

**THE
SKEPTIC
ZONE
PODCAST**

www.skepticzone.tv

1
00:00:11,810 --> 00:00:09,440
this is just a pretty I just is this any

2
00:00:13,370 --> 00:00:11,820
specific you want how very podcast on

3
00:00:15,980 --> 00:00:13,380
guys

4
00:00:17,660 --> 00:00:15,990
giggles all right ha this is Evan

5
00:00:19,040 --> 00:00:17,670
Bernstein this guy kicks guide to the

6
00:00:22,279 --> 00:00:19,050
universe and you listening to the

7
00:00:23,990 --> 00:00:22,289
skeptics every I can do hi everyone this

8
00:00:25,429 --> 00:00:24,000
is Evan Bernstein from the skeptics

9
00:00:30,620 --> 00:00:25,439
guide to the universe and you are

10
00:00:34,290 --> 00:00:30,630
listening to the skeptics own oh voice

11
00:00:40,330 --> 00:00:34,300
like honey heaven that was so good

12
00:00:43,490 --> 00:00:40,340
[Music]

13
00:00:46,240 --> 00:00:43,500

welcome to the skeptic zone the podcast

14

00:00:48,310 --> 00:00:46,250

from Australia for science and reason

15

00:00:57,010 --> 00:00:48,320

[Music]

16

00:01:04,870 --> 00:00:59,930

yes it's the skeptics zone episode

17

00:01:07,399 --> 00:01:04,880

number 454 for the 2nd of July 2017

18

00:01:11,300 --> 00:01:07,409

Richard Saunders here with you from New

19

00:01:13,280 --> 00:01:11,310

York City New York what a wonderful

20

00:01:16,040 --> 00:01:13,290

wonderful time I've had over the past

21

00:01:17,450 --> 00:01:16,050

few days first couple of days up in

22

00:01:20,090 --> 00:01:17,460

Connecticut staying with my dear friend

23

00:01:22,580 --> 00:01:20,100

Evan Bernstein who you heard briefly at

24

00:01:24,920 --> 00:01:22,590

the beginning of the show then tripped

25

00:01:27,620 --> 00:01:24,930

down through Connecticut to our New York

26
00:01:28,940 --> 00:01:27,630
City with Steve novella and that was an

27
00:01:31,130 --> 00:01:28,950
interesting trip a lot of good

28
00:01:33,109 --> 00:01:31,140
conversation and for the past few days

29
00:01:35,150 --> 00:01:33,119
I've been taking part in Nexus the

30
00:01:37,580 --> 00:01:35,160
Northeast Conference of science and

31
00:01:40,880 --> 00:01:37,590
skepticism right here in New York City

32
00:01:43,639 --> 00:01:40,890
it's got one more day to run sadly for

33
00:01:46,219 --> 00:01:43,649
me only a half a day for travel reasons

34
00:01:48,680 --> 00:01:46,229
I've got to catch a flight but what a

35
00:01:50,600 --> 00:01:48,690
wonderful time I've had so far I've been

36
00:01:52,790 --> 00:01:50,610
trying to get lots of interviews for

37
00:01:55,460 --> 00:01:52,800
skeptic zone listeners they will be

38
00:01:57,230 --> 00:01:55,470

coming up in the coming weeks but a

39

00:02:00,649 --> 00:01:57,240

little taste of New York on this week's

40

00:02:04,969 --> 00:02:00,659

episode the last report the last story

41

00:02:05,960 --> 00:02:04,979

is my impressions of Times Square where

42

00:02:09,080 --> 00:02:05,970

I join

43

00:02:11,720 --> 00:02:09,090

Jocelyn novella Julian novella and

44

00:02:14,630 --> 00:02:11,730

autumn novella they took me on a little

45

00:02:18,350 --> 00:02:14,640

tour so coming up at the end of the show

46

00:02:20,900 --> 00:02:18,360

a walk around the madness the wonder the

47

00:02:22,819 --> 00:02:20,910

spectacle that is Times Square in New

48

00:02:25,039 --> 00:02:22,829

York and I hope it gives you a little

49

00:02:28,370 --> 00:02:25,049

sense of a little taste a bit of a

50

00:02:31,069 --> 00:02:28,380

flavor but yes lots of interviews and

51
00:02:32,569 --> 00:02:31,079
more in-depth things coming up in the

52
00:02:36,229 --> 00:02:32,579
coming weeks from this conference

53
00:02:37,789 --> 00:02:36,239
including a nice chat I had with none

54
00:02:39,470 --> 00:02:37,799
other than James Randi and what a

55
00:02:40,940 --> 00:02:39,480
pleasure was to catch up with James

56
00:02:44,240 --> 00:02:40,950
Randi haven't seen him for a little

57
00:02:45,830 --> 00:02:44,250
while and apart from anything else that

58
00:02:47,720 --> 00:02:45,840
just reminds me how much we laugh

59
00:02:50,420 --> 00:02:47,730
together James Randi and I it's it's

60
00:02:52,490 --> 00:02:50,430
it's something very special but before

61
00:02:54,650 --> 00:02:52,500
we get to all that coming up at the top

62
00:02:57,530 --> 00:02:54,660
of the show it's Heidi Robertson the raw

63
00:03:00,080 --> 00:02:57,540

skeptic but the very interesting and

64

00:03:01,789 --> 00:03:00,090

different interview she interviews dr.

