

336

00:16:18,730 --> 00:16:25,570

deliberate attempt to to get teachers to

337

00:16:22,029 --> 00:16:28,929

teach the wrong things and to think that

338

00:16:25,570 --> 00:16:30,790

climate change is not as a topic that is

339

00:16:28,929 --> 00:16:32,519

that is founded in science and so forth

340

00:16:30,789 --> 00:16:35,110

so we identified five specific

341

00:16:32,519 --> 00:16:36,759

misconceptions in that mailing and each

342

00:16:35,110 --> 00:16:39,519

of the five lessons addresses one of

343
00:16:36,759 --> 00:16:42,069
them the first one is based on consensus

344
00:16:39,519 --> 00:16:44,889
the fact is that 97% of climate

345
00:16:42,070 --> 00:16:48,100
scientists support human impacts causing

346
00:16:44,889 --> 00:16:49,870
climate change so we have a lesson where

347
00:16:48,100 --> 00:16:51,759
the students actually work with the data

348
00:16:49,870 --> 00:16:54,360
themselves come to that conclusion

349
00:16:51,759 --> 00:16:57,009
independently and then share their

350
00:16:54,360 --> 00:16:59,230
outcomes and and realize that no matter

351
00:16:57,009 --> 00:17:01,179
which line of evidence they studied it

352
00:16:59,230 --> 00:17:03,220
led to that conclusion that only the

353
00:17:01,179 --> 00:17:05,318
only explanation is that human impacts

354
00:17:03,220 --> 00:17:06,610
are causing climate change from there

355
00:17:05,318 --> 00:17:08,409
they look at models they look at the

356
00:17:06,609 --> 00:17:10,059
Paleo record they look at and then they

357
00:17:08,410 --> 00:17:12,670
look at to the last two lessons are

358
00:17:10,059 --> 00:17:16,688
place based so the teachers find issues

359
00:17:12,670 --> 00:17:18,430
where they are that are I mean where

360
00:17:16,689 --> 00:17:21,209
climate changes of the underlying cause

361
00:17:18,430 --> 00:17:24,459
so whether it's wildfires or droughts or

362
00:17:21,209 --> 00:17:26,799
decrease snowfall in in in some areas

363
00:17:24,459 --> 00:17:28,209
they design their lesson around that and

364
00:17:26,799 --> 00:17:30,879
get the students involved with data

365
00:17:28,209 --> 00:17:33,880
about their local issues and then the

366
00:17:30,880 --> 00:17:35,050
final one looking at solutions most of

367
00:17:33,880 --> 00:17:36,940
the time a lot of times it's more

368
00:17:35,049 --> 00:17:39,700
effective to start with solutions to get

369
00:17:36,940 --> 00:17:41,140
people involved in a conversation but we

370
00:17:39,700 --> 00:17:43,539
found that with this lesson if we

371

00:17:41,140 --> 00:17:46,840
started with with the not you know

372
00:17:43,539 --> 00:17:48,190
inoculating students about with data by

373
00:17:46,839 --> 00:17:50,459
the time we get to solutions they're

374
00:17:48,190 --> 00:17:53,680
really on board to look at it a lot more

375
00:17:50,460 --> 00:17:55,750
as something they can be involved in and

376
00:17:53,680 --> 00:17:58,180
and so that that place-based education

377
00:17:55,750 --> 00:17:59,710
works really well the ultimate goal

378
00:17:58,180 --> 00:18:01,539
though that you know those lessons were

379
00:17:59,710 --> 00:18:03,610
field tested by the eighth ambassador

380
00:18:01,539 --> 00:18:05,409
teachers or teacher ambassadors in their

381
00:18:03,609 --> 00:18:07,119
own classrooms and anjana's assessed

382
00:18:05,410 --> 00:18:08,890
that the effectiveness of that and it

383
00:18:07,119 --> 00:18:11,139
worked really well so we're currently

384
00:18:08,890 --> 00:18:13,240
working with them to set up workshops in

385
00:18:11,140 --> 00:18:15,430

their areas where they are to try to

386

00:18:13,240 --> 00:18:18,460
reach teachers that wouldn't normally

387

00:18:15,430 --> 00:18:20,410
come to a a workshop with the words

388

00:18:18,460 --> 00:18:21,640
climate change in it or you know

389

00:18:20,410 --> 00:18:22,130
anything that they might because what

390

00:18:21,640 --> 00:18:23,750
we've

391

00:18:22,130 --> 00:18:25,450
from our own surveys is that teachers

392

00:18:23,750 --> 00:18:27,880
are avoiding teaching climate change

393

00:18:25,450 --> 00:18:30,259
primarily because it's controversial and

394

00:18:27,880 --> 00:18:32,750
somewhat because they also share those

395

00:18:30,259 --> 00:18:34,490
misconceptions so we're trying to get to

396

00:18:32,750 --> 00:18:35,690
those teachers that the teachers that

397

00:18:34,490 --> 00:18:37,880
might be a little tentative about

398

00:18:35,690 --> 00:18:40,160
wanting to teach climate change and if

399

00:18:37,880 --> 00:18:41,870
we can get our teacher ambassadors to

400
00:18:40,160 --> 00:18:43,460
then reach them and give them these

401
00:18:41,869 --> 00:18:46,250
lessons and teach them how to do these

402
00:18:43,460 --> 00:18:48,200
lessons then we then we're going to be

403
00:18:46,250 --> 00:18:50,390
able to saturate into that portion of

404
00:18:48,200 --> 00:18:52,029
the teaching population that is not

405
00:18:50,390 --> 00:18:54,350
teaching climate change effectively

406
00:18:52,029 --> 00:18:56,210
we've already done a series of webinars

407
00:18:54,349 --> 00:18:57,679
with these lessons with a partner

408
00:18:56,210 --> 00:19:00,590
organization called the Alliance for

409
00:18:57,680 --> 00:19:02,120
climate education or ace and those went

410
00:19:00,589 --> 00:19:04,579
extremely well as well so those are

411
00:19:02,119 --> 00:19:06,679
available on our website along with the

412
00:19:04,579 --> 00:19:08,359
lessons themselves it's interesting when

413
00:19:06,680 --> 00:19:10,490
you're talking about that some teachers

414
00:19:08,359 --> 00:19:11,899
are hesitant it does now remind me of

415
00:19:10,490 --> 00:19:14,180
some of the problems with the

416
00:19:11,900 --> 00:19:16,970
creationism yeah I think there are a lot

417
00:19:14,180 --> 00:19:18,140
of parallels they're interesting

418
00:19:16,970 --> 00:19:19,370
particularly with our misconception

419
00:19:18,140 --> 00:19:22,100
based focus because we also have a

420
00:19:19,369 --> 00:19:24,799
similar group of teacher ambassadors for

421
00:19:22,099 --> 00:19:26,799
evolution and similarly based on five

422
00:19:24,799 --> 00:19:28,879
misconceptions and so forth

423
00:19:26,799 --> 00:19:32,210
misconceptions around creationism or

424
00:19:28,880 --> 00:19:34,880
mostly larger conceptual misconceptions

425
00:19:32,210 --> 00:19:36,680
as well as of course the conflicts that

426
00:19:34,880 --> 00:19:39,350
many people see between evolution and

427
00:19:36,680 --> 00:19:41,120
religion which is why we work with a man

428

00:19:39,349 --> 00:19:42,409
to glaze on that one and she's a really

429
00:19:41,119 --> 00:19:44,239
effective at being able to communicate

430
00:19:42,410 --> 00:19:46,160
how that it doesn't need to be a

431
00:19:44,240 --> 00:19:47,990
conflict there and you can learn about

432
00:19:46,160 --> 00:19:51,320
evolution and still have faith that

433
00:19:47,990 --> 00:19:53,269
doesn't but that's an aside I think to

434
00:19:51,319 --> 00:19:57,200
get to this point the similarities being

435
00:19:53,269 --> 00:19:59,660
that climate change misconceptions are a

436
00:19:57,200 --> 00:20:02,289
little bit more logical fallacy because

437
00:19:59,660 --> 00:20:05,060
they're based on misconceptions that

438
00:20:02,289 --> 00:20:07,490