65

00:03:03,920 --> 00:03:01,799

Carl cruise on whiskey who talks about

66

00:03:04,520 --> 00:03:03,930

just about everything you can possibly

67

00:03:07,700 --> 00:03:04,530

imagine

68

00:03:10,700 --> 00:03:07,710

and this interview was conducted

69

00:03:12,920 --> 00:03:10,710

they were driving along in a car Heidi

70

00:03:16,910 --> 00:03:12,930

was driving dr. Carl had the microphone

71

00:03:18,830 --> 00:03:16,920

and well you'll hear for yourself coming

72

00:03:21,830 --> 00:03:18,840

up to kick off the show the raw skeptic

73

00:03:25,070 --> 00:03:21,840

report dr. Carl and Heidi Robinson

74

00:03:27,560 --> 00:03:25,080

driving along in a car hour the links my

75

00:03:30,290 --> 00:03:27,570

reporters will go to then it's brouhaha

76
00:03:33,080 --> 00:03:30,300
signs from Australia science TV this

77
00:03:36,470 --> 00:03:33,090
week Kelly Wang tells us about the

78
00:03:39,280 --> 00:03:36,480
census the recent government census here

79
00:03:41,630 --> 00:03:39,290
in Australia and some of the findings

80
00:03:44,570 --> 00:03:41,640
Bend around off the show it's part two

81
00:03:47,930 --> 00:03:44,580
of our be keeping story from last week

82
00:03:50,900 --> 00:03:47,940
with dr. eugenie Scott and this week

83
00:03:54,770 --> 00:03:50,910
Jeannie and I sat down and she talks

84
00:03:58,580 --> 00:03:54,780
more about the science of beekeeping and

85
00:04:00,590 --> 00:03:58,590
bees and things like plagues and mites

86
00:04:02,480 --> 00:04:00,600
and things that affect bees very

87
00:04:06,680 --> 00:04:02,490
interesting the science some of the

88
00:04:08,510 --> 00:04:06,690

science of beekeeping stay tuned at the

89

00:04:10,520 --> 00:04:08,520

end of the show I will have a few more

90

00:04:12,380 --> 00:04:10,530

things to say about this conference

91

00:04:15,350 --> 00:04:12,390

there Northeast Conference of science

92

00:04:17,090 --> 00:04:15,360

and skepticism but now it's time for me

93

00:04:20,990 --> 00:04:17,100

to well I can't really run anywhere I'm

94

00:04:24,620 --> 00:04:21,000

in a hotel room in New York in fact I've

95

00:04:28,070 --> 00:04:24,630

just left a very nice evening with lots

96

00:04:31,550 --> 00:04:28,080

of skeptical friends here and a bar a

97

00:04:33,290 --> 00:04:31,560

few blocks away snuck away to produce

98

00:04:36,440 --> 00:04:33,300

the skipping cents so it's time for me

99

00:04:39,020 --> 00:04:36,450

to well let me let me see

100

00:04:43,010 --> 00:04:39,030

open the minibar maybe I don't know raid

101
00:04:44,540 --> 00:04:43,020
them there's not much here to raid I'll

102
00:04:47,750 --> 00:04:44,550
figure out something well I'm figuring

103
00:04:50,750 --> 00:04:47,760
out something maybe I'll I'll order out

104
00:04:52,220 --> 00:04:50,760
for some bagels and root beer maybe I'll

105
00:04:54,590 --> 00:04:52,230
do something like that well I figure

106
00:05:14,410 --> 00:04:54,600
that out I hope you enjoy the skeptic

107
00:05:28,130 --> 00:05:18,380
it's the raw skeptic report with Heidi

108
00:05:29,450 --> 00:05:28,140
Robertson hello everyone hi Lee

109
00:05:31,580 --> 00:05:29,460
Robertson from the Northern Rivers

110
00:05:37,310 --> 00:05:31,590
vaccination supporters in your ears

111
00:05:40,580 --> 00:05:37,320
today last Friday the 23rd of June 2017

112
00:05:44,240 --> 00:05:40,590
I was privileged to speak with dr. Carl

113
00:05:47,750 --> 00:05:44,250

who was up my way in barn bay for the

114

00:05:49,700 --> 00:05:47,760

starstuff event you may have heard the

115

00:05:52,910 --> 00:05:49,710

recent promos for this event on the

116

00:05:55,940 --> 00:05:52,920

sceptic zone and more about that in a

117

00:05:58,490 --> 00:05:55,950

separate report now if you are

118

00:06:00,920 --> 00:05:58,500

Australian you will know who dr. Carl is

119

00:06:04,160 --> 00:06:00,930

but for our overseas listeners who may

120

00:06:07,040 --> 00:06:04,170

not be aware dr. Carl is pretty much

121

00:06:10,850 --> 00:06:07,050

Australia's equivalent of America's Bill

122

00:06:12,710 --> 00:06:10,860

Nye the Science Guy relating dr. Karl's

123

00:06:14,260 --> 00:06:12,720

qualifications and achievements would

124

00:06:16,820 --> 00:06:14,270

take far too long

125

00:06:21,040 --> 00:06:16,830

so if you'd like to learn more about him

126

00:06:23,510 --> 00:06:21,050

you can go to his website dr. Carl calm

127

00:06:26,150 --> 00:06:23,520

dr. Carl took some time out from his

128

00:06:29,120 --> 00:06:26,160

trip up here to speak with the students

129

00:06:30,890 --> 00:06:29,130

of Mullen bimby High School in this

130

00:06:33,320 --> 00:06:30,900

interview I talked with him about his

131

00:06:36,560 --> 00:06:33,330

presentation to the students as well as

132

00:06:39,170 --> 00:06:36,570

some other stuff I was speaking with him

133

00:06:42,020 --> 00:06:39,180

whilst driving him to his barn bay

134

00:06:45,920 --> 00:06:42,030

accommodation with him holding my

135

00:06:49,310 --> 00:06:45,930

microphone so I do apologize in advance

136

00:06:52,670 --> 00:06:49,320

for the sometimes stilted sentences on

137

00:06:55,610 --> 00:06:52,680

my part turns out I'm not as good as I

138

00:06:58,490 --> 00:06:55,620

thought I would be at multitasking and

139

00:07:08,060 --> 00:06:58,500

with that said I hope you enjoy the

140

00:07:12,680 --> 00:07:08,070

interview at the carpark there on the

141

00:07:13,840 --> 00:07:12,690

maze here the cow pasture burnt upside

142

00:07:17,110 --> 00:07:13,850

down cars

143

00:07:18,940 --> 00:07:17,120

exit that way okay here we go

144

00:07:21,130 --> 00:07:18,950

thank you for joining us on the sceptic

145

00:07:24,580 --> 00:07:21,140

zone dr. Karl my pleasure thank you very

146

00:07:26,860 --> 00:07:24,590

much well I've been looking very much

147

00:07:27,690 --> 00:07:26,870

forward to meeting with you I'm a bit of

148

00:07:32,140 --> 00:07:27,700

a fangirl

149

00:07:36,210 --> 00:07:32,150

I'm not worthy but thank you so you're

150

00:07:38,700 --> 00:07:36,220

actually in town for the starstuff

151
00:07:43,000 --> 00:07:38,710
festival which is found at starstuff

152
00:07:48,850 --> 00:07:43,010
Kombe you and it's been described online

153
00:07:51,750 --> 00:07:48,860
as being a lineup of Australia's hmm

154
00:07:54,660 --> 00:07:51,760
most renowned astrophysicists

155
00:07:57,730 --> 00:07:54,670
cosmologists I think astronomers

156
00:08:00,130 --> 00:07:57,740
astrophotographers and you're one of the

157
00:08:01,350 --> 00:08:00,140
keynote speakers so that's exciting even

158
00:08:05,770 --> 00:08:01,360
though I'm not a professional astronomer

159
00:08:07,540 --> 00:08:05,780
cosmologists or photographer but I do

160
00:08:09,100 --> 00:08:07,550
write about that but I'd listen to the

161
00:08:10,630 --> 00:08:09,110
heavy guys because they're the ones who

162
00:08:12,220 --> 00:08:10,640
give me the stuff that I plagiarized I

163
00:08:16,000 --> 00:08:12,230

follow the motto of plagiarize

164

00:08:17,920 --> 00:08:16,010

plagiarize let no one's work ever evade

165

00:08:21,010 --> 00:08:17,930

your eyes and so I turned into pretty

166

00:08:23,860 --> 00:08:21,020

stories oh that's awesome well before we

167

00:08:26,620 --> 00:08:23,870

get to star stuff you were actually

168

00:08:28,030 --> 00:08:26,630

talking at a high school the local high

169

00:08:29,590 --> 00:08:28,040

school Mullen with me high school which

170

00:08:31,840 --> 00:08:29,600

is I don't know if you knew Richard

171

00:08:37,080 --> 00:08:31,850

Saunders actually went to Muhlenberg B

172

00:08:40,780 --> 00:08:37,090

high school when he was a young chap and

173

00:08:42,640 --> 00:08:40,790

you were there to talk to them about all

174

00:08:44,260 --> 00:08:42,650

things science I really liked the format

175

00:08:46,420 --> 00:08:44,270

of your talk actually because you were

176

00:08:48,580 --> 00:08:46,430

talking to them about the changes they

177

00:08:51,220 --> 00:08:48,590

could expect to see in various fields of

178

00:08:52,690 --> 00:08:51,230

science over the course of their

179

00:08:54,850 --> 00:08:52,700

lifetime can you tell us a bit more

180

00:08:56,910 --> 00:08:54,860

about the topics that you that you

181

00:09:02,340 --> 00:08:56,920

talked about today with the students

182

00:09:05,430 --> 00:09:02,350

yes things will change dramatically in

183

00:09:08,730 --> 00:09:05,440

their working lives so I dealt with five

184

00:09:11,940 --> 00:09:08,740

ish major topics being changes that will

185

00:09:16,050 --> 00:09:11,950

happen in their working lives in the few

186

00:09:18,150 --> 00:09:16,060

field of computers / IT and going into

187

00:09:21,300 --> 00:09:18,160

things such as the hundred thousand

188

00:09:22,560 --> 00:09:21,310

people who already have computers buried

189

00:09:25,440 --> 00:09:22,570

in their brains to help them get through

190

00:09:29,250 --> 00:09:25,450

their day those computers and then I

191

00:09:32,460 --> 00:09:29,260

also dealt with engineering and point

192

00:09:34,560 --> 00:09:32,470

out that science is about discovering

193

00:09:37,259 --> 00:09:34,570

stuff that's not known Engineering is

194

00:09:39,180 --> 00:09:37,269

about building stuff that's not known

195

00:09:40,800 --> 00:09:39,190

and how that's going to change including

196

00:09:44,610 --> 00:09:40,810

the big changes coming along with 3d

197

00:09:46,769 --> 00:09:44,620

printing then went into genetics and

198

00:09:48,660 --> 00:09:46,779

went out in a bit of a limb pointing out

199

00:09:50,100 --> 00:09:48,670

that there's a reasonable chance that

200

00:09:52,470 --> 00:09:50,110

some of them will be in the first

201
00:09:55,110 --> 00:09:52,480
generation to live forever by forever

202
00:09:57,240 --> 00:09:55,120
amid 5,000 years of age was a healthy 18

203
00:09:59,579 --> 00:09:57,250
to 25 year old body kept that way by

204
00:10:01,410 --> 00:09:59,589
genetics whereas I'll be in the first

205
00:10:03,030 --> 00:10:01,420
generation to die and kill don't worry

206
00:10:07,290 --> 00:10:03,040
about it and the changes that will

207
00:10:08,819 --> 00:10:07,300
happen with genetics and I deliberately

208
00:10:11,189 --> 00:10:08,829
did not mention the weaponization of

209
00:10:13,230 --> 00:10:11,199
genetics that's just too easy so if you

210
00:10:18,420 --> 00:10:13,240
wonder you can make a virus that had a

211
00:10:20,579 --> 00:10:18,430
time delay in it and that was as nasty

212
00:10:22,860 --> 00:10:20,589
as a bowl and our bowl is very nasty but

213
00:10:24,240 --> 00:10:22,870

it's really silly because it kills you

214

00:10:25,920 --> 00:10:24,250

almost immediately what you wanna do is

215

00:10:27,110 --> 00:10:25,930

infect everybody then kill them and then

216

00:10:29,009 --> 00:10:27,120

you can trigger it with any particular

217

00:10:30,660 --> 00:10:29,019

characteristic your life for example you

218

00:10:32,819 --> 00:10:30,670

know like red haired people and then

219

00:10:34,259 --> 00:10:32,829

pick the racial characteristic or the

220

00:10:35,610 --> 00:10:34,269

top of your choice and then kill off any

221

00:10:36,269 --> 00:10:35,620

of those people so that's the sort of

222

00:10:37,920 --> 00:10:36,279

stuff that's coming

223

00:10:42,150 --> 00:10:37,930

but deliberately did not mention that to

224

00:10:45,810 --> 00:10:42,160

them did I make them too sad and then

225

00:10:50,540 --> 00:10:45,820

into the fourth topic which is basic

226

00:10:53,970 --> 00:10:50,550

physics and that's a really big field

227

00:10:56,850 --> 00:10:53,980

with now the finally understood mass and

228

00:10:59,160 --> 00:10:56,860

I've just barely touched upon the fact

229

00:11:02,280 --> 00:10:59,170

that there are so many major problems we

230

00:11:04,290 --> 00:11:02,290

have with physics today like dark matter

231

00:11:05,880 --> 00:11:04,300

dark energy and the fact that the

232

00:11:07,740 --> 00:11:05,890

neutrino has mass there's all these

233

00:11:08,940 --> 00:11:07,750

problems in physics we've got a whole

234

00:11:10,740 --> 00:11:08,950

bunch of theories that are sort of held

235

00:11:12,390 --> 00:11:10,750

together with gaffer tape it's so much

236

00:11:14,190 --> 00:11:12,400

as bad as God's design of the knee

237

00:11:15,900 --> 00:11:14,200

that's how bad it is but it's still

238

00:11:18,840 --> 00:11:15,910

pretty good and we're going to come up

239

00:11:22,110 --> 00:11:18,850

with something new in physics and then

240

00:11:25,950 --> 00:11:22,120

talked about the environment was a guard

241

00:11:28,350 --> 00:11:25,960

to global warming and then to give them

242

00:11:30,960 --> 00:11:28,360

an overview of those four topics went

243

00:11:35,220 --> 00:11:30,970

into the fifth or the sixth topic which

244

00:11:37,470 --> 00:11:35,230

is world view and the concept of a

245

00:11:39,210 --> 00:11:37,480

moonshot where a country spends hundreds

246

00:11:42,870 --> 00:11:39,220

of billions of dollars a decade or

247

00:11:45,660 --> 00:11:42,880

decades on a single goal and in the case

248

00:11:47,790 --> 00:11:45,670

of China they go for moon shots where as

249

00:11:49,380 --> 00:11:47,800

we in the West have one moon shot which

250

00:11:51,510 --> 00:11:49,390

was to bring peace and democracy to Iraq

251
00:11:54,240 --> 00:11:51,520
and Afghanistan we've spent a billion

252
00:11:55,620 --> 00:11:54,250
dollars a day since 2003 on it and I

253
00:11:57,840 --> 00:11:55,630
don't think it's looking like we're

254
00:11:59,760 --> 00:11:57,850
getting our value back and then went

255
00:12:03,870 --> 00:11:59,770
into the through positive notes that we

256
00:12:05,280 --> 00:12:03,880
can not only halt the global warming I

257
00:12:07,740 --> 00:12:05,290
didn't mention that we could reverse it

258
00:12:09,600 --> 00:12:07,750
with 80 million units each the size of

259
00:12:10,890 --> 00:12:09,610
her container we can actually mostly

260
00:12:12,810 --> 00:12:10,900
have stopped pumping carbon dioxide we

261
00:12:13,800 --> 00:12:12,820
can start bringing it out and avoid that

262
00:12:15,090 --> 00:12:13,810
five to eight meter

263
00:12:17,070 --> 00:12:15,100

ocean level rise by the end of the

264

00:12:18,570 --> 00:12:17,080

century and also the fact that the kids

265

00:12:20,970 --> 00:12:18,580

are smart and their parents by 9 oq

266

00:12:22,350 --> 00:12:20,980

points the Flynn effect and also we are

267

00:12:24,120 --> 00:12:22,360

living in the most peaceful time in

268

00:12:26,280 --> 00:12:24,130

history don't believe the press when

269

00:12:28,620 --> 00:12:26,290

they follow their mantra of if it bleeds

270

00:12:30,240 --> 00:12:28,630

it leads they just lied to you and I

271

00:12:32,480 --> 00:12:30,250

stuffed all of that into one quarter

272

00:12:35,540 --> 00:12:32,490

hours and 15 minutes of Q&A so

273

00:12:37,370 --> 00:12:35,550

there's a job and you're still talking

274

00:12:39,800 --> 00:12:37,380

at the same rate that you did during the

275

00:12:44,180 --> 00:12:39,810

entire presentation which was extremely

276

00:12:45,500 --> 00:12:44,190

impressive I have to say that that's the

277

00:12:47,870 --> 00:12:45,510

first time I ever heard of the Flynn

278

00:12:49,850 --> 00:12:47,880

effect and I thought that the students

279

00:12:51,950 --> 00:12:49,860

were all quite a little bit excited

280

00:12:54,710 --> 00:12:51,960

about that hang on Howard you didn't

281

00:12:56,360 --> 00:12:54,720

read my 38th book oh dear listener like

282

00:12:59,900 --> 00:12:56,370

a knife into my heart

283

00:13:02,420 --> 00:12:59,910

oh that way you can get it for free on

284

00:13:07,070 --> 00:13:02,430

the ABC homepage look up on Google dr.