people have naturally due to their

439
00:20:05,059 --> 00:20:10,069
inability to grapple with probabilities

440
00:20:07,490 --> 00:20:11,950
and changing frequencies and personal

441
00:20:10,069 --> 00:20:15,189
biases but more fundamentally

442
00:20:11,950 --> 00:20:18,289

ideologically resistant to the idea of

443

00:20:15,190 --> 00:20:20,150

climate change on a political level or

444

00:20:18,289 --> 00:20:23,750

an ideological level because it doesn't

445

00:20:20,150 --> 00:20:25,340

align with what their their beliefs are

446

00:20:23,750 --> 00:20:27,079

in that sense so there's a there's kind

447

00:20:25,339 --> 00:20:29,929

of an underlying similarity in terms of

448

00:20:27,079 --> 00:20:31,379

the misconceptions being bolstered by an

449

00:20:29,930 --> 00:20:35,669

ideological or

450

00:20:31,380 --> 00:20:39,090

religious resistance to just allowing

451

00:20:35,669 --> 00:20:41,070

that information to be true now one of

452

00:20:39,089 --> 00:20:43,230

the problems we have in Australia and I

453

00:20:41,069 --> 00:20:46,230

think it's reflected here on vice-versa

454

00:20:43,230 --> 00:20:49,140

ah is the conservative media especially

455

00:20:46,230 --> 00:20:51,150

what we call the shock jocks and the the

456

00:20:49,140 --> 00:20:56,280

conservative talkback

457
00:20:51,150 --> 00:20:59,309
calling announcers who it's almost a

458
00:20:56,279 --> 00:21:03,000
religion with them to rail against this

459
00:20:59,308 --> 00:21:04,349
thing of climate change I imagine you've

460
00:21:03,000 --> 00:21:07,109
come across the same sort of thing here

461
00:21:04,349 --> 00:21:08,730
yes definitely I think when we I tried

462
00:21:07,109 --> 00:21:10,709
intend to use the word ideology rather

463
00:21:08,730 --> 00:21:12,419
than Pollak political but it's kind of

464
00:21:10,710 --> 00:21:14,819
the same thing that I'm referring to and

465
00:21:12,419 --> 00:21:19,770
it's you know there's there's there is a

466
00:21:14,819 --> 00:21:21,509
group of or a mindset rather of this

467
00:21:19,769 --> 00:21:25,980
globe just fight against a globalization

468
00:21:21,509 --> 00:21:28,470
of our economy and the fact or the idea

469
00:21:25,980 --> 00:21:30,599
that somehow climate change is part of

470
00:21:28,470 --> 00:21:34,230
that agenda that because it's a global

471
00:21:30,599 --> 00:21:36,029
issue that our intent as by teaching

472
00:21:34,230 --> 00:21:39,179
climate change is to actually try to

473
00:21:36,029 --> 00:21:42,359
make you break down American democracy

474
00:21:39,179 --> 00:21:43,950
and turn it into a globalized and that's

475
00:21:42,359 --> 00:21:46,859
that's really what's coming to what they

476
00:21:43,950 --> 00:21:49,350
feel ya feel sometimes yeah and even if

477
00:21:46,859 --> 00:21:51,740
it's not as upfront in their minds I

478
00:21:49,349 --> 00:21:54,418
think that's sort of the underlying

479
00:21:51,740 --> 00:21:57,690
anxieties that drive that ideology is

480
00:21:54,419 --> 00:22:00,030
that climate changes is it is a

481
00:21:57,690 --> 00:22:04,110
conspiracy of sorts to try to achieve

482
00:22:00,029 --> 00:22:05,730
this liberal agenda of expanding

483
00:22:04,109 --> 00:22:07,529
government because the response to

484
00:22:05,730 --> 00:22:11,099
climate change would be mostly a

485

00:22:07,529 --> 00:22:13,279
governmental issue and globalizing our

486
00:22:11,099 --> 00:22:16,288
economy and both of those things are

487
00:22:13,279 --> 00:22:19,908
ideologically anathema to them or yeah

488
00:22:16,288 --> 00:22:22,200
and so that's the underlying and

489
00:22:19,909 --> 00:22:24,020
underlying aspect of that and I think

490
00:22:22,200 --> 00:22:26,880
that that's why a lot of the the

491
00:22:24,019 --> 00:22:29,579
rhetoric on that again is very illogical

492
00:22:26,880 --> 00:22:31,710
if you break it down a lot of a lot

493
00:22:29,579 --> 00:22:33,869
logical fallacy used to try to attack

494
00:22:31,710 --> 00:22:37,140
the climate science a lot of

495
00:22:33,869 --> 00:22:40,439
cherry-picking of data a lot of you know

496
00:22:37,140 --> 00:22:42,990
false experts trying to claim that

497
00:22:40,440 --> 00:22:45,690
scientists outside of you know when you

498
00:22:42,990 --> 00:22:47,220
look at that 97% consensus number that's

499
00:22:45,690 --> 00:22:48,808

of climate scientists those are the

500

00:22:47,220 --> 00:22:51,360

scientists who were studying studying

501

00:22:48,808 --> 00:22:54,869

climate directly if you ask a petroleum

502

00:22:51,359 --> 00:22:56,579

geologist or a chemist or a physicist

503

00:22:54,869 --> 00:22:57,839

they're not going to have the expertise

504

00:22:56,579 --> 00:22:59,699

to really be able to judge it so

505

00:22:57,839 --> 00:23:02,039

obviously they're able to go into some

506

00:22:59,700 --> 00:23:04,558

of the fine scientists who are quote

507

00:23:02,039 --> 00:23:06,990

scientists who would deny climate change

508

00:23:04,558 --> 00:23:08,308

or deny human impact but they're not the

509

00:23:06,990 --> 00:23:10,829

climate scientists who were studying

510

00:23:08,308 --> 00:23:12,690

climate this is a great point because

511

00:23:10,829 --> 00:23:15,299

you know if I glanced towards my notes

512

00:23:12,690 --> 00:23:16,470

is exactly the the the notes I've

513

00:23:15,299 --> 00:23:18,839

written here for this interview

514
00:23:16,470 --> 00:23:20,549
cherry-picking I've put here and experts

515
00:23:18,839 --> 00:23:21,959
and this is very important we'll get

516
00:23:20,549 --> 00:23:25,919
back to these shock jocks and whatever

517
00:23:21,960 --> 00:23:30,779
the conservative media because they will

518
00:23:25,920 --> 00:23:34,558
have on their show an expert and a

519
00:23:30,779 --> 00:23:36,089
scientist right and that to them is game

520
00:23:34,558 --> 00:23:37,950
set and match right you know they've

521
00:23:36,089 --> 00:23:40,019
found somebody who agrees with their

522
00:23:37,950 --> 00:23:41,880
side of the story they interview them

523
00:23:40,019 --> 00:23:43,470
and they say after you new view they say

524
00:23:41,880 --> 00:23:45,540
to the audience well there you are there

525
00:23:43,470 --> 00:23:47,190
you are this person has is an expert in

526
00:23:45,539 --> 00:23:50,399
whatever they are a scientist and they

527
00:23:47,190 --> 00:23:52,410
say it's it's all it's all baloney and I

528
00:23:50,400 --> 00:23:54,390
guess that happens here it would happen

529
00:23:52,410 --> 00:23:56,009
here more yeah and there's there's two

530
00:23:54,390 --> 00:23:58,920
ways that it happens I think there's one

531
00:23:56,009 --> 00:24:01,109
very again deliberate way and this goes

532
00:23:58,920 --> 00:24:03,900
back to the tobacco Wars and as the

533
00:24:01,109 --> 00:24:07,409
climate Wars as well in the u.s. kiss

534
00:24:03,900 --> 00:24:09,720
has documented that quite well in her

535
00:24:07,410 --> 00:24:11,880
book the merchants of doubt' and so

536
00:24:09,720 --> 00:24:15,089
that's an attempt to actually recruit

537
00:24:11,880 --> 00:24:18,360
scientists who are willing to to say

538
00:24:15,089 --> 00:24:20,579
what the you know to attack science and

539
00:24:18,359 --> 00:24:22,289
to try to make it sound like well

540
00:24:20,579 --> 00:24:23,819
they're scientists and and so they're

541
00:24:22,289 --> 00:24:25,789
they're saying that this isn't good

542

00:24:23,819 --> 00:24:28,019
science it's not bad science and so

543
00:24:25,789 --> 00:24:30,240
that's a deliberate attempt

544
00:24:28,019 --> 00:24:31,589
there's also however just there are

545
00:24:30,240 --> 00:24:34,920
scientists who are outside of their

546
00:24:31,589 --> 00:24:37,500
field who feel like they have some

547
00:24:34,920 --> 00:24:38,880
capacity for analyzing data sort of from

548
00:24:37,500 --> 00:24:40,859
the periphery and coming up with

549
00:24:38,880 --> 00:24:43,890
conclusions and having the same sort of

550
00:24:40,859 --> 00:24:45,509
ideological anxieties and it drives them

551
00:24:43,890 --> 00:24:47,850
to bad conclusions I mean that's always

552
00:24:45,509 --> 00:24:50,700
been true in science is true and

553
00:24:47,849 --> 00:24:53,039
that's why science as a process works by

554
00:24:50,700 --> 00:24:55,710
peer review and constant repetition and

555
00:24:53,039 --> 00:24:59,220
and so forth so over decades of research

556
00:24:55,710 --> 00:25:01,769

on climate change the climate experts

557

00:24:59,220 --> 00:25:03,509

have seen the impact that that our own

558

00:25:01,769 --> 00:25:06,240

activities have had and they're pretty

559

00:25:03,509 --> 00:25:07,920

settled on it and it's it's something

560

00:25:06,240 --> 00:25:09,179

that they're confident about but outside

561

00:25:07,920 --> 00:25:11,100

of that on the peripheries those

562

00:25:09,179 --> 00:25:13,230

anxieties that underlie a lot of the

563

00:25:11,099 --> 00:25:15,329

denial they exist in scientists as well

564

00:25:13,230 --> 00:25:17,308

and some of them are willing to to speak

565

00:25:15,329 --> 00:25:19,230

to that but I think the bigger problem

566

00:25:17,308 --> 00:25:21,450

and in what you're talking about with

567

00:25:19,230 --> 00:25:22,679

these shock jocks is still till there

568

00:25:21,450 --> 00:25:25,440

are a group of scientists they were

569

00:25:22,679 --> 00:25:28,890

almost specifically targeted over and

570

00:25:25,440 --> 00:25:31,049

over again to deny different types of

571
00:25:28,890 --> 00:25:35,100
science it's just kind of even become a

572
00:25:31,049 --> 00:25:38,009
career for some wow that's interesting

573
00:25:35,099 --> 00:25:40,589
now I I don't know what the situation

574
00:25:38,009 --> 00:25:43,200
here was in the United States last year

575
00:25:40,589 --> 00:25:44,819
in November there was a strike a student

576
00:25:43,200 --> 00:25:48,720
strike which undoubtedly you've heard

577
00:25:44,819 --> 00:25:51,720
about a note I think it it started in

578
00:25:48,720 --> 00:25:52,890
Sweden now if I'm correct with a student

579
00:25:51,720 --> 00:25:53,069
there or wasn't Norway or something like

580
00:25:52,890 --> 00:25:55,500
that

581
00:25:53,069 --> 00:25:57,480
listen his honor and it made its way to

582
00:25:55,500 --> 00:26:00,720
Australia and one day in Australia in

583
00:25:57,480 --> 00:26:02,279
late November there was a big strike and

584
00:26:00,720 --> 00:26:03,870
thousands of students didn't go to

585
00:26:02,279 --> 00:26:05,369
school they all turned up in the center

586
00:26:03,869 --> 00:26:06,869
of Sydney and held up protests about

587
00:26:05,369 --> 00:26:11,250
climate change and one of the government

588
00:26:06,869 --> 00:26:14,579
to do something and I couldn't help

589
00:26:11,250 --> 00:26:15,480
think that there was it was good of them

590
00:26:14,579 --> 00:26:18,509
to do that because they obviously

591
00:26:15,480 --> 00:26:20,099
passionate and concerned but I was

592
00:26:18,509 --> 00:26:22,558
wondering I couldn't help wondering if

593
00:26:20,099 --> 00:26:24,808
they were doing the right thing for the

594
00:26:22,558 --> 00:26:26,549
wrong reasons in other words do they

595
00:26:24,808 --> 00:26:30,649
actually have enough knowledge or they

596
00:26:26,549 --> 00:26:33,919
simply jumping on the bandwagon of of

597
00:26:30,650 --> 00:26:37,259
this even if it's the right conclusion

598
00:26:33,920 --> 00:26:39,420
and I just wondered what you'd think

599

00:26:37,259 --> 00:26:42,900
about the the the younger generation

600
00:26:39,420 --> 00:26:45,808
taking such action well I think I think

601
00:26:42,900 --> 00:26:47,610
that it's a part of of how we are

602
00:26:45,808 --> 00:26:50,670
approaching you know we certainly

603
00:26:47,609 --> 00:26:53,490
support students in in expressing

604
00:26:50,670 --> 00:26:55,650
themselves in that way and here in the

605
00:26:53,490 --> 00:26:57,000
US I think it's been more of a court

606
00:26:55,650 --> 00:26:58,920
case students have actually brought

607
00:26:57,000 --> 00:27:03,150
against different states about

608
00:26:58,920 --> 00:27:05,550
they're being denied a quality education

609
00:27:03,150 --> 00:27:07,170
by not having climate change and there's

610
00:27:05,549 --> 00:27:08,700
those typically that haven't gone very

611
00:27:07,170 --> 00:27:10,289
far yet but they're still working their

612
00:27:08,700 --> 00:27:11,700
way through the court system to some

613
00:27:10,289 --> 00:27:13,769

level and there are a lot of programs

614

00:27:11,700 --> 00:27:16,500

that are that are meant to empower the

615

00:27:13,769 --> 00:27:18,180

youth in terms of climate action and

616

00:27:16,500 --> 00:27:20,519

things like that and doing something a

617

00:27:18,180 --> 00:27:21,840

lot of a lot of the groups are looking

618

00:27:20,519 --> 00:27:24,660

for making their communities more

619

00:27:21,839 --> 00:27:26,759

resilient by getting students involved

620

00:27:24,660 --> 00:27:28,529

in not only understanding climate change

621

00:27:26,759 --> 00:27:31,319

but then translating that into things

622

00:27:28,529 --> 00:27:33,599

they can do locally to to make a

623

00:27:31,319 --> 00:27:35,879

difference in terms of drought or water

624

00:27:33,599 --> 00:27:37,859

issues or agricultural issues and so on

625

00:27:35,880 --> 00:27:40,350

and I mentioned earlier that you know we

626

00:27:37,859 --> 00:27:43,679

sort of take our own niche in this

627

00:27:40,349 --> 00:27:45,480

bigger piece and that is to to get to

628
00:27:43,680 --> 00:27:47,820
those misconceptions that inoculate

629
00:27:45,480 --> 00:27:49,430
students against them in a way that they

630
00:27:47,819 --> 00:27:52,289
can really understand the issues

631
00:27:49,430 --> 00:27:53,670
obviously most of these students haven't

632
00:27:52,289 --> 00:27:55,649
studied climate change to a level where

633
00:27:53,670 --> 00:27:57,240
where they understand the issues and so

634
00:27:55,650 --> 00:27:58,800
thoroughly that they can speak to in a

635
00:27:57,240 --> 00:28:01,890
way they're an expert would but that's

636
00:27:58,799 --> 00:28:05,339
not that's not necessary as long as

637
00:28:01,890 --> 00:28:06,930
they're focusing on action Nets is built

638
00:28:05,339 --> 00:28:08,399
around finding solutions to real

639
00:28:06,930 --> 00:28:10,799
problems I think that that's very

640
00:28:08,400 --> 00:28:13,290
productive well it is a huge problem for

641
00:28:10,799 --> 00:28:16,559
us and we don't know what the next five

642
00:28:13,289 --> 00:28:17,909
or ten years will bring because and

643
00:28:16,559 --> 00:28:20,009