285

00:13:09,740 --> 00:13:07,080

Karl ABC and Flynn f ly double n and you

286

00:13:13,280 --> 00:13:09,750

too and read for yourself how the IQ is

287

00:13:19,520 --> 00:13:13,290

going up by 9 IQ points every generation

288

00:13:21,800 --> 00:13:19,530

oh my god Shirley I was having before

289

00:13:23,630 --> 00:13:21,810

the world wide web began in 1932 when we

290

00:13:27,470 --> 00:13:23,640

first started measuring it with the

291

00:13:30,080 --> 00:13:27,480

intakes into the American military and

292

00:13:31,220 --> 00:13:30,090

we started with measuring IQ was going

293

00:13:32,690 --> 00:13:31,230

up then since then we've measured

294

00:13:35,630 --> 00:13:32,700

happening not just in American military

295

00:13:37,820 --> 00:13:35,640

but American citizens and citizens

296

00:13:40,850 --> 00:13:37,830

around the world in any country where

297

00:13:43,040 --> 00:13:40,860

they are wealthy enough to afford an IQ

298

00:13:44,960 --> 00:13:43,050

test as part of their education system

299

00:13:47,390 --> 00:13:44,970

what is going on with that then how do

300

00:13:52,190 --> 00:13:47,400

we explain that we cannot explain it

301
00:13:53,810 --> 00:13:52,200
what we do know is that firstly people

302
00:13:56,150 --> 00:13:53,820
are thinking more in their jobs rather

303
00:13:58,730 --> 00:13:56,160
than doing so in 1903 percent of people

304
00:14:01,850 --> 00:13:58,740
sat down and thought today's 35 percent

305
00:14:04,340 --> 00:14:01,860
secondly we've gone more abstract so we

306
00:14:07,040 --> 00:14:04,350
think about concepts such as mammals

307
00:14:08,400 --> 00:14:07,050
rather than dogs chasing cats but it's

308
00:14:10,860 --> 00:14:08,410
still a

309
00:14:14,460 --> 00:14:10,870
mysterious well there you go and another

310
00:14:16,079 --> 00:14:14,470
fun fact that I did not know where there

311
00:14:18,749 --> 00:14:16,089
are six thousand two hundred and seventy

312
00:14:20,939 --> 00:14:18,759
three different varieties of rice yes

313
00:14:23,340 --> 00:14:20,949

and we almost lost all the rice on the

314

00:14:25,619 --> 00:14:23,350

planet when the rice grassy stunted

315

00:14:28,470 --> 00:14:25,629

virus started attacking all the rice on

316

00:14:29,850 --> 00:14:28,480

earth and the scientists went looking in

317

00:14:31,949 --> 00:14:29,860

the nineteen seventies and they found

318

00:14:35,999 --> 00:14:31,959

the number of strains resistant to this

319

00:14:38,040 --> 00:14:36,009

virus was one not one hundred one and

320

00:14:40,259 --> 00:14:38,050

the scientists had found it in India in

321

00:14:42,090 --> 00:14:40,269

the mid-1960s and if we had not found

322

00:14:47,040 --> 00:14:42,100

that variety of rice and bread into it

323

00:14:50,490 --> 00:14:47,050

there would be no rice korma no fried

324

00:14:52,290 --> 00:14:50,500

rice no cut rice for curry we people

325

00:14:53,910 --> 00:14:52,300

don't realize how close we came to not

326

00:14:55,199 --> 00:14:53,920

having any rice I certainly didn't

327

00:14:57,509 --> 00:14:55,209

realize that and I think you're saying

328

00:15:01,679 --> 00:14:57,519

that it actually makes up 20-25 percent

329

00:15:04,949 --> 00:15:01,689

of the world's staple caloric intake is

330

00:15:08,160 --> 00:15:04,959

it this ballpark figure rice is an

331

00:15:11,009 --> 00:15:08,170

incredibly important product in the

332

00:15:15,449 --> 00:15:11,019

world today for nutrition for roughly

333

00:15:17,759 --> 00:15:15,459

one-fifth of humanity okay so this

334

00:15:19,470 --> 00:15:17,769

weekend it's very exciting

335

00:15:21,420 --> 00:15:19,480

a is there anyone in particular you're

336

00:15:25,079 --> 00:15:21,430

you're particularly looking forward to

337

00:15:27,749 --> 00:15:25,089

to hearing all of them because each of

338

00:15:29,790 --> 00:15:27,759

them has expertise in areas that I have

339

00:15:31,679 --> 00:15:29,800

zero expertise I'm a generalist they're

340

00:15:33,929 --> 00:15:31,689

specialists so I'm turning out for all

341

00:15:35,970 --> 00:15:33,939

of the talks just to learn more and the

342

00:15:37,650 --> 00:15:35,980

amazing thing is that when you go you

343

00:15:39,870 --> 00:15:37,660

think I know that I know that what and

344

00:15:42,780 --> 00:15:39,880

then you learn something new so I'm

345

00:15:45,389 --> 00:15:42,790

hanging out for everybody I'm just so

346

00:15:46,370 --> 00:15:45,399

glad that this event is coming to Byron

347

00:15:48,560 --> 00:15:46,380

Bay hours

348

00:15:52,250 --> 00:15:48,570

viewing Dylan the O'Donnell the event

349

00:15:56,180 --> 00:15:52,260

coordinator the other day I was a little

350

00:15:58,220 --> 00:15:56,190

bit bemused when he described how

351

00:16:00,620 --> 00:15:58,230

several people thought that this was

352

00:16:03,890 --> 00:16:00,630

actually going to be an astrology event

353

00:16:06,140 --> 00:16:03,900

did you hear about that an official

354

00:16:09,560 --> 00:16:06,150

government body in charge of funding for

355

00:16:10,790 --> 00:16:09,570

events like this misread astronomy for

356

00:16:13,370 --> 00:16:10,800

astrology because they thought it was

357

00:16:14,750 --> 00:16:13,380

Byron Bay and therefore assumes that you

358

00:16:17,150 --> 00:16:14,760

couldn't have astronomy you'd have only

359

00:16:19,310 --> 00:16:17,160

astrology and we do live in a strange

360

00:16:20,840 --> 00:16:19,320

part of the world up here where on one

361

00:16:22,070 --> 00:16:20,850

hand they care more about the

362

00:16:24,170 --> 00:16:22,080

environment than practically anywhere

363

00:16:27,350 --> 00:16:24,180

else in Australia but they do not care

364

00:16:29,480 --> 00:16:27,360

about their children because they've got

365

00:16:33,080 --> 00:16:29,490

the lowest rates of vaccination in

366

00:16:35,690 --> 00:16:33,090

Australia well I did particularly like

367

00:16:38,000 --> 00:16:35,700

the part in your talk where you you said

368

00:16:40,610 --> 00:16:38,010

to the students children get vaccinated

369

00:16:43,280 --> 00:16:40,620

I really wanted to stand up and Cheer at

370

00:16:45,890 --> 00:16:43,290

that point in time actually talking

371

00:16:50,600 --> 00:16:45,900

about vaccinations and many of our

372

00:16:52,070 --> 00:16:50,610

listeners on the sceptic zone have seen

373

00:16:54,190 --> 00:16:52,080

the vaccination Chronicles the

374

00:16:56,570 --> 00:16:54,200

documentary written and produced by

375

00:16:59,090 --> 00:16:56,580

Richard Saunders and of course is you

376

00:17:02,300 --> 00:16:59,100

starred in that yourself and you were in

377

00:17:04,010 --> 00:17:02,310

that documentary which by the way if you

378

00:17:06,679 --> 00:17:04,020

haven't seen it it is well worth seeing

379

00:17:11,689 --> 00:17:06,689

it's only about 26 minutes long and it's

380

00:17:13,520 --> 00:17:11,699

freely available on YouTube but dr. Karl

381

00:17:16,579 --> 00:17:13,530

you were saying that you spent some time

382

00:17:19,069 --> 00:17:16,589

as a medical student up here I think in

383

00:17:20,540 --> 00:17:19,079

nimbin in particular can you tell us do

384

00:17:22,939 --> 00:17:20,550

you remember the story that you you

385

00:17:25,400 --> 00:17:22,949

relied for the skeptics oh sorry the

386

00:17:27,439 --> 00:17:25,410

vaccination chronicles regarding that

387

00:17:29,030 --> 00:17:27,449

particular one particular experience

388

00:17:30,560 --> 00:17:29,040

that you had

389

00:17:34,700 --> 00:17:30,570

with a patient when you're a medical

390

00:17:36,980 --> 00:17:34,710

student it's such a tragic story I can

391

00:17:38,900 --> 00:17:36,990

never forget it you see as a medical

392

00:17:41,210 --> 00:17:38,910

student you're taught to observe people

393

00:17:43,660 --> 00:17:41,220

and gradually to go through you get

394

00:17:46,160 --> 00:17:43,670

better and better and part of it is

395

00:17:47,510 --> 00:17:46,170

where they laughingly call the funny

396

00:17:50,180 --> 00:17:47,520

walk so you learn to recognize the

397

00:17:51,590 --> 00:17:50,190

difference between somebody who's

398

00:17:52,280 --> 00:17:51,600

walking that way because they've got a

399

00:17:54,380 --> 00:17:52,290

stroke

400

00:17:57,440 --> 00:17:54,390

they've got Huntington's chorea they've

401
00:18:00,560 --> 00:17:57,450
got Parkinson's disease and so I was

402
00:18:02,810 --> 00:18:00,570
there as a medical student in an office

403
00:18:04,850 --> 00:18:02,820
with the doctor shadowing the doctor in

404
00:18:06,920 --> 00:18:04,860
nimbin and just sitting there quietly

405
00:18:08,780 --> 00:18:06,930
asking you know they're not saying

406
00:18:13,090 --> 00:18:08,790
anything to keep my big mouth shut in my

407
00:18:15,850 --> 00:18:13,100
big ears open and in came this

408
00:18:20,159 --> 00:18:15,860
mother and father and their 16 year old

409
00:18:23,820 --> 00:18:20,169
child and as a 16 year old child came in

410
00:18:27,159 --> 00:18:23,830
it was perfectly obvious that the kid

411
00:18:29,529 --> 00:18:27,169
had polio just obvious if he if you've

412
00:18:30,880 --> 00:18:29,539
seen it you know it it's there the sky's

413
00:18:34,480 --> 00:18:30,890

blue the kids got poly edges from the

414

00:18:35,560 --> 00:18:34,490
war and even and it's so real in

415

00:18:38,680 --> 00:18:35,570
Australia just don't see it

416

00:18:40,380 --> 00:18:38,690
and and I was so surprised that I looked

417

00:18:43,840 --> 00:18:40,390
at the doctor who then looked at me and

418

00:18:46,690 --> 00:18:43,850
we both were thinking the same thing how

419

00:18:48,549 --> 00:18:46,700
did this kid get polio so we both kept

420

00:18:50,140 --> 00:18:48,559
it I said I think he can be she was very

421

00:18:52,120 --> 00:18:50,150
good he kept he's a big now so just ask

422

00:18:57,060 --> 00:18:52,130
questions so what's happening and so the

423

00:19:01,630 --> 00:18:57,070
story was that they'd gone to India and

424

00:19:03,789 --> 00:19:01,640
the kids have got a sore leg hip knee

425

00:19:05,350 --> 00:19:03,799
something and there's something wrong

426

00:19:08,520 --> 00:19:05,360

with his bones can you organize an x-ray

427

00:19:12,250 --> 00:19:08,530

I said the doctor did a series of

428

00:19:13,990 --> 00:19:12,260

neurological musculoskeletal physical

429

00:19:18,520 --> 00:19:14,000

examinations and it was perfectly clear

430

00:19:21,970 --> 00:19:18,530

that the kid had polio and then he asked

431

00:19:24,279 --> 00:19:21,980

the question has your son being

432

00:19:26,830 --> 00:19:24,289

vaccinated against polio and they

433

00:19:28,060 --> 00:19:26,840

started getting really angry and at that

434

00:19:30,430 --> 00:19:28,070

moment I realized that they've been

435

00:19:34,149 --> 00:19:30,440

thinking about that themselves and they

436

00:19:36,100 --> 00:19:34,159

started throwing stuff around the office

437

00:19:38,870 --> 00:19:36,110

and stormed out saying that they're

438

00:19:42,990 --> 00:19:38,880

going to sue the doctor for

439

00:19:45,090 --> 00:19:43,000

suggesting that the question has your

440

00:19:47,790 --> 00:19:45,100

child been immunized against polio was

441

00:19:52,080 --> 00:19:47,800

important and the kid that turned out

442

00:19:53,040 --> 00:19:52,090

had polio and then would have that limp

443

00:19:55,170 --> 00:19:53,050

for the rest of their life would get a

444

00:19:56,520 --> 00:19:55,180

little bit better and then later 30 40

445

00:19:59,280 --> 00:19:56,530

years down the line going to the post

446

00:20:01,920 --> 00:19:59,290

viral syndrome posted her polio syndrome

447

00:20:04,830 --> 00:20:01,930

and and get worse again all because the

448

00:20:06,780 --> 00:20:04,840

parents had deliberately chosen not to

449

00:20:08,160 --> 00:20:06,790

get their kids vaccinated and there was

450

00:20:12,090 --> 00:20:08,170

something going on in their heads

451
00:20:13,830 --> 00:20:12,100
without thinking well polio is not real

452
00:20:15,510 --> 00:20:13,840
and vaccinations don't work and the

453
00:20:17,070 --> 00:20:15,520
other part was going but our kid is gone

454
00:20:18,150 --> 00:20:17,080
we didn't get him vaccinated we went to

455
00:20:22,290 --> 00:20:18,160
a country where there's lots of polio

456
00:20:26,430 --> 00:20:22,300
everywhere and I feel very sorry for

457
00:20:27,690 --> 00:20:26,440
both the parents and the kid and that's

458
00:20:28,620 --> 00:20:27,700
an example of why you should get

459
00:20:31,980 --> 00:20:28,630
vaccinated

460
00:20:33,660 --> 00:20:31,990
dangerous vaccination is the one you

461
00:20:37,830 --> 00:20:33,670
don't get

462
00:20:39,630 --> 00:20:37,840
yeah well said one of the main things we

463
00:20:42,180 --> 00:20:39,640

here at Northern Rivers vaccinations

464

00:20:44,010 --> 00:20:42,190

supporters with people that that don't

465

00:20:46,320 --> 00:20:44,020

want to vaccinate their children is well

466

00:20:49,530 --> 00:20:46,330

why should i vaccinate against things

467

00:20:52,650 --> 00:20:49,540

that are no longer around but you've

468

00:20:57,080 --> 00:20:52,660

just illustrated that point you know

469

00:20:59,490 --> 00:20:57,090

very clearly that will things like polio

470

00:21:01,380 --> 00:20:59,500

will in countries that are still endemic

471

00:21:05,370 --> 00:21:01,390

and i think it's down to three countries

472

00:21:06,990 --> 00:21:05,380

now that still have polio as endemic but

473

00:21:10,380 --> 00:21:07,000

it's a it's really only a plane ride

474

00:21:11,850 --> 00:21:10,390

away isn't it yeah now look let me just

475

00:21:13,800 --> 00:21:11,860

back up I said the only dangerous

476
00:21:16,740 --> 00:21:13,810
vaccine is the one you didn't take okay

477
00:21:18,810 --> 00:21:16,750
let's just go deep into this attack

478
00:21:21,870 --> 00:21:18,820
these statistics let's go deep into

479
00:21:23,580 --> 00:21:21,880
these statistics Paracelsus said all

480
00:21:27,420 --> 00:21:23,590
drugs are poisons what medicines the

481
00:21:30,810 --> 00:21:27,430
dose so there have been occasions where

482
00:21:33,000 --> 00:21:30,820
people have had reactions to polio

483
00:21:34,770 --> 00:21:33,010
vaccines or any other vaccine but

484
00:21:38,520 --> 00:21:34,780
overwhelmingly if you look at the

485
00:21:40,340 --> 00:21:38,530
numbers you are much safer if you get

486
00:21:42,510 --> 00:21:40,350
vaccinated than if you don't

487
00:21:45,960 --> 00:21:42,520
overwhelmingly you're much safer on the

488
00:21:47,160 --> 00:21:45,970

plane trip then on the taxi ride to the

489

00:21:50,790 --> 00:21:47,170

airport

490

00:21:53,160 --> 00:21:50,800

so just to be absolutely rigorous you've

491

00:21:55,020 --> 00:21:53,170

got to look at the big picture and the

492

00:21:56,430 --> 00:21:55,030

big picture to get safer so why should

493

00:21:57,960 --> 00:21:56,440

you get vaccinated against some disease

494

00:21:59,400 --> 00:21:57,970

that's no longer around because it's no

495

00:22:01,500 --> 00:21:59,410

longer around and by getting vaccinated

496

00:22:03,540 --> 00:22:01,510

you'll make sure it's not around for the

497

00:22:05,940 --> 00:22:03,550

next generation I was there in the kids

498

00:22:08,700 --> 00:22:05,950

hospital in the early 1990s we had after

499

00:22:10,830 --> 00:22:08,710

a gap of 20 years of deaths from

500

00:22:13,500 --> 00:22:10,840

whooping cough we had zero deaths from

501
00:22:16,560 --> 00:22:13,510
whooping cough we had the first deaths

502
00:22:19,740 --> 00:22:16,570
from whooping cough and that was after a

503
00:22:21,030 --> 00:22:19,750
TV series had shown what they sit with

504
00:22:22,560 --> 00:22:21,040
both sides of the story

505
00:22:25,770 --> 00:22:22,570
giving equal weight to the vaccination

506
00:22:27,780 --> 00:22:25,780
and anti vaccination story so they could

507
00:22:29,220 --> 00:22:27,790
sell more dog food or whatever it was

508
00:22:31,170 --> 00:22:29,230
that was going on in the ads in between

509
00:22:33,600 --> 00:22:31,180
and as a result there's a kid died and I

510
00:22:38,370 --> 00:22:33,610
spoke to the parents and they said but

511
00:22:40,920 --> 00:22:38,380
insert name of TV presenter TV presenter

512
00:22:42,810 --> 00:22:40,930
said that there's an argument both ways

513
00:22:46,740 --> 00:22:42,820

and so we thought we'd just not do

514

00:22:48,270 --> 00:22:46,750

anything and that person their kids

515

00:22:50,820 --> 00:22:48,280

death was directly responsible to

516

00:22:52,890 --> 00:22:50,830

hearing the words of that person on TV

517

00:22:54,720 --> 00:22:52,900

their kid died because that person on TV

518

00:22:56,280 --> 00:22:54,730

said those words and the kid didn't have

519

00:22:59,670 --> 00:22:56,290

to die and they were finding something

520

00:23:01,770 --> 00:22:59,680

else with whooping cough which my

521

00:23:05,430 --> 00:23:01,780

daughter is suffering from so the thing

522

00:23:07,940 --> 00:23:05,440

is that whooping cough vaccine out of

523

00:23:12,210 --> 00:23:07,950

all of accidents that we have is the

524

00:23:14,280 --> 00:23:12,220

least effective vaccine some are really

525

00:23:16,020 --> 00:23:14,290

effective if you get vaccinated against

526

00:23:18,000 --> 00:23:16,030

measles make you set for life

527

00:23:20,430 --> 00:23:18,010

whooping cough vaccine is not as

528

00:23:22,760 --> 00:23:20,440

effective and you need top-ups and it

529

00:23:25,790 --> 00:23:22,770

turns out that if you do get

530

00:23:28,400 --> 00:23:25,800

whooping cough because the vaccine was

531

00:23:31,010 --> 00:23:28,410

not 100% if Acacia s-- you'll end up

532

00:23:32,750 --> 00:23:31,020

with even though you've been vaccinated

533

00:23:35,120 --> 00:23:32,760

you'll still get a very weak form of

534

00:23:39,770 --> 00:23:35,130

whooping cough which happened to one of

535

00:23:42,670 --> 00:23:39,780

my daughters and as a result even though

536

00:23:45,440 --> 00:23:42,680

she'd been vaccinated she still got

537

00:23:50,270 --> 00:23:45,450

something that has left her lungs a

538

00:23:52,940 --> 00:23:50,280

little bit damaged forever it turns out

539

00:23:55,550 --> 00:23:52,950

and this new syndrome is just being

540

00:23:57,800 --> 00:23:55,560

explored now thanks to the anti-vaxxers

541

00:24:02,480 --> 00:23:57,810

we now have this brand-new disease where

542

00:24:03,710 --> 00:24:02,490

the lungs a lift after you've even

543

00:24:06,080 --> 00:24:03,720

though you've been vaccinated you still

544

00:24:09,140 --> 00:24:06,090

get a weak form of whooping cough your

545

00:24:11,750 --> 00:24:09,150

lungs are left in a hyper immune State

546

00:24:14,660 --> 00:24:11,760

now the immunologists have a saying the

547

00:24:17,990 --> 00:24:14,670

lungs are a dumb organ and they don't

548

00:24:20,600 --> 00:24:18,000

need to but the lungs react against the

549

00:24:22,400 --> 00:24:20,610

whooping cough and everything else so

550

00:24:24,380 --> 00:24:22,410

that later in life after you've had a

551
00:24:25,700 --> 00:24:24,390
fairly distressing bit of whooping cough

552
00:24:27,020 --> 00:24:25,710
and you're caught for ages and finally

553
00:24:28,070 --> 00:24:27,030
get over it your eyes get a bit

554
00:24:29,390 --> 00:24:28,080
bloodshot and you're sick of it for a

555
00:24:31,790 --> 00:24:29,400
couple of months but then for the rest

556
00:24:33,860 --> 00:24:31,800
of your life you're left with whooping

557
00:24:36,620 --> 00:24:33,870
cough hypersensitivity of the lungs

558
00:24:40,010 --> 00:24:36,630
where any infection can damage you and a

559
00:24:42,500 --> 00:24:40,020
friend of my daughter young got

560
00:24:44,330 --> 00:24:42,510
pneumonia and would have died if it

561
00:24:46,510 --> 00:24:44,340
wasn't for antibiotics and she'd been

562
00:24:50,320 --> 00:24:46,520
vaccinated as well so

563
00:24:53,200 --> 00:24:50,330

even though whooping-cough has been

564

00:24:55,180 --> 00:24:53,210

pushed back a lot because of the herd

565

00:24:56,650 --> 00:24:55,190

immunity dropping and because the

566

00:24:57,850 --> 00:24:56,660

vaccine is not the best vaccine in the

567

00:24:59,530 --> 00:24:57,860

world because we're just not that good

568

00:25:01,510 --> 00:24:59,540

because they're not having anything but

569

00:25:05,049 --> 00:25:01,520

it's still hard as perfect as measles we

570

00:25:07,390 --> 00:25:05,059

still end up with some defects but maybe

571

00:25:08,650 --> 00:25:07,400

1020 years we'll have a bit of AXI but

572

00:25:10,770 --> 00:25:08,660

of course we had herd immunity we

573

00:25:13,990 --> 00:25:10,780

wouldn't have to have the better vaccine