again I haven't seen the latest research

644
00:28:17,910 --> 00:28:23,130
but I don't think it's slowing down any

645
00:28:20,009 --> 00:28:26,129
and I don't know what the next decade

646
00:28:23,130 --> 00:28:30,750
decade will bring us in terms of direct

647
00:28:26,130 --> 00:28:34,110
impact on our climate on society etc but

648
00:28:30,750 --> 00:28:35,910
I think the kids are doing a good thing

649
00:28:34,109 --> 00:28:39,389
but you're right I I don't think they

650
00:28:35,910 --> 00:28:41,910
have the knowledge to really speak to

651
00:28:39,390 --> 00:28:43,710
what they're doing right but they're

652
00:28:41,910 --> 00:28:45,450
passionate enough and I guess it's a

653
00:28:43,710 --> 00:28:46,920
generational thing too isn't it it's

654
00:28:45,450 --> 00:28:48,330
certainly a generation I think this

655
00:28:46,920 --> 00:28:51,410
generation is coming up my daughter's

656

00:28:48,329 --> 00:28:55,409
part of it yeah they do have a sense of

657
00:28:51,410 --> 00:28:57,509
activism they want to make change part

658
00:28:55,410 --> 00:28:58,560
of their lives and so I definitely think

659
00:28:57,509 --> 00:29:01,140
that there's an energy in this

660
00:28:58,559 --> 00:29:02,940
generation that is very positive I think

661
00:29:01,140 --> 00:29:05,430
speaking to your earlier question too as

662
00:29:02,940 --> 00:29:08,100
long as this one is that there is kind

663
00:29:05,430 --> 00:29:09,778
of maybe a razor's edge in terms of

664
00:29:08,099 --> 00:29:12,058
doing good and doing day

665
00:29:09,778 --> 00:29:13,829
and conceptually with climate change and

666
00:29:12,058 --> 00:29:14,878
a lot of the people that fight climate

667
00:29:13,829 --> 00:29:16,439
change and deny it

668
00:29:14,878 --> 00:29:19,079
we'll take advantage of some of that

669
00:29:16,440 --> 00:29:21,778
naivete at times and in sort of try to

670
00:29:19,079 --> 00:29:23,819

undo some of those efforts and the

671

00:29:21,778 --> 00:29:26,239

impact for on extreme weather for

672

00:29:23,819 --> 00:29:29,668

instance is one of those areas where

673

00:29:26,239 --> 00:29:31,590

climate change is not causing a specific

674

00:29:29,669 --> 00:29:34,288

hurricane or a specific drought or a

675

00:29:31,589 --> 00:29:36,749

specific wildfire but it's contributing

676

00:29:34,288 --> 00:29:39,089

because it's increasing the odds of

677

00:29:36,749 --> 00:29:40,259

those things happening that's a very

678

00:29:39,089 --> 00:29:42,388

tricky thing to really communicate

679

00:29:40,259 --> 00:29:44,669

effectively and we're in the science

680

00:29:42,388 --> 00:29:46,648

behind it is really still evolving in

681

00:29:44,669 --> 00:29:48,269

terms of getting the data there is clear

682

00:29:46,648 --> 00:29:50,608

data now that's clear enough to make

683

00:29:48,269 --> 00:29:53,460

that connection that we can connect

684

00:29:50,608 --> 00:29:56,009

climate change to these events but it's

685
00:29:53,460 --> 00:29:57,989
not a direct causal relationship and

686
00:29:56,009 --> 00:30:00,899
that is easily turn into a misconception

687
00:29:57,989 --> 00:30:02,308
by somebody who wants to deny it you

688
00:30:00,898 --> 00:30:03,868
know that wants to say oh this is just

689
00:30:02,308 --> 00:30:05,308
something that's happened to all the

690
00:30:03,868 --> 00:30:08,488
time we've always had extreme weather

691
00:30:05,308 --> 00:30:11,009
there's no connection and so unless you

692
00:30:08,489 --> 00:30:12,598
can really talk about well the

693
00:30:11,009 --> 00:30:14,278
connection what the connection is and

694
00:30:12,598 --> 00:30:16,439
that it's that there's more heat in the

695
00:30:14,278 --> 00:30:19,979
oceans or there's you know there's and

696
00:30:16,440 --> 00:30:21,719
there's perhaps more you know drier air

697
00:30:19,979 --> 00:30:23,129
in the jet stream or the jet streams

698
00:30:21,719 --> 00:30:25,379
weaker and various things that are

699
00:30:23,128 --> 00:30:27,509
contributing to those extreme events but

700
00:30:25,378 --> 00:30:29,608
it's not a direct directly causing them

701
00:30:27,509 --> 00:30:31,259
and that's a difficult thing to do now

702
00:30:29,608 --> 00:30:33,989
let's sir before we wrap up let's go on

703
00:30:31,259 --> 00:30:35,278
another little tangent here and I don't

704
00:30:33,989 --> 00:30:37,108
know if this is something that the

705
00:30:35,278 --> 00:30:41,519
center will have to address one day or

706
00:30:37,108 --> 00:30:44,449
not but I've been absolutely dumbfounded

707
00:30:41,519 --> 00:30:48,269
by the rise of the Flat Earth movement

708
00:30:44,450 --> 00:30:50,639
yeah is this impacting on anything you

709
00:30:48,269 --> 00:30:54,479
do here or is it just so bizarre and

710
00:30:50,638 --> 00:30:56,758
crazy it's always been part of kind of

711
00:30:54,479 --> 00:30:58,348
what we do when we approach evolution

712
00:30:56,759 --> 00:31:00,838
and misconceptions about evolution

713

00:30:58,348 --> 00:31:02,878
because it it's in the nature of science

714
00:31:00,838 --> 00:31:04,499
we've just added it actually we're going

715
00:31:02,878 --> 00:31:06,778
to recruit teachers in addition to our

716
00:31:04,499 --> 00:31:08,129
climate change ambassador to teacher

717
00:31:06,778 --> 00:31:09,239
ambassadors and our evolution teacher

718
00:31:08,128 --> 00:31:11,878
ambassadors are gonna have a nature of

719
00:31:09,239 --> 00:31:13,469
science group specifically focused on

720
00:31:11,878 --> 00:31:15,238
the nature of science because anytime

721
00:31:13,469 --> 00:31:16,859
we're with our evolution teachers or our

722
00:31:15,239 --> 00:31:19,348
climate change teachers it inevitably

723
00:31:16,858 --> 00:31:21,720
comes around to a discussion about well

724
00:31:19,348 --> 00:31:23,009
how does you know it's the nature of

725
00:31:21,720 --> 00:31:24,929
science that

726
00:31:23,009 --> 00:31:27,990
the students need to learn here because

727
00:31:24,929 --> 00:31:29,340

that's what most of the misconception a

728

00:31:27,990 --> 00:31:32,400

lot of the misconceptions are tied into

729

00:31:29,339 --> 00:31:35,668

misconceptions about science itself and

730

00:31:32,400 --> 00:31:38,940

the Flat Earth it's kind of become just

731

00:31:35,669 --> 00:31:40,650

a fad to think or a media source it's

732

00:31:38,940 --> 00:31:43,048

always been there that the group those

733

00:31:40,650 --> 00:31:45,240

groups have always been around it's

734

00:31:43,048 --> 00:31:47,339

become over the last two years yeah the

735

00:31:45,240 --> 00:31:49,109

last few years a few celebrities and

736

00:31:47,339 --> 00:31:52,558

athletes or whatever have kind of made

737

00:31:49,109 --> 00:31:54,779

it I think sort of a new fad I don't

738

00:31:52,558 --> 00:31:57,089

know that it'll have any more traction

739

00:31:54,779 --> 00:31:59,308

now than it has in the past so we're not

740

00:31:57,089 --> 00:32:01,289

focused at least at this point on that

741

00:31:59,308 --> 00:32:03,058

is our front I hope you don't have to be

742
00:32:01,289 --> 00:32:05,700
now and I don't think we will but we

743
00:32:03,058 --> 00:32:07,710
certainly monitor all of that because it

744
00:32:05,700 --> 00:32:09,990
is worth being able to tell a teacher

745
00:32:07,710 --> 00:32:11,640