574

00:25:17,980 --> 00:25:14,000

very good well thank you thank you so

575

00:25:20,290 --> 00:25:17,990

much for that we're nearly at your your

576

00:25:23,890 --> 00:25:20,300

place of residence for the next couple

577

00:25:26,470 --> 00:25:23,900

of days so we might wrap up there but

578

00:25:28,030 --> 00:25:26,480

I'm looking forward to the weekend and

579

00:25:30,280 --> 00:25:28,040

looking forward to you speaking again

580

00:25:32,980 --> 00:25:30,290

and hopefully we can catch up at some

581

00:25:35,710 --> 00:25:32,990

point and have a coffee and another

582

00:25:37,480 --> 00:25:35,720

gasbag I do like coffee the world's most

583

00:25:40,660 --> 00:25:37,490

popular legal drug with overwhelmingly

584

00:25:43,360 --> 00:25:40,670

so many good effects but only in

585

00:25:44,910 --> 00:25:43,370

observational studies and so by an

586

00:25:47,770 --> 00:25:44,920

observational study I mean you get

587

00:25:51,010 --> 00:25:47,780

300,000 nurses in America and you follow

588

00:25:53,169 --> 00:25:51,020

them for three decades and what you find

589

00:25:55,299 --> 00:25:53,179

is if they have coffee they have a

590

00:25:58,600 --> 00:25:55,309

longer life expectancy lower heart

591

00:26:01,720 --> 00:25:58,610

disease better outcomes with prostate

592

00:26:04,360 --> 00:26:01,730

cancer okay and better outcomes with

593

00:26:06,160 --> 00:26:04,370

diabetes type 2 diabetes and there are

594

00:26:09,280 --> 00:26:06,170

so many people type 2 diabetes that if

595

00:26:10,600 --> 00:26:09,290

there were a country by themselves

596

00:26:13,240 --> 00:26:10,610

they'd be the third largest country on

597

00:26:17,890 --> 00:26:13,250

earth and with liver disease and and

598

00:26:21,490 --> 00:26:17,900

mouth and skin cancers as well but these

599

00:26:24,430 --> 00:26:21,500

are not your peer review double-blind

600

00:26:26,049 --> 00:26:24,440

randomized control just up in there they

601
00:26:28,049 --> 00:26:26,059
don't your peer reviewed randomized

602
00:26:30,460 --> 00:26:28,059
double control test they're just simply

603
00:26:32,140 --> 00:26:30,470
observational so they're just a hint we

604
00:26:35,140 --> 00:26:32,150
didn't need to do the better studies so

605
00:26:36,220 --> 00:26:35,150
I do like coffee if you go to give up

606
00:26:38,560 --> 00:26:36,230
anything here's something if you want to

607
00:26:40,690 --> 00:26:38,570
give up something in going down a

608
00:26:43,120 --> 00:26:40,700
pathway of getting healthier or whatever

609
00:26:45,220 --> 00:26:43,130
that is don't give up coffee give up

610
00:26:49,230 --> 00:26:45,230
fats or something to blend give up

611
00:26:51,690 --> 00:26:49,240
coffee give up cigarettes yes

612
00:26:54,300 --> 00:26:51,700
thank you doctor come thank you still

613
00:26:55,590 --> 00:26:54,310

working up as a little oh they're going

614

00:27:18,090 --> 00:26:55,600

up and they're just like magic

615

00:27:20,220 --> 00:27:18,100

we must go radio something the skeptic

616

00:27:23,190 --> 00:27:20,230

magazine the journal from Australian

617

00:27:27,020 --> 00:27:23,200

skeptics subscribe online to the world's

618

00:27:31,260 --> 00:27:27,030

second oldest skeptical magazine visit

619

00:27:34,920 --> 00:27:31,270

WWF XCOM and click the publication's

620

00:27:38,210 --> 00:27:34,930

link you can also find there over 30

621

00:27:41,700 --> 00:27:38,220

years on back issues free to download

622

00:27:55,620 --> 00:27:41,710

the skeptic magazine from Australian

623

00:27:57,630 --> 00:27:55,630

skeptics and now direct from the cafe at

624

00:28:04,710 --> 00:27:57,640

Australia's Science Channel

625

00:28:05,910 --> 00:28:04,720

it's brouhaha with Kelly Wang the moment

626
00:28:06,810 --> 00:28:05,920
we've all been waiting for is finally

627
00:28:09,480 --> 00:28:06,820
here

628
00:28:11,550 --> 00:28:09,490
the first round of data from census 2016

629
00:28:11,790 --> 00:28:11,560
have been published and unlike Senses

630
00:28:13,650 --> 00:28:11,800
Fail

631
00:28:16,590 --> 00:28:13,660
things have held up a little better this

632
00:28:18,690 --> 00:28:16,600
time so far I've revealed some pretty

633
00:28:21,270 --> 00:28:18,700
basic stuff about all twenty three point

634
00:28:24,060 --> 00:28:21,280
four million of us how old are we where

635
00:28:25,530 --> 00:28:24,070
we live where do we come from but we

636
00:28:27,870 --> 00:28:25,540
knows what the census is missing some

637
00:28:29,760 --> 00:28:27,880
questions ones that can be used to help

638
00:28:32,560 --> 00:28:29,770

make better decisions to tackle one big

639

00:28:35,080 --> 00:28:32,570

problem in particular climate change

640

00:28:36,460 --> 00:28:35,090

we reckon that in the future the census

641

00:28:39,460 --> 00:28:36,470

should ask us about our environmental

642

00:28:41,290 --> 00:28:39,470

impact and carbon footprint but how

643

00:28:44,320 --> 00:28:41,300

often do you recycle do you use a

644

00:28:46,090 --> 00:28:44,330

driverless car how can you read me when

645

00:28:48,490 --> 00:28:46,100

was the last time you bought new clothes

646

00:28:50,830 --> 00:28:48,500

we wouldn't know how spellings are using

647

00:28:53,140 --> 00:28:50,840

up resources if we value this is a

648

00:28:55,060 --> 00:28:53,150

nationwide measurement we'd be a big

649

00:28:57,520 --> 00:28:55,070

step closer it's a practical sustainable

650

00:28:59,740 --> 00:28:57,530

change it could implement for structure

651
00:29:01,960 --> 00:28:59,750
allocate resources and help make

652
00:29:05,800 --> 00:29:01,970
decisions about our nation's future just

653
00:29:08,770 --> 00:29:05,810
like the rest of the census data for

654
00:29:19,270 --> 00:29:08,780
more brouhaha and Australian science ed

655
00:29:21,940 --> 00:29:19,280
4ww Australia science TV hello Anala

656
00:29:23,920 --> 00:29:21,950
needle on solo starts of deep moments

657
00:29:28,260 --> 00:29:23,930
been to an atlas run out of skeptic zone

658
00:29:31,600 --> 00:29:28,270
for way to stop and Katie snide anchor

659
00:29:37,080 --> 00:29:31,610
moving from RC fauna we may be been

660
00:29:44,050 --> 00:29:40,900
now for part two of our beekeeping story

661
00:29:45,880 --> 00:29:44,060
with dr. eugenie Scott last week we went

662
00:29:48,400 --> 00:29:45,890
to her backyard and collected the honey

663
00:29:50,740 --> 00:29:48,410

right from the hive this week Jeannie

664

00:29:54,610 --> 00:29:50,750

and I sit down and she discusses some of

665

00:30:03,490 --> 00:29:54,620

these science behind beekeeping biscuits

666

00:30:04,540 --> 00:30:03,500

have gone to us and I hope content I am

667

00:30:07,150 --> 00:30:04,550

content

668

00:30:08,740 --> 00:30:07,160

oh yeah absolutely delightful now let's

669

00:30:13,090 --> 00:30:08,750

talk about some of the science when it

670

00:30:16,330 --> 00:30:13,100

comes to bees and beekeeping because my

671

00:30:17,830 --> 00:30:16,340

brief experience yesterday doing what we

672

00:30:20,020 --> 00:30:17,840

did gathering the honey and looking

673

00:30:22,750 --> 00:30:20,030

inside the hives and seeing you're

674

00:30:25,510 --> 00:30:22,760

pointing out the drones a lot I could

675

00:30:28,000 --> 00:30:25,520

see the different casts of these workers

676

00:30:28,450 --> 00:30:28,010

didn't see a queen but not for lack of

677

00:30:30,160 --> 00:30:28,460

trying

678

00:30:32,410 --> 00:30:30,170

well we didn't try real hard we didn't

679

00:30:35,320 --> 00:30:32,420

try real hard but maybe it's not it is

680

00:30:37,420 --> 00:30:35,330

is it good to spot the Queen Isabella no

681

00:30:40,150 --> 00:30:37,430

it's a good idea to know that you have a

682

00:30:42,490 --> 00:30:40,160

queen but we did see it wasn't on camera

683

00:30:44,830 --> 00:30:42,500

but we did see eggs so that means that

684

00:30:50,380 --> 00:30:44,840

with within the last couple of days she

685

00:30:54,790 --> 00:30:53,470

Anna Anna Carlsen you just up the street

686

00:30:56,410 --> 00:30:54,800

of course there's another there were

687

00:31:00,490 --> 00:30:56,420

lots of hives around Berkeley Oh

688

00:31:02,800 --> 00:31:00,500

Berkeley is thick as thieves with - when

689

00:31:06,010 --> 00:31:02,810

I walk over my next-door neighbor has

690

00:31:07,870 --> 00:31:06,020

has a hive and when I walk over the

691

00:31:09,340 --> 00:31:07,880

grocery store I always kind of stop and

692

00:31:11,140 --> 00:31:09,350

I look over one fence don't worry

693

00:31:12,850 --> 00:31:11,150

they've got they've had hives and I

694

00:31:16,450 --> 00:31:12,860

always kind of check them out and see

695

00:31:19,750 --> 00:31:16,460

how they're doing there are bees flying

696

00:31:22,150 --> 00:31:19,760

in and out or their hives crashed over

697

00:31:25,930 --> 00:31:22,160

the winter I felt really bad they their

698

00:31:28,960 --> 00:31:25,940

hives died out oh and yeah that that is

699

00:31:33,870 --> 00:31:28,970

actually an interesting an interesting

700

00:31:36,640 --> 00:31:33,880

thing they the survival of these hives

701
00:31:39,820 --> 00:31:36,650
I'm a backyard beekeeper but of course

702
00:31:43,420 --> 00:31:39,830
here in California beekeeping is a huge

703
00:31:45,400 --> 00:31:43,430
huge agricultural industry because bees

704
00:31:48,120 --> 00:31:45,410
are pollinators for a lot of crops

705
00:31:51,350 --> 00:31:48,130
especially the tree crops almonds

706
00:31:55,350 --> 00:31:51,360
mmm stone fruits lots of different

707
00:31:59,520 --> 00:31:55,360
products are and it's not just

708
00:32:01,680 --> 00:31:59,530
California Florida other parts of the

709
00:32:04,980 --> 00:32:01,690
United States where they have especially

710
00:32:10,340 --> 00:32:04,990
trees they use a lot of they use a lot

711
00:32:13,290 --> 00:32:10,350
of beets and what happens is commercial

712
00:32:14,880 --> 00:32:13,300
beekeepers in California most of them

713
00:32:15,860 --> 00:32:14,890

actually are in California because this

714

00:32:18,450 --> 00:32:15,870

is sort of the home base for

715

00:32:20,280 --> 00:32:18,460

agricultural yeah production in the

716

00:32:25,080 --> 00:32:20,290

United States this is the huge

717

00:32:27,360 --> 00:32:25,090

agricultural part of the country and so

718

00:32:29,340 --> 00:32:27,370

the the commercial beekeepers have hives