you know this this is all part of the

746
00:32:09,990 --> 00:32:13,798
nature of why we need people to be

747
00:32:11,640 --> 00:32:15,330
literate scientifically literate and why

748
00:32:13,798 --> 00:32:18,720
they need to understand how science is

749
00:32:15,329 --> 00:32:21,659
done and how it provides explanation and

750
00:32:18,720 --> 00:32:23,160
in four phenomena and it's not just a

751
00:32:21,660 --> 00:32:25,019
matter of opinion it's not just well you

752
00:32:23,160 --> 00:32:26,730
think this and I think that so you know

753
00:32:25,019 --> 00:32:29,308
we can have this debate science doesn't

754
00:32:26,730 --> 00:32:32,160
operate that way I like to say you know

755
00:32:29,308 --> 00:32:34,319
science doesn't proceed by debate you

756
00:32:32,160 --> 00:32:35,640
don't have two sides that say I believe

757
00:32:34,319 --> 00:32:36,659
one thing and the other side believes

758
00:32:35,640 --> 00:32:38,340
the other and they come to some

759
00:32:36,660 --> 00:32:40,110
consensus in the middle and that's not

760
00:32:38,339 --> 00:32:42,529
what we mean by consensus when we talk

761
00:32:40,109 --> 00:32:46,918
about a consensus of experts in science

762
00:32:42,529 --> 00:32:49,649
it's the data that tells them what is

763
00:32:46,919 --> 00:32:52,410
right what what the evidence is and so

764
00:32:49,650 --> 00:32:53,160
it's not a it's not a compromise it's an

765
00:32:52,410 --> 00:32:55,440
agreement

766
00:32:53,160 --> 00:32:57,150
due to their finding the same

767
00:32:55,440 --> 00:32:58,860
conclusions over and over again through

768
00:32:57,150 --> 00:33:01,140
different lines of evidence but the

769
00:32:58,859 --> 00:33:04,259
evidence it's the data that drives that

770

00:33:01,140 --> 00:33:06,960
consensus not compromise and finally

771
00:33:04,259 --> 00:33:08,400
bread what can people do teaches here in

772
00:33:06,960 --> 00:33:09,150
the United States and teachers around

773
00:33:08,400 --> 00:33:12,179
the world

774
00:33:09,150 --> 00:33:14,730
I guess visiting the website here and is

775
00:33:12,179 --> 00:33:16,710
a good Stan yeah we're we're redesigning

776
00:33:14,730 --> 00:33:18,990
our website right now right now there's

777
00:33:16,710 --> 00:33:21,329
a we do have our lessons available and

778
00:33:18,990 --> 00:33:23,460
the webinars that we did with ace are

779
00:33:21,329 --> 00:33:25,439
available but in the next few months

780
00:33:23,460 --> 00:33:27,000
we're going to be unveiling a lot more

781
00:33:25,440 --> 00:33:29,190
resources for teachers that'll be a lot

782
00:33:27,000 --> 00:33:31,529
easier to navigate and so forth so

783
00:33:29,190 --> 00:33:33,150
that's probably going to be two or three

784
00:33:31,529 --> 00:33:35,298

months before it's completed but I would

785

00:33:33,150 --> 00:33:37,940
certainly invite anybody to visit

786

00:33:35,298 --> 00:33:39,319
website or to contact me directly about

787

00:33:37,940 --> 00:33:42,919
any of the resources I'm talking about

788

00:33:39,319 --> 00:33:45,109
or any of the issues that they might

789

00:33:42,919 --> 00:33:46,700
have questions they may have so there

790

00:33:45,109 --> 00:33:48,558
you are folks especially teachers out

791

00:33:46,700 --> 00:33:54,230
there no matter where in the world you

792

00:33:48,558 --> 00:33:56,239
are if you visit WWN si se comm you'll

793

00:33:54,230 --> 00:33:58,278
find all the resources and information

794

00:33:56,239 --> 00:34:00,048
there and of course you can contact the

795

00:33:58,278 --> 00:34:02,028
good people here directly for any help

796

00:34:00,048 --> 00:34:03,980
well Brad hagh thank you very much for

797

00:34:02,028 --> 00:34:06,470
your time today and I look forward to

798

00:34:03,980 --> 00:34:08,298
maybe interviewing you again in a year

799
00:34:06,470 --> 00:34:10,250
or two to see how we're progressing yeah

800
00:34:08,298 --> 00:34:11,838
that would be wonderful it's it's an

801
00:34:10,250 --> 00:34:13,269
ever-changing thing to think interesting

802
00:34:11,838 --> 00:34:17,418
thing about climate change is that it's

803
00:34:13,269 --> 00:34:18,798
it is a new part of Education I mean

804
00:34:17,418 --> 00:34:20,808
it's just now getting into the standards

805
00:34:18,798 --> 00:34:23,329
it's just now being a need for teachers

806
00:34:20,809 --> 00:34:25,129
to teach this and so the resources are

807
00:34:23,329 --> 00:34:26,329
being developed as we speak and so a

808
00:34:25,128 --> 00:34:27,429
year from now there's gonna be a lot

809
00:34:26,329 --> 00:34:34,789
more talking about

810
00:34:27,429 --> 00:34:34,789
[Music]

811
00:34:36,030 --> 00:34:41,280
you told me

812
00:34:41,309 --> 00:34:43,610
cysts

813
00:34:44,429 --> 00:34:50,289
CSO simply idiot hey Sal you guys guys I

814
00:34:48,039 --> 00:34:52,210
just had the most amazing experience

815
00:34:50,289 --> 00:34:53,858
what experience on dress under Chevy

816
00:34:52,210 --> 00:34:55,990
been to the pub children nuts hang out

817
00:34:53,858 --> 00:34:58,420
with mash you know he was blessed by

818
00:34:55,989 --> 00:35:01,269
peter Popoff no Yellin I'm not talking

819
00:34:58,420 --> 00:35:03,250
about psychics it was a really SP

820
00:35:01,269 --> 00:35:04,989
experience now you have been to the pub

821
00:35:03,250 --> 00:35:05,469
either that or you've been smoking

822
00:35:04,989 --> 00:35:07,989
something

823
00:35:05,469 --> 00:35:10,209
no punters the ESB is the European

824
00:35:07,989 --> 00:35:12,368
sceptics podcast it's the most amazing

825
00:35:10,210 --> 00:35:14,170
thing you get to know so much about

826
00:35:12,369 --> 00:35:17,108
sceptics and their activities across

827

00:35:14,170 --> 00:35:18,700
Europe you know events hot topics and

828
00:35:17,108 --> 00:35:21,098
interviews with lots of interesting

829
00:35:18,699 --> 00:35:22,419
people oh wow cool by the way punters

830
00:35:21,099 --> 00:35:25,269
you just come into the false dichotomy

831
00:35:22,420 --> 00:35:26,800
fallacy I guess that means I'm really

832
00:35:25,269 --> 00:35:28,300
wrong yep

833
00:35:26,800 --> 00:35:30,250
then you can even learn about those

834
00:35:28,300 --> 00:35:32,650
fallacies in the show and hear about

835
00:35:30,250 --> 00:35:35,349
people spreading silly ideas you should

836
00:35:32,650 --> 00:35:38,260
really check it out it's the ESP the

837
00:35:35,349 --> 00:35:40,900
European sceptics podcast it's on never

838
00:35:38,260 --> 00:35:43,089
weak all right so where can I get this

839
00:35:40,900 --> 00:35:45,550
is the experience it sounds good

840
00:35:43,088 --> 00:35:48,608
you can go online at the ESP dotty you

841
00:35:45,550 --> 00:35:51,640

follow it on twitter at es podcast

842

00:35:48,608 --> 00:35:53,798

underscore EU or like the podcast on

843

00:35:51,639 --> 00:35:56,858

Facebook oh and you can also contact the

844

00:35:53,798 --> 00:36:00,670

show by sending them an email to info at

845

00:35:56,858 --> 00:36:02,710

the ESPE you and if you want to

846

00:36:00,670 --> 00:36:05,460

subscribe do a quick search for the

847

00:36:02,710 --> 00:36:11,470

European skeptic podcast on soundcloud

848

00:36:05,460 --> 00:36:15,119

iTunes or stitcher I don't know how you

849

00:36:11,469 --> 00:36:15,118

can't believe

850

00:36:16,820 --> 00:36:27,480

[Music]