719

00:32:31,110 --> 00:32:29,350

here and they'll have you know one

720

00:32:32,760 --> 00:32:31,120

hundred two hundred a thousand hives I

721

00:32:36,990 --> 00:32:32,770

mean they can have huge huge numbers of

722

00:32:40,320 --> 00:32:37,000

hives and when the the almond season is

723

00:32:42,960 --> 00:32:40,330

done you know they'll put their hives

724

00:32:45,720 --> 00:32:42,970

stacked you know five seven whatever

725

00:32:47,880 --> 00:32:45,730

deep and drive them to the Midwest or

726

00:32:50,070 --> 00:32:47,890

driving really to Florida or drive them

727

00:32:53,850 --> 00:32:50,080

someplace else so the the portable bees

728

00:32:55,590 --> 00:32:53,860

exactly exactly so and you know they'll

729

00:32:56,520 --> 00:32:55,600

let them out the bees will orient and

730

00:32:58,560 --> 00:32:56,530

figure out where they are

731

00:33:01,230 --> 00:32:58,570

and then they'll go forth and do this

732

00:33:03,870 --> 00:33:01,240

time colony well the clover crops

733

00:33:06,030 --> 00:33:03,880

alfalfa there's lots of different crops

734

00:33:10,470 --> 00:33:06,040

that honey that honey bees are used to

735

00:33:14,010 --> 00:33:10,480

to pollinate and in not just the United

736

00:33:16,530 --> 00:33:14,020

States but especially here in North

737

00:33:18,540 --> 00:33:16,540

America there's a real problem with

738

00:33:21,000 --> 00:33:18,550

what's called colony collapse disorder

739

00:33:22,980 --> 00:33:21,010

yes we've heard about that it's yes

740

00:33:26,400 --> 00:33:22,990

makes the news sometimes it's a little

741

00:33:28,470 --> 00:33:26,410

bit sensationalist I think yeah there's

742

00:33:32,960 --> 00:33:28,480

a lot of pseudoscience yes but you know

743

00:33:36,570 --> 00:33:32,970

I think as skeptics I think we know that

744

00:33:39,420 --> 00:33:36,580

pseudoscience thrives when there's a

745

00:33:41,880 --> 00:33:39,430

lack of a scientific consensus and it's

746

00:33:44,340 --> 00:33:41,890

that's perfectly reasonable if you don't

747

00:33:46,680 --> 00:33:44,350

really have a solid scientific consensus

748

00:33:48,690 --> 00:33:46,690

there are a lot of competing hypotheses

749

00:33:52,800 --> 00:33:48,700

and you know people can attach to one

750

00:33:56,120 --> 00:33:52,810

another what happens in most cases is

751

00:33:58,830 --> 00:33:56,130

that sooner or later there's enough

752

00:34:00,980 --> 00:33:58,840

experimental or other kinds of tests to

753

00:34:05,810 --> 00:34:00,990

rule out certain

754

00:34:09,170 --> 00:34:05,820

hypotheses and in a set of opinions

755

00:34:11,420 --> 00:34:09,180

coalesce around some explanations and

756

00:34:13,700 --> 00:34:11,430

then eventually everybody gets convinced

757

00:34:16,520 --> 00:34:13,710

and so you move on and of course says we

758

00:34:19,070 --> 00:34:16,530

know it's got to this it's often the

759

00:34:22,010 --> 00:34:19,080

case that even with the consensus some

760

00:34:24,830 --> 00:34:22,020

of the pseudoscience promoters cling to

761

00:34:27,010 --> 00:34:24,840

uploaded ideas and of course we have

762

00:34:29,630 --> 00:34:27,020

lots of examples of that in oh yeah

763

00:34:34,910 --> 00:34:29,640

climate science anti-vaccination any

764

00:34:37,430 --> 00:34:34,920

number it goes on and on occasion ism

765

00:34:39,290 --> 00:34:37,440

yes some of these ideas die very hard

766

00:34:41,990 --> 00:34:39,300

but that's enough that's a whole other

767

00:34:45,200 --> 00:34:42,000

conversation we've we've had and enjoy

768

00:34:47,480 --> 00:34:45,210

talking about but colony collapse

769

00:34:52,690 --> 00:34:47,490

disorder is a tough thing to deal with

770

00:34:57,410 --> 00:34:52,700

because it can wipe out 1/2 to 2/3 of a

771

00:34:59,320 --> 00:34:57,420

beekeepers hives and and for commercial

772

00:35:02,750 --> 00:34:59,330

beekeepers this is just a stunning

773

00:35:05,900 --> 00:35:02,760

economic hit because they have to have

774

00:35:08,720 --> 00:35:05,910

bees in order to have a livelihood we

775

00:35:11,710 --> 00:35:08,730

have to have the migratory beekeepers in

776

00:35:14,360 --> 00:35:11,720

order to have a reliable food supply and

777

00:35:16,040 --> 00:35:14,370

so it's something that even if you're

778

00:35:18,320 --> 00:35:16,050

not a commercial beekeeper you want to

779

00:35:21,710 --> 00:35:18,330

you want to think about it's less of a

780

00:35:26,300 --> 00:35:21,720

problem for backyard beekeepers we do

781

00:35:29,900 --> 00:35:26,310

have we do have hives that fail and in

782

00:35:32,020 --> 00:35:29,910

fact every year there's a I forget what

783

00:35:35,810 --> 00:35:32,030

the agency as I could look it up but

784

00:35:38,170 --> 00:35:35,820

there is an institution that keeps track

785

00:35:43,460 --> 00:35:38,180

of as well as it can

786

00:35:46,160 --> 00:35:43,470

self-reported statistics from backyard

787

00:35:48,230 --> 00:35:46,170

beekeepers how many of your hives failed

788

00:35:51,080 --> 00:35:48,240

this winter how many of your hives are

789

00:35:53,720 --> 00:35:51,090

still going etc and those those data

790

00:35:57,380 --> 00:35:53,730

suggest that even backyard beekeepers

791

00:35:59,450 --> 00:35:57,390

also have die offs hmm no backyard

792

00:36:02,120 --> 00:35:59,460

beekeeping and commercial beekeeping are

793

00:36:06,140 --> 00:36:02,130

in many respects very different entities

794

00:36:08,720 --> 00:36:06,150

I mean I can pamper my bees right I've

795

00:36:10,650 --> 00:36:08,730

got two hives and I could be out there

796

00:36:13,090 --> 00:36:10,660

every day

797

00:36:15,370 --> 00:36:13,100

well yeah I don't want to harass might

798

00:36:17,320 --> 00:36:15,380

be so it don't but but if you've got

799

00:36:18,940 --> 00:36:17,330

five hundred hives you're not going to

800

00:36:20,710 --> 00:36:18,950

be able to be able to look at every

801
00:36:23,470 --> 00:36:20,720
single one of them at regular intervals

802
00:36:24,910 --> 00:36:23,480
and assess their health and how they're

803
00:36:30,730 --> 00:36:24,920
doing and whether they're growing or

804
00:36:33,280 --> 00:36:30,740
whatever so the fact that backyard

805
00:36:35,920 --> 00:36:33,290
beekeepers also have sometimes

806
00:36:37,750 --> 00:36:35,930
substantial die offs depending on region

807
00:36:39,160 --> 00:36:37,760
and so forth and commercial beekeepers

808
00:36:42,490 --> 00:36:39,170
have suffered with this for several

809
00:36:47,650 --> 00:36:42,500
years it is worth trying to solve this

810
00:36:51,090 --> 00:36:47,660
problem the major hypotheses are of

811
00:36:54,220 --> 00:36:51,100
course environmental in the sense that

812
00:36:57,070 --> 00:36:54,230
commercial beekeepers are rough on bees

813
00:36:58,930 --> 00:36:57,080

when you're hauling your bees across the

814

00:37:03,490 --> 00:36:58,940

country you're exposing them to

815

00:37:06,280 --> 00:37:03,500

temperature and to humidity differences

816

00:37:08,020 --> 00:37:06,290

or your Europe's you know you're shaking

817

00:37:11,380 --> 00:37:08,030

the heck out of them and you're Rumble

818

00:37:14,340 --> 00:37:11,390

across highways yes yes and that's got

819

00:37:17,140 --> 00:37:14,350

to be very stressful for bees so one

820

00:37:19,270 --> 00:37:17,150

hypothesis was that well yeah commercial

821

00:37:20,860 --> 00:37:19,280

beekeepers are using losing half to

822

00:37:22,480 --> 00:37:20,870

two-thirds of their bees because they're

823

00:37:24,130 --> 00:37:22,490

just beating them up they're just

824

00:37:27,220 --> 00:37:24,140

providing this very unhealthy

825

00:37:30,070 --> 00:37:27,230

environment and monoculture you take

826

00:37:32,800 --> 00:37:30,080

your bees here and they they spend a

827

00:37:34,870 --> 00:37:32,810

week fertilizing alfalfa fields and then

828

00:37:37,390 --> 00:37:34,880

you pack them up and you move them here

829

00:37:40,210 --> 00:37:37,400

and now they're doing almonds that's the

830

00:37:42,420 --> 00:37:40,220

wrong order but anyway and and so that's

831

00:37:47,170 --> 00:37:42,430

not that's not really a healthy kind of

832

00:37:49,180 --> 00:37:47,180

living for bees monoculture doesn't give

833

00:37:51,910 --> 00:37:49,190

them the variety of nutrients that they

834

00:37:54,690 --> 00:37:51,920

need so you know the environment of

835

00:37:56,950 --> 00:37:54,700

commercial beekeepers has been one

836

00:38:03,340 --> 00:37:56,960

hypothesis for colony collapse disorder

837

00:38:08,830 --> 00:38:03,350

a very important variable is the varroa

838

00:38:13,600 --> 00:38:08,840

mite that's dar Oh try that again VAR ro

839

00:38:17,800 --> 00:38:13,610

a varroa this is a mite it's a parasite

840

00:38:19,720 --> 00:38:17,810

of bees which is not native to the

841

00:38:21,880 --> 00:38:19,730

United States or North America

842

00:38:24,970 --> 00:38:21,890

came in from Asia the number of years

843

00:38:29,080 --> 00:38:24,980

ago and it doesn't really you know like

844

00:38:31,260 --> 00:38:29,090

all intrusive species it's a new

845

00:38:33,940 --> 00:38:31,270

environment it doesn't have its usual

846

00:38:37,930 --> 00:38:33,950

predators and that's just writing like

847

00:38:41,080 --> 00:38:37,940

crazy right yeah and varroa mites don't

848

00:38:44,800 --> 00:38:41,090

actually you know will rarely just

849

00:38:46,990 --> 00:38:44,810

flat-out killaby because it doesn't make

850

00:38:48,670 --> 00:38:47,000

sense for the parasite only yeah in

851
00:38:51,790 --> 00:38:48,680
generally speaking but it weakens a bee

852
00:38:54,190 --> 00:38:51,800
uh-huh and they're actually fairly large

853
00:38:56,440 --> 00:38:54,200
you can actually see them reeling the

854
00:38:57,400 --> 00:38:56,450
bees yep they're about the size of a

855
00:39:00,700 --> 00:38:57,410
pinhead

856
00:39:02,500 --> 00:39:00,710
which if you visualize a bee he's not

857
00:39:04,690 --> 00:39:02,510
very big and something the size of a

858
00:39:09,310 --> 00:39:04,700
pendant you can definitely smell okay

859
00:39:11,890 --> 00:39:09,320
and what so you'd have to have a whole

860
00:39:13,990 --> 00:39:11,900
lot of them sucking lymph out of the B

861
00:39:16,090 --> 00:39:14,000
in order to just kill it off that's not

862
00:39:19,150 --> 00:39:16,100
likely to happen but what it does happen

863
00:39:22,390 --> 00:39:19,160

is that it weakens the bees and they

864

00:39:24,490 --> 00:39:22,400

also carry an awful lot of viruses and I

865

00:39:27,099 --> 00:39:24,500

think also there's some and bacterias as

866

00:39:29,200 --> 00:39:27,109

well so there are diseases of bees that

867

00:39:32,290 --> 00:39:29,210

are spread around by these varroa mites

868

00:39:34,810 --> 00:39:32,300

so one of the things that both

869

00:39:37,240 --> 00:39:34,820

commercial and backyard beekeepers have

870

00:39:40,570 --> 00:39:37,250

to do is really monitor the amount of

871

00:39:44,170 --> 00:39:40,580

varroa parasitism every hive has it I'm

872

00:39:46,060 --> 00:39:44,180

sure my I've had my previous hives which

873

00:39:49,210 --> 00:39:46,070

have succeeded or died I know they had

874

00:39:52,660 --> 00:39:49,220

it as well and in fact I think I lost

875

00:39:55,599 --> 00:39:52,670

one of my hives year or so ago to a

876

00:39:58,060 --> 00:39:55,609

disease carried by berola so when you

877

00:40:00,340 --> 00:39:58,070

say lust is you you go to visit your

878

00:40:05,140 --> 00:40:00,350

hive in you notices you notice get less

879

00:40:07,180 --> 00:40:05,150

are getting low maybe you see it's it's

880

00:40:09,730 --> 00:40:07,190

not uncommon to see some dead bees out

881

00:40:11,650 --> 00:40:09,740

in front of your hive because well like

882

00:40:13,960 --> 00:40:11,660

we were talking about bees have a very

883

00:40:15,820 --> 00:40:13,970

short lifespan the workers basically

884

00:40:18,280 --> 00:40:15,830

work themselves to death and they you

885

00:40:20,530 --> 00:40:18,290

know just keel over but if you've got

886

00:40:22,240 --> 00:40:20,540

you know more in a couple you might want

887

00:40:26,770 --> 00:40:22,250

to take care of a look there and see

888

00:40:29,740 --> 00:40:26,780

what's going on there's an one of the

889

00:40:30,660 --> 00:40:29,750

diseases is a deformed wing virus mm-hm

890

00:40:33,870 --> 00:40:30,670

that

891

00:40:38,400 --> 00:40:33,880

when the the varroa mite can infect a

892

00:40:40,380 --> 00:40:38,410

developing embryo that's actually where

893

00:40:43,800 --> 00:40:40,390

you know the varroa mites get into the

894

00:40:45,630 --> 00:40:43,810

cells that contain the embryos and they

895

00:40:47,400 --> 00:40:45,640

attach themselves to the embryo oh wow

896

00:40:49,800 --> 00:40:47,410

so that weakens the embryo and then when

897

00:40:52,050 --> 00:40:49,810

the creature when the embryo grows up

898

00:40:56,610 --> 00:40:52,060

and hatches out it carries around the

899

00:40:59,040 --> 00:40:56,620

severe or parasite but one of the

900

00:41:01,500 --> 00:40:59,050

viruses that they carry is one that can

901
00:41:05,670 --> 00:41:01,510
affect the development of wings on this

902
00:41:08,730 --> 00:41:05,680
developing embryo and the wings they

903
00:41:10,530 --> 00:41:08,740
have like lots of Hymenoptera they have

904
00:41:12,000 --> 00:41:10,540
four pairs of wings to in front and two

905
00:41:16,050 --> 00:41:12,010
smaller ones in back that are used for

906
00:41:17,760 --> 00:41:16,060
balancing and the wings kind of come out

907
00:41:19,710 --> 00:41:17,770
a little bit twisted or they're smaller

908
00:41:23,490 --> 00:41:19,720
they don't really work well and so those

909
00:41:25,980 --> 00:41:23,500
birds don't boots those bees don't make

910
00:41:29,190 --> 00:41:25,990
it they generally they can't fly or if

911
00:41:30,960 --> 00:41:29,200
they if the disease isn't too bad they

912
00:41:33,570 --> 00:41:30,970
just don't fly very well and so they're

913
00:41:37,070 --> 00:41:33,580

you know they don't work so there's a

914

00:41:40,410 --> 00:41:37,080

lot of problems with the varroa mite and

915

00:41:43,410 --> 00:41:40,420

varroa mite is is a very good culprit

916

00:41:47,460 --> 00:41:43,420

for a colony collapse well the third

917

00:41:50,880 --> 00:41:47,470

major hypothesis is neonicotinoid

918

00:41:53,190 --> 00:41:50,890

pesticides and the Neo Nick's as they're

919

00:41:55,370 --> 00:41:53,200

called for obvious reasons it's a lot

920

00:41:58,700 --> 00:41:55,380

shorter than saying Leo Nick is annoyed

921

00:42:04,940 --> 00:41:58,710

the Neo Nicks is a class of Petrov

922

00:42:08,130 --> 00:42:04,950

pesticide that are used fairly widely in

923

00:42:12,750 --> 00:42:08,140

canola you know rapeseed production and

924

00:42:15,330 --> 00:42:12,760

many other crops as well and there have

925

00:42:19,730 --> 00:42:15,340

been a number of studies mostly in

926
00:42:24,500 --> 00:42:19,740
Europe actually showing that neonics are

927
00:42:30,240 --> 00:42:24,510
toxic toxic to developing B embryos and

928
00:42:31,830 --> 00:42:30,250
and adult bees as well the hypothesis of

929
00:42:33,920 --> 00:42:31,840
the effect of the neonics

930
00:42:36,900 --> 00:42:33,930
is that it it affects the bees

931
00:42:40,230 --> 00:42:36,910
navigation system hmm because one of the

932
00:42:41,720 --> 00:42:40,240
problems one of the indicators of colony

933
00:42:46,700 --> 00:42:41,730
collapse disorder is

934
00:42:48,800 --> 00:42:46,710
that bees hatch out they you know

935
00:42:58,330 --> 00:42:48,810
Orient's they fly off they are working

936
00:43:03,890 --> 00:43:01,580
and so of course you're Heidi decreases

937
00:43:05,510 --> 00:43:03,900
a number because your bees don't come

938
00:43:13,160 --> 00:43:05,520

back to me that that's a real problem

939

00:43:15,670 --> 00:43:13,170

and so what seems to be you know gelling

940

00:43:19,580 --> 00:43:15,680

and I'm certainly not a bee researcher

941

00:43:22,490 --> 00:43:19,590

goodness knows but what appears from you

942

00:43:25,790 --> 00:43:22,500

know a very far outsider's perspective

943

00:43:28,370 --> 00:43:25,800

is that it's probably all three no four

944

00:43:31,099 --> 00:43:28,380

commercial beekeepers they do stress the

945

00:43:32,920 --> 00:43:31,109

bees a lot they expose them to crops

946

00:43:36,200 --> 00:43:32,930

that have neonics

947

00:43:39,650 --> 00:43:36,210

and varroa is universal I mean every you

948

00:43:42,109 --> 00:43:39,660

know you you work hard to control your

949

00:43:45,940 --> 00:43:42,119

varroa and there's my two sides that

950

00:43:49,160 --> 00:43:45,950

sometimes people use oh they're also our

951
00:43:52,240 --> 00:43:49,170
non-chemical ways of dealing with the

952
00:43:57,320 --> 00:43:52,250
mites and of course just trying to

953
00:44:01,130 --> 00:43:57,330
trying to avoid avoid robbing and avoid

954
00:44:05,030 --> 00:44:01,140
other things that expose your hive to -

955
00:44:09,349 --> 00:44:05,040
you know if you can get your hive

956
00:44:13,160 --> 00:44:09,359
relatively varroa free you can keep it

957
00:44:14,690 --> 00:44:13,170
relatively varroa free if your bees are

958
00:44:16,370 --> 00:44:14,700
not out robbing others because that's

959
00:44:19,160 --> 00:44:16,380
where they pick up mites from other

960
00:44:22,609 --> 00:44:19,170
hives or other hives trying to run your

961
00:44:27,290 --> 00:44:22,619
life will bring mites in so you try to

962
00:44:29,890 --> 00:44:27,300
you know keep the robbing down but yet

963
00:44:32,390 --> 00:44:29,900

see crime does not pay

964

00:44:34,910 --> 00:44:32,400

if you're a bee who robs your are

965

00:44:38,359 --> 00:44:34,920

exposing yourself to illness so it's

966

00:44:41,210 --> 00:44:38,369

probably all three of those factors for

967

00:44:42,530 --> 00:44:41,220

us backyard beekeepers where you know we

968

00:44:45,320 --> 00:44:42,540

pamper our bees and give them this

969

00:44:47,630 --> 00:44:45,330

wonderful environment where they aren't

970

00:44:52,250 --> 00:44:47,640

exposed to the kinds of stresses that

971

00:44:53,390 --> 00:44:52,260

commercial beekeepers have depending on

972

00:44:55,820 --> 00:44:53,400

where you live you

973

00:45:00,590 --> 00:44:55,830

maybe your bees may be exposed to

974

00:45:03,530 --> 00:45:00,600

neonics here in very green Northern

975

00:45:05,390 --> 00:45:03,540

California and especially Berkeley I I

976

00:45:07,730 --> 00:45:05,400

don't know any neighbor that uses any

977

00:45:09,530 --> 00:45:07,740

kind of pesticide remember that so I

978

00:45:13,100 --> 00:45:09,540

don't have a lot of worry about my yes

979

00:45:16,040 --> 00:45:13,110

yeah doing that but you know I mean just

980

00:45:17,900 --> 00:45:16,050

cuz I know my neighbors they if they go

981

00:45:20,720 --> 00:45:17,910

over a few blocks people I don't know

982

00:45:23,750 --> 00:45:20,730

who knows what they're using so at any

983

00:45:26,510 --> 00:45:23,760

rate colony collapse disorder is a

984

00:45:32,270 --> 00:45:26,520

serious problem with honeybee production

985

00:45:35,360 --> 00:45:32,280

or honeybee maintenance and a serious

986

00:45:38,690 --> 00:45:35,370

problem for pollination of food crops

987

00:45:42,290 --> 00:45:38,700

yes of course we have to we have to roll

988

00:45:44,690 --> 00:45:42,300

up it's interesting to see what you have

989

00:45:47,450 --> 00:45:44,700

in your backyard and then to try to

990

00:45:50,830 --> 00:45:47,460

visualize it on an industrial scale yes

991

00:45:54,410 --> 00:45:50,840

these massive

992

00:45:57,490 --> 00:45:54,420

stacks stacks of knives and you your

993

00:46:00,080 --> 00:45:57,500

hives for example have what four layers

994

00:46:03,560 --> 00:46:00,090

no no mines mine are much smaller

995

00:46:05,690 --> 00:46:03,570

although it's possible the the standard

996

00:46:08,780 --> 00:46:05,700

hive configuration is what they call a

997

00:46:11,030 --> 00:46:08,790

brood box which is a deeper box there

998

00:46:12,590 --> 00:46:11,040

for the entrance is right yeah yeah we

999

00:46:16,850 --> 00:46:12,600

all tend to use these lengths trough

1000

00:46:18,770 --> 00:46:16,860

pipes which have our rectangles that I

1001

00:46:21,830 --> 00:46:18,780

should know exactly how tall they are

1002

00:46:26,330 --> 00:46:21,840

but foot and a half or something like

1003

00:46:29,330 --> 00:46:26,340

that less and each of these boxes can

1004

00:46:31,580 --> 00:46:29,340

hold ten frames so that's a standard box

1005

00:46:34,010 --> 00:46:31,590

yeah and you use the deep box for brood

1006

00:46:37,220 --> 00:46:34,020