851

00:36:25,480 --> 00:36:27,480

Oh

852

00:36:29,190 --> 00:36:33,450

Brian Dunning hello hello sir how are

853

00:36:32,280 --> 00:36:36,349

you good to see you as always

854

00:36:33,449 --> 00:36:39,269

thank you we're sitting here in the

855

00:36:36,349 --> 00:36:41,490

downstairs section of skeptoid media's

856
00:36:39,269 --> 00:36:45,088
palatial headquarters Thunder wood ranch

857
00:36:41,489 --> 00:36:47,159
and we're delighted because a couple of

858
00:36:45,088 --> 00:36:49,798
minutes ago you look out the window and

859
00:36:47,159 --> 00:36:51,899
the snow is snowing the snow snow to

860
00:36:49,798 --> 00:36:53,519
snowfall what's happening all right now

861
00:36:51,900 --> 00:36:55,500
you would say it's really dumping

862
00:36:53,519 --> 00:36:57,269
because it really is it's pick out the

863
00:36:55,500 --> 00:37:00,059
front that's crazy

864
00:36:57,269 --> 00:37:01,469
lot of snow when we went up before to

865
00:37:00,059 --> 00:37:03,450
make a quick video for the folks back

866
00:37:01,469 --> 00:37:04,429
home and we came back inside and it's

867
00:37:03,449 --> 00:37:08,038
really coming down

868
00:37:04,429 --> 00:37:09,989
Brian Oh wonderful to see you I love

869
00:37:08,039 --> 00:37:13,380
coming to bend the first time here in

870
00:37:09,989 --> 00:37:15,179
winter and what I want to do is find out

871
00:37:13,380 --> 00:37:18,210
get a direct update from you about

872
00:37:15,179 --> 00:37:20,279
science friction and a quick overview

873
00:37:18,210 --> 00:37:23,420
for those people out there who may be

874
00:37:20,280 --> 00:37:26,400
new to the skeptic zone or skeptoid

875
00:37:23,420 --> 00:37:28,500
what's it all about so science friction

876
00:37:26,400 --> 00:37:31,200
is a feature documentary that we're

877
00:37:28,500 --> 00:37:33,778
executive producing Emory Emory is the

878
00:37:31,199 --> 00:37:36,538
director and it's about scientists who

879
00:37:33,778 --> 00:37:40,230
get misquoted or edited out of context

880
00:37:36,539 --> 00:37:43,140
on these air quotes science networks on

881
00:37:40,230 --> 00:37:45,659
television which happens more often than

882
00:37:43,139 --> 00:37:48,778
anyone would would would fear to think

883
00:37:45,659 --> 00:37:50,909
so you know you're the average cases

884

00:37:48,778 --> 00:37:52,588
you're a scientist and you go on to give

885
00:37:50,909 --> 00:37:54,298
your expert opinion on whatever this

886
00:37:52,588 --> 00:37:57,808
show is about ancient aliens or

887
00:37:54,298 --> 00:38:00,269
something and they often will edit the

888
00:37:57,809 --> 00:38:02,130
words in a sentence even or they'll have

889
00:38:00,269 --> 00:38:03,690
you start to say one thing they'll cut

890
00:38:02,130 --> 00:38:06,119
away to something else they'll cut back

891
00:38:03,690 --> 00:38:07,559
to you finishing a different thought the

892
00:38:06,119 --> 00:38:10,260
trying to make it sound like these

893
00:38:07,559 --> 00:38:12,359
legitimate scientists are supporting the

894
00:38:10,260 --> 00:38:13,049
idea that aliens built the pyramids or

895
00:38:12,358 --> 00:38:15,690
what-have-you

896
00:38:13,048 --> 00:38:17,548
so we're going around we're interviewing

897
00:38:15,690 --> 00:38:18,690
as many of these scientists as we can to

898
00:38:17,548 --> 00:38:20,699

whom this has happened we're

899

00:38:18,690 --> 00:38:23,309

interviewing some industry people who

900

00:38:20,699 --> 00:38:25,439

engage in this practice to explain how

901

00:38:23,309 --> 00:38:28,769

and why they do it so it's going to be

902

00:38:25,440 --> 00:38:32,519

quite the interesting expose the

903

00:38:28,769 --> 00:38:34,170

production update is we've just finished

904

00:38:32,519 --> 00:38:35,548

having the holidays write down so we're

905

00:38:34,170 --> 00:38:38,700

just kind of picking up after that

906

00:38:35,548 --> 00:38:41,429

before the holidays we sent a film crew

907

00:38:38,699 --> 00:38:42,869

out to Washington DC to the American

908

00:38:41,429 --> 00:38:45,809

Geophysical Union

909

00:38:42,869 --> 00:38:47,759

conference where they had 32,000 earth

910

00:38:45,809 --> 00:38:48,809

scientists attend this conference it's

911

00:38:47,760 --> 00:38:51,240

out of this world

912

00:38:48,809 --> 00:38:54,900

hey there thirty two thousand thirty two

913
00:38:51,239 --> 00:38:56,489
thousand yeah I wasn't there personally

914
00:38:54,900 --> 00:38:59,250
so I I don't know what it looked like

915
00:38:56,489 --> 00:39:01,019
but oh my god so we we had arranged in

916
00:38:59,250 --> 00:39:03,329
advance with quite a few of them to sit

917
00:39:01,019 --> 00:39:05,130
down with an interview about their their

918
00:39:03,329 --> 00:39:07,650
experiences and many many of these these

919
00:39:05,130 --> 00:39:10,710
being earth scientists it'll be two

920
00:39:07,650 --> 00:39:12,630
basic cases they edit them to make it

921
00:39:10,710 --> 00:39:14,849
sound like the giant earthquake is

922
00:39:12,630 --> 00:39:17,240
coming any second now to kill us all and

923
00:39:14,849 --> 00:39:19,889
slide California into the ocean or the

924
00:39:17,239 --> 00:39:22,469
what is the mega volcano this the

925
00:39:19,889 --> 00:39:24,179
Yellowstone supervolcano yes that it's

926
00:39:22,469 --> 00:39:27,329
going to explode any day now and wipe

927
00:39:24,179 --> 00:39:29,819
out civilization and both of these are

928
00:39:27,329 --> 00:39:32,670
old jokes in the geophysical community

929
00:39:29,820 --> 00:39:35,130
and it happens they have to be so

930
00:39:32,670 --> 00:39:39,119
careful when they go on TV but no matter

931
00:39:35,130 --> 00:39:40,860
how careful you are they this happens so

932
00:39:39,119 --> 00:39:43,469
we collected some great interviews there

933
00:39:40,860 --> 00:39:46,019
and we're you've got at least three more

934
00:39:43,469 --> 00:39:48,059
little shooting tours planned one is

935
00:39:46,019 --> 00:39:49,619
going to go through the east coast one

936
00:39:48,059 --> 00:39:51,210
is going to go through the southwest and

937
00:39:49,619 --> 00:39:53,210
one is just going to be right there in

938
00:39:51,210 --> 00:39:56,010
Los Angeles where the film crews based

939
00:39:53,210 --> 00:39:58,199
that's the update wow that's fantastic

940
00:39:56,010 --> 00:40:03,750
and for those people who don't know it's

941

00:39:58,199 --> 00:40:06,449
it's being driven by the kind generosity

942
00:40:03,750 --> 00:40:09,659
if you can say that kind generosity the

943
00:40:06,449 --> 00:40:12,539
generosity of fans and listeners to skip

944
00:40:09,659 --> 00:40:15,329
tide particularly which is yeah it's

945
00:40:12,539 --> 00:40:18,960
it's being crowdfunded which is unusual

946
00:40:15,329 --> 00:40:20,639
for a feature film because you say oh

947
00:40:18,960 --> 00:40:21,840
it's going to be in theater so it makes

948
00:40:20,639 --> 00:40:24,809
lots of money so what do you need

949
00:40:21,840 --> 00:40:26,760
crowdfunding for so since we're we're

950
00:40:24,809 --> 00:40:28,070
executive producing at skeptoid media

951
00:40:26,760 --> 00:40:30,390
and we're an educational non-profit

952
00:40:28,070 --> 00:40:31,800
we're not just making a movie and giving

953
00:40:30,389 --> 00:40:33,409
it out there to some studio here take

954
00:40:31,800 --> 00:40:35,850
this put it in theaters make money on it

955
00:40:33,409 --> 00:40:37,799

we're gonna retain the educational

956

00:40:35,849 --> 00:40:39,449

rights and so when you're retaining a

957

00:40:37,800 --> 00:40:40,860

certain amount of the rights you're not

958

00:40:39,449 --> 00:40:42,210

going to get the same kind of a deal as

959

00:40:40,860 --> 00:40:45,870

you would when you normally sell a film

960

00:40:42,210 --> 00:40:47,610

to a distributor so we're crowdfunding

961

00:40:45,869 --> 00:40:50,279

basically the whole production phase of

962

00:40:47,610 --> 00:40:52,680

it and then we're going to be able to

963

00:40:50,280 --> 00:40:55,110

include it in the teachers toolkit which

964

00:40:52,679 --> 00:40:57,618

is one of our growing and upcoming

965

00:40:55,110 --> 00:40:59,960

products here at skeptoid

966

00:40:57,619 --> 00:41:01,789

and it's going to be part of its going

967

00:40:59,960 --> 00:41:03,260

to have educational curricula that we go

968

00:41:01,789 --> 00:41:04,400

along with it and it's something that

969

00:41:03,260 --> 00:41:07,609

we're just gonna be able to give out to

970
00:41:04,400 --> 00:41:11,660
schools for free that's going to really

971
00:41:07,608 --> 00:41:13,309
help students understand what they're

972
00:41:11,659 --> 00:41:15,348
seeing in the media and learn to

973
00:41:13,309 --> 00:41:17,539
recognize that the media is not giving

974
00:41:15,349 --> 00:41:19,849
them the full story when it comes to

975
00:41:17,539 --> 00:41:21,289
true science and true history because

976
00:41:19,849 --> 00:41:25,010
those are the things that are it really

977
00:41:21,289 --> 00:41:26,838
abused the most in this pop media of

978
00:41:25,010 --> 00:41:29,660
television the entertainment industry

979
00:41:26,838 --> 00:41:33,858
when it can people go to find out more

980
00:41:29,659 --> 00:41:36,139
yeah so science friction TV is the

981
00:41:33,858 --> 00:41:37,759
website that's not only the crowdfunding

982
00:41:36,139 --> 00:41:39,679
website but it's also where we've got a

983
00:41:37,760 --> 00:41:41,240
little trailer and we've got some of the

984
00:41:39,679 --> 00:41:44,598
stories that were featuring from some of

985
00:41:41,239 --> 00:41:45,949
the scientists are up there and what you

986
00:41:44,599 --> 00:41:47,930
should at least do is put your name on

987
00:41:45,949 --> 00:41:49,368
the mailing lists because every couple

988
00:41:47,929 --> 00:41:51,769
weeks I'm sending out a new update for

989
00:41:49,369 --> 00:41:53,210
who we've shot lately here's some news

990
00:41:51,769 --> 00:41:55,730
stories here's some exciting things

991
00:41:53,210 --> 00:41:57,440
happening with the film and of course

992
00:41:55,730 --> 00:41:58,760
donors if you want to donate to the film

993
00:41:57,440 --> 00:42:00,079
then you can get your name in the

994
00:41:58,760 --> 00:42:02,240
credits we're doing that whole thing

995
00:42:00,079 --> 00:42:04,220
you'll be able to get a digital download

996
00:42:02,239 --> 00:42:06,919
of the film and and there's other perks

997
00:42:04,219 --> 00:42:09,799
for people who may want to donate at at

998

00:42:06,920 --> 00:42:11,119
higher levels and that's a you can see

999
00:42:09,800 --> 00:42:13,818
all of that on the website science

1000
00:42:11,119 --> 00:42:15,349
friction TV that's the clue folks that's

1001
00:42:13,818 --> 00:42:17,838
where you should head to find out more

1002
00:42:15,349 --> 00:42:20,088
now last time I was here we had a lot of

1003
00:42:17,838 --> 00:42:21,920
fun we went out to a lava cave and we

1004
00:42:20,088 --> 00:42:24,230
did a report and also we'd had a gag

1005
00:42:21,920 --> 00:42:27,470
where I was hiding from you because you

1006
00:42:24,230 --> 00:42:28,068
were Bigfoot but all joking aside well

1007
00:42:27,469 --> 00:42:30,858
sort of

1008
00:42:28,068 --> 00:42:33,050
recently you and you were telling you

1009
00:42:30,858 --> 00:42:35,989
this just yesterday that you attended a

1010
00:42:33,050 --> 00:42:39,050
Bigfoot meetup or a Bigfoot meeting or

1011
00:42:35,989 --> 00:42:41,269
something like this yeah this is a total

1012
00:42:39,050 --> 00:42:43,430

total change of gears here obviously so

1013

00:42:41,269 --> 00:42:45,789

this is a Central Oregon which is you

1014

00:42:43,429 --> 00:42:48,529

know we're right near all of the major

1015

00:42:45,789 --> 00:42:50,599

Bigfoot stories from history the the

1016

00:42:48,530 --> 00:42:54,319

Patterson Gimlin film was shot you know

1017

00:42:50,599 --> 00:42:56,150

just a few hours south of here and to

1018

00:42:54,318 --> 00:42:58,880

this day there's Bigfoot reports coming

1019

00:42:56,150 --> 00:43:01,970

out of right here where I live all the

1020

00:42:58,880 --> 00:43:05,568

time that the Cascade Range so here in

1021

00:43:01,969 --> 00:43:09,889

Bend Oregon just I found on the meetup

1022

00:43:05,568 --> 00:43:12,769

groups that they have a Bigfoot

1023

00:43:09,889 --> 00:43:15,379

of people who believe that bigfoot is

1024

00:43:12,769 --> 00:43:16,789

real they're absolutely persuaded and

1025

00:43:15,380 --> 00:43:18,680

they go out and they have regular

1026

00:43:16,789 --> 00:43:20,449

camping trips which are fun whether you

1027
00:43:18,679 --> 00:43:22,129
believe in Bigfoot or not and it's nice

1028
00:43:20,449 --> 00:43:24,829
to have some sort of organization to the

1029
00:43:22,130 --> 00:43:27,680
camping trip I guess a very nice very

1030
00:43:24,829 --> 00:43:29,420
nice group of folks so my wife and I we

1031
00:43:27,679 --> 00:43:31,669
went they held their meeting a little

1032
00:43:29,420 --> 00:43:34,400
pizza place here we went they were all

1033
00:43:31,670 --> 00:43:37,159
super super nice there was not a single

1034
00:43:34,400 --> 00:43:39,559
person there that you'd say is a raving

1035
00:43:37,159 --> 00:43:41,559
crazy Bigfoot lunatic there were even a

1036
00:43:39,559 --> 00:43:45,529
couple of working scientists in

1037
00:43:41,559 --> 00:43:47,989
semi-related Sciences there and we had

1038
00:43:45,530 --> 00:43:49,460
had great conversation the main thrust

1039
00:43:47,989 --> 00:43:51,379
of the evening was everyone went around

1040
00:43:49,460 --> 00:43:54,110
and told what their Bigfoot experience

1041
00:43:51,380 --> 00:43:56,090
was and there wasn't a single person

1042
00:43:54,110 --> 00:43:59,630
there who claims to have seen a Bigfoot

1043
00:43:56,090 --> 00:44:03,010
and by far the most common story that

1044
00:43:59,630 --> 00:44:05,750
many of them had was that they had heard

1045
00:44:03,010 --> 00:44:07,550
branches being struck together like

1046
00:44:05,750 --> 00:44:09,710
you've picked up a fallen limb and you

1047
00:44:07,550 --> 00:44:11,030
beat it against a tree they say they had

1048
00:44:09,710 --> 00:44:13,039
heard that and they all believe that

1049
00:44:11,030 --> 00:44:15,380
that's evidence that Bigfoot is out

1050
00:44:13,039 --> 00:44:16,849
there for for some reason it's not clear

1051
00:44:15,380 --> 00:44:18,740
to me why they all think that that's an

1052
00:44:16,849 --> 00:44:27,799
activity that Bigfoot would be likely to

1053
00:44:18,739 --> 00:44:30,739
engage in yeah that's right it's really

1054
00:44:27,800 --> 00:44:36,140
popular you did you stood about 20

1055

00:44:30,739 --> 00:44:38,359
meters from me go to big log and I've

1056
00:44:36,139 --> 00:44:40,609
since learned from from other people

1057
00:44:38,360 --> 00:44:43,940
that there are birds that that make

1058
00:44:40,610 --> 00:44:47,090
these exact same sound incredibly loud I

1059
00:44:43,940 --> 00:44:48,860
don't know what kind of bird it is I was

1060
00:44:47,090 --> 00:44:51,019
told but I didn't recognize the species

1061
00:44:48,860 --> 00:44:52,460
it wasn't a woodpecker so I'm I I

1062
00:44:51,019 --> 00:44:53,750
shouldn't say more cuz I really don't

1063
00:44:52,460 --> 00:44:57,230
know what's going on in fact if someone

1064
00:44:53,750 --> 00:44:59,630
does use an episode of Bigfoot sounds d

1065
00:44:57,230 --> 00:45:01,340
yes on the skeptoid podcast just

1066
00:44:59,630 --> 00:45:04,099
recently I did an episode but it was on

1067
00:45:01,340 --> 00:45:07,070
vocalizations right so you know a

1068
00:45:04,099 --> 00:45:09,019
Bigfoot goes right up but the these

1069
00:45:07,070 --> 00:45:11,180

beliefs are that Bigfoot will kind of

1070

00:45:09,019 --> 00:45:13,519

scream like we hear at the zoo like

1071

00:45:11,179 --> 00:45:16,940

chimpanzees do at the zoo or whatever or

1072

00:45:13,519 --> 00:45:18,500

we'll make some other sounds and Bigfoot

1073

00:45:16,940 --> 00:45:20,900

enthusiasts have collected quite a few

1074

00:45:18,500 --> 00:45:22,219

recordings and they've got them on you

1075

00:45:20,900 --> 00:45:23,400

can buy them on albums or they're just

1076

00:45:22,219 --> 00:45:25,019

all over the internet as

1077

00:45:23,400 --> 00:45:27,990

little sound clips you can listen to and

1078

00:45:25,019 --> 00:45:31,288

the funny thing is that virtually every

1079

00:45:27,989 --> 00:45:33,959

one of these you can find an analog from

1080

00:45:31,289 --> 00:45:38,220

the known animal kingdom a lot of them

1081

00:45:33,960 --> 00:45:40,949

are owls a lot of them are foxes one of

1082

00:45:38,219 --> 00:45:44,669

the most popular ones is a bird called a

1083

00:45:40,949 --> 00:45:47,669

common loon so there's there's very

1084
00:45:44,670 --> 00:45:51,450
little mystery but there's also a lot of

1085
00:45:47,670 --> 00:45:53,309
really cool new stuff to learn I was I

1086
00:45:51,449 --> 00:45:56,338
was amazed at some of the animal sounds

1087
00:45:53,309 --> 00:45:58,140
when I was collecting them very

1088
00:45:56,338 --> 00:45:59,130
unexpected and if I heard these sounds

1089
00:45:58,139 --> 00:46:00,900
out in the woods in the middle of the

1090
00:45:59,130 --> 00:46:03,480
night I would go oh my god what the heck

1091
00:46:00,900 --> 00:46:07,079
is that it never would occur to me that

1092
00:46:03,480 --> 00:46:09,690
it's a bird or an owl or or Lynx that

1093
00:46:07,079 --> 00:46:12,269
what Lynx sounds crazy just looking out

1094
00:46:09,690 --> 00:46:15,838
the window again and the other side over

1095
00:46:12,269 --> 00:46:17,219
there and we were out in the snow as I

1096
00:46:15,838 --> 00:46:18,778
said a little while ago to make a little

1097
00:46:17,219 --> 00:46:20,759
video and then we thought oh it's

1098
00:46:18,778 --> 00:46:22,469
getting too cold I would not like to go

1099
00:46:20,760 --> 00:46:25,619
out hunting for Bigfoot in the middle of

1100
00:46:22,469 --> 00:46:29,669
winter in Oregon to be honest well if

1101
00:46:25,619 --> 00:46:31,019
you're properly equipped yes if you yeah

1102
00:46:29,670 --> 00:46:32,970
we've taken the Jeep up in the snow a

1103
00:46:31,019 --> 00:46:34,079
few times so that's that's a lot of fun

1104
00:46:32,969 --> 00:46:35,969
I had to learn a whole new type of

1105
00:46:34,079 --> 00:46:38,250
jeeping how do you get how do you Jeep

1106
00:46:35,969 --> 00:46:39,719
in the snow which is very different than

1107
00:46:38,250 --> 00:46:41,639
how you do it out in the desert or in

1108
00:46:39,719 --> 00:46:44,308
the sand or on rocks which is you know

1109
00:46:41,639 --> 00:46:45,900
most of my experiences and I've had to

1110
00:46:44,309 --> 00:46:47,369
buy all new clothes of course in

1111
00:46:45,900 --> 00:46:50,010
everything and every one of my family

1112

00:46:47,369 --> 00:46:53,039
we've all got snowshoes now so do the

1113
00:46:50,010 --> 00:46:54,900
whole thing it's great I love this part

1114
00:46:53,039 --> 00:46:56,579
of the world I'm having a wonderful time

1115
00:46:54,900 --> 00:46:59,338
sitting back on this comfortable couch

1116
00:46:56,579 --> 00:47:00,000
and skeptoid headquarters looking at the

1117
00:46:59,338 --> 00:47:03,029
snow falling

1118
00:47:00,000 --> 00:47:06,019
but for now Brian Dunning thank you very

1119
00:47:03,030 --> 00:47:06,019
thank you Richard

1120
00:47:06,539 --> 00:47:16,139
[Music]

1121
00:47:21,920 --> 00:47:26,760
thank you for listening to the skeptic

1122
00:47:24,360 --> 00:47:29,099
zone and a big hi to everybody in

1123
00:47:26,760 --> 00:47:30,900
Australia I hope I'll be back soon I'm

1124
00:47:29,099 --> 00:47:35,159
really just having a few days break here

1125
00:47:30,900 --> 00:47:36,809
in Oregon I've got important Oh another

1126
00:47:35,159 --> 00:47:39,779

dog I've got important things to do in

1127

00:47:36,809 --> 00:47:42,960

California but a few days break for me

1128

00:47:39,780 --> 00:47:44,660

then back to California and some time or

1129

00:47:42,960 --> 00:47:46,769

other I'll be heading back to Sydney and

1130

00:47:44,659 --> 00:47:48,599

again to all those people who are

1131

00:47:46,769 --> 00:47:51,030

waiting on packages from the sceptic

1132

00:47:48,599 --> 00:47:53,460

zone new patreon people I hope you

1133

00:47:51,030 --> 00:47:55,500

understand that I will get those to you

1134

00:47:53,460 --> 00:47:58,530

as soon as I can and I hope it'll be

1135

00:47:55,500 --> 00:48:02,039

worth the wait and thank you to those

1136

00:47:58,530 --> 00:48:04,470

people who are contribute to the

1137

00:48:02,039 --> 00:48:08,460

skeptics owned by patreon beta at

1138

00:48:04,469 --> 00:48:10,980

skeptic zone TV it means a lot to Stu

1139

00:48:08,460 --> 00:48:12,630

the show it means there is a show and it

1140

00:48:10,980 --> 00:48:16,139

means that everybody else listening for

1141
00:48:12,630 --> 00:48:21,300
free which is fine are benefiting from

1142
00:48:16,139 --> 00:48:25,109
your generosity and I hope you get a lot

1143
00:48:21,300 --> 00:48:28,950
out of the show every week a big shout

1144
00:48:25,110 --> 00:48:30,570
out to Maynard and I look forward to

1145
00:48:28,949 --> 00:48:34,109
catching up to main out as soon as I get

1146
00:48:30,570 --> 00:48:39,200
home don't forget his podcasts over at

1147
00:48:34,110 --> 00:48:42,329
Maynard comm dot a you and he like me

1148
00:48:39,199 --> 00:48:44,789
depends on the generosity of listeners

1149
00:48:42,329 --> 00:48:46,920
to help keep his podcast going like

1150
00:48:44,789 --> 00:48:49,590
bunga bunga so if you're missing on

1151
00:48:46,920 --> 00:48:51,450
hearing if you miss hearing Maynard at

1152
00:48:49,590 --> 00:48:53,100
the moment on the sceptic zone head over

1153
00:48:51,449 --> 00:48:55,598
to Maynard calm day year for his

1154
00:48:53,099 --> 00:48:58,630
podcasts

1155
00:48:55,599 --> 00:49:01,119
I think I'm lost

1156
00:48:58,630 --> 00:49:03,900
grandma I've been wandering around for

1157
00:49:01,119 --> 00:49:08,459
some time now just on these back roads

1158
00:49:03,900 --> 00:49:11,798
when the outskirts are Bend it's just

1159
00:49:08,458 --> 00:49:14,198
it's beautiful Central Oregon is just

1160
00:49:11,798 --> 00:49:17,380
beautiful and I'm not getting any

1161
00:49:14,199 --> 00:49:21,250
kickback from the Oregon tourist boat or

1162
00:49:17,380 --> 00:49:23,309
anything like that but this week has a

1163
00:49:21,250 --> 00:49:25,659
[Applause]

1164
00:49:23,309 --> 00:49:27,729
crunch along some more snow

1165
00:49:25,659 --> 00:49:35,498
this is Richard Saunders signing off

1166
00:49:27,728 --> 00:49:38,198
from Oregon you've been listening to the

1167
00:49:35,498 --> 00:49:44,889
skeptic zone podcast please visit our

1168
00:49:38,199 --> 00:49:47,680
website at wwlp.com tax and to access

1169

00:49:44,889 --> 00:49:51,278
the bat catalog of episodes going back

1170
00:49:47,679 --> 00:49:54,940
to 2008 you can follow the skeptic zone

1171
00:49:51,278 --> 00:49:57,338
podcast on twitter at skeptic zone visit

1172
00:49:54,940 --> 00:49:58,229
our facebook page or leave a review on

1173
00:49:57,338 --> 00:50:01,328
itunes

1174
00:49:58,228 --> 00:50:04,268
you can also support the skeptic zone by

1175
00:50:01,329 --> 00:50:07,690
a patreon or paypal the skeptic zone

1176
00:50:04,268 --> 00:50:09,399
podcast is an independent production the

1177
00:50:07,690 --> 00:50:11,499
views and opinions expressed on the

1178
00:50:09,400 --> 00:50:13,869
skeptic zone are not necessarily those

1179
00:50:11,498 --> 00:50:15,649
of Australian skeptics or any other

1180
00:50:13,869 --> 00:50:21,949
skeptical organisation

1181
00:50:15,650 --> 00:50:21,949
[Music]