box that's where you that's where the

1007

00:46:39,860 --> 00:46:37,230

Queen will will develop the workers will

1008

00:46:42,110 --> 00:46:39,870

develop that will draw the comb and the

1009

00:46:44,300 --> 00:46:42,120

Queen will lay the eggs and the cells

1010

00:46:47,090 --> 00:46:44,310

their workers will raise the embryos and

1011

00:46:53,690 --> 00:46:47,100

count them and all that and then I also

1012

00:46:55,700 --> 00:46:53,700

have expanded my brood area you can do

1013

00:46:57,500 --> 00:46:55,710

that by putting a second brood box on if

1014

00:46:59,250 --> 00:46:57,510

you are planning to have a really big

1015

00:47:02,610 --> 00:46:59,260

high some people do it that's fine

1016

00:47:07,530 --> 00:47:02,620

I put a smaller box on top called the

1017

00:47:10,200 --> 00:47:07,540

super as in super in the sense of above

1018

00:47:12,450 --> 00:47:10,210

it's the it's a smaller it's a

1019

00:47:14,310 --> 00:47:12,460

medium-sized box

1020

00:47:17,510 --> 00:47:14,320

it also has ten frames so they're same

1021

00:47:22,380 --> 00:47:17,520

same did they nest on top of one another

1022

00:47:28,080 --> 00:47:22,390

and this is a this is about a six or

1023

00:47:30,510 --> 00:47:28,090

seven inch tall box and I'm using one of

1024

00:47:32,430 --> 00:47:30,520

those as to sort of expand my brood area

1025

00:47:34,530 --> 00:47:32,440

but then I've got what's called the

1026

00:47:38,000 --> 00:47:34,540

queen excluder which is a new great

1027

00:47:41,430 --> 00:47:38,010

that keeps the Queen because it's it's

1028

00:47:45,120 --> 00:47:41,440

the spaces between the the wires of the

1029

00:47:47,370 --> 00:47:45,130

great are wide enough to let a worker

1030

00:47:50,370 --> 00:47:47,380

beef through but not wide enough to let

1031

00:47:52,770 --> 00:47:50,380

a larger Queen through so it excludes

1032

00:47:55,890 --> 00:47:52,780

the Queen from anything above it and

1033

00:47:58,260 --> 00:47:55,900

I've got another honey super another

1034

00:48:01,470 --> 00:47:58,270

medium box on top of the Queen excluder

1035

00:48:04,020 --> 00:48:01,480

and that was the one that we got we did

1036

00:48:06,420 --> 00:48:04,030

yesterday yeah so when you harvest the

1037

00:48:07,950 --> 00:48:06,430

honey from that you sure you away some

1038

00:48:10,590 --> 00:48:07,960

of the bees but you just basically

1039

00:48:12,150 --> 00:48:10,600

getting honey yeah yeah there's not

1040

00:48:14,100 --> 00:48:12,160

gonna be any brood in there there's not

1041

00:48:18,560 --> 00:48:14,110

gonna yeah when we were looking at

1042

00:48:22,740 --> 00:48:18,570

Anna's high yesterday I pointed out that

1043

00:48:26,420 --> 00:48:22,750

this one this one frame had a very

1044

00:48:29,370 --> 00:48:26,430

classic distribution on the left side

1045

00:48:32,190 --> 00:48:29,380

across the top and on the right side you

1046

00:48:33,690 --> 00:48:32,200

saw there was capped honey where they

1047

00:48:36,840 --> 00:48:33,700

were storing the honey around the

1048

00:48:40,080 --> 00:48:36,850

outside and then in the middle was brood

1049

00:48:43,680 --> 00:48:40,090

you know rows and columns of cells that

1050

00:48:45,690 --> 00:48:43,690

the Queen had laid eggs in and the

1051
00:48:49,050 --> 00:48:45,700
workers then captain they were raising

1052
00:48:51,150 --> 00:48:49,060
brood in there which is a very classic

1053
00:48:56,750 --> 00:48:51,160
kind of pattern and that would be

1054
00:49:00,420 --> 00:48:56,760
repeated in any number of frames the

1055
00:49:01,980 --> 00:49:00,430
that's good but it's it's often really

1056
00:49:03,170 --> 00:49:01,990
nice if you're one if you want to

1057
00:49:05,430 --> 00:49:03,180
harvest honey

1058
00:49:09,000 --> 00:49:05,440
which we do

1059
00:49:11,640 --> 00:49:09,010
Jesus yes to you you don't want to take

1060
00:49:15,270 --> 00:49:11,650
you don't want to take a frame of brood

1061
00:49:17,280 --> 00:49:15,280
not be spinning up no you don't wanna

1062
00:49:19,829 --> 00:49:17,290
kill your bees no you also don't want to

1063
00:49:22,760 --> 00:49:19,839

have little bee parts in your honey so

1064

00:49:25,050 --> 00:49:22,770

it's good to have it's good to have the

1065

00:49:29,430 --> 00:49:25,060

the frames with honey that you're

1066

00:49:31,349 --> 00:49:29,440

planning to to harvest separate from the

1067

00:49:33,240 --> 00:49:31,359

frames with honey that also have brood

1068

00:49:36,000 --> 00:49:33,250

in them that you're you're leaving that

1069

00:49:39,240 --> 00:49:36,010

honey for the bees do you know they'll

1070

00:49:42,150 --> 00:49:39,250

they'll consume the honey in those

1071

00:49:44,280 --> 00:49:42,160

frames and in those cells and then

1072

00:49:45,329 --> 00:49:44,290

they'll fill them back up again so

1073

00:49:49,050 --> 00:49:45,339

there's you know there's a lot of

1074

00:49:50,700 --> 00:49:49,060

recycling in the bee worlds well what a

1075

00:49:54,500 --> 00:49:50,710

fascinating thing I mean I had no idea

1076

00:49:58,140 --> 00:49:54,510

you see documentaries on TV over these

1077

00:49:59,790 --> 00:49:58,150

and occasionally they inside the Beehive

1078

00:50:01,109 --> 00:49:59,800

the David Attenborough something like

1079

00:50:04,620 --> 00:50:01,119

that everyone's familiar with the

1080

00:50:07,530 --> 00:50:04,630

classic shape of a standard be high

1081

00:50:09,930 --> 00:50:07,540

affects like I'll hit the hexagonal so

1082

00:50:12,800 --> 00:50:09,940

the cells and all of that but I must say

1083

00:50:16,800 --> 00:50:12,810

it was really really interesting to

1084

00:50:20,250 --> 00:50:16,810

Donley the gear open up the hive lift up

1085

00:50:22,800 --> 00:50:20,260

the bits that are the frames and massive

1086

00:50:27,599 --> 00:50:22,810

bees there and do all that sort of thing

1087

00:50:29,520 --> 00:50:27,609

so folks why not look at the beekeeping

1088

00:50:31,859 --> 00:50:29,530

it's an interesting thing to do if

1089

00:50:34,980 --> 00:50:31,869

you've got some time and you've got a

1090

00:50:36,990 --> 00:50:34,990

backyard or something like that and the

1091

00:50:40,770 --> 00:50:37,000

results as you heard a little while ago

1092

00:50:43,050 --> 00:50:40,780

as we munched our honey biscuits results

1093

00:50:46,140 --> 00:50:43,060

the results can be very rewarding I

1094

00:50:50,089 --> 00:50:46,150

won't put in a plate and a plug for me

1095

00:50:52,230 --> 00:50:50,099

backyard beekeeping actually because

1096

00:50:54,990 --> 00:50:52,240

you're increasing the genetic

1097

00:50:57,000 --> 00:50:55,000

variability of the European honeybee

1098

00:50:59,069 --> 00:50:57,010

which is the bee that we all use do you

1099

00:51:03,450 --> 00:50:59,079

do to do this with and to raise honey

1100

00:51:05,250 --> 00:51:03,460

from the commercial beekeepers are doing

1101

00:51:09,030 --> 00:51:05,260

the best they can they go through an

1102

00:51:11,730 --> 00:51:09,040

awful lot of bees they are subjecting

1103

00:51:14,450 --> 00:51:11,740

their bees to a lot of artificial

1104

00:51:18,670 --> 00:51:14,460

selection for

1105

00:51:23,870 --> 00:51:21,950

treatments that they're subjecting them

1106

00:51:24,670 --> 00:51:23,880

to for Verona and other diseases and

1107

00:51:27,500 --> 00:51:24,680

stuff

1108

00:51:30,799 --> 00:51:27,510

speaking of artificial selection there

1109

00:51:33,500 --> 00:51:30,809

is a very strong selection on the varroa

1110

00:51:35,420 --> 00:51:33,510

mite against certain meta sites which

1111

00:51:37,160 --> 00:51:35,430

already have become upset oh wow

1112

00:51:41,030 --> 00:51:37,170

and so that's kind of scary because the

1113

00:51:42,799 --> 00:51:41,040

microsites these are insects mites or

1114

00:51:44,960 --> 00:51:42,809

mites they're different more than their

1115

00:51:46,370 --> 00:51:44,970

different environments so I might decide

1116

00:51:49,069 --> 00:51:46,380

we'll kill a mite and isn't that

1117

00:51:50,240 --> 00:51:49,079

supposed to kill an insect doesn't

1118

00:51:52,480 --> 00:51:50,250

always work that way you know the

1119

00:51:55,099 --> 00:51:52,490

miticide is used to control the raw our

1120

00:51:56,480 --> 00:51:55,109

our tough on bees so you don't really

1121

00:52:01,130 --> 00:51:56,490

want to use them unless you absolutely

1122

00:52:04,309 --> 00:52:01,140

have to but you know so there is um

1123

00:52:06,829 --> 00:52:04,319

there's all sorts of selection going on

1124

00:52:08,540 --> 00:52:06,839

good better and different in the

1125

00:52:10,780 --> 00:52:08,550

commercial hives but one thing that

1126
00:52:13,780 --> 00:52:10,790
backyard beekeepers can do is they can

1127
00:52:16,430 --> 00:52:13,790
deliberately select four characteristics

1128
00:52:18,950 --> 00:52:16,440
there's a beekeeper mmm

1129
00:52:20,870 --> 00:52:18,960
north of here he's actually commercial

1130
00:52:23,059 --> 00:52:20,880
beekeeper but he's very oriented towards

1131
00:52:26,390 --> 00:52:23,069
scientific beekeeping that's actually

1132
00:52:31,280 --> 00:52:26,400
his website and he is trying to select

1133
00:52:33,440 --> 00:52:31,290
for varroa resistant bees and backyard

1134
00:52:35,930 --> 00:52:33,450
beekeepers can also be increasing that

1135
00:52:40,430 --> 00:52:35,940
genetic variation and maintaining the

1136
00:52:42,890 --> 00:52:40,440
stalks of European honeybee so the more

1137
00:52:45,890 --> 00:52:42,900
backyard beekeepers we have the better

1138
00:52:48,680 --> 00:52:45,900

off we are the less were likely to lose

1139

00:52:52,839 --> 00:52:48,690

all of our beers always say the less

1140

00:52:57,140 --> 00:52:52,849

like we are likely we are to have a

1141

00:52:59,329 --> 00:52:57,150

really disastrous crash in the bee

1142

00:53:02,270 --> 00:52:59,339

population so thanks for reminding them

1143

00:53:05,510 --> 00:53:02,280

check with your local provincial or

1144

00:53:08,299 --> 00:53:05,520

state bee keepers Association there is

1145

00:53:10,370 --> 00:53:08,309

very likely one we have ours are by

1146

00:53:13,520 --> 00:53:10,380

county some Vonda Alameda County

1147

00:53:15,910 --> 00:53:13,530

Beekeepers Association sometimes they're

1148

00:53:19,339 --> 00:53:15,920

citywide but if you google you know

1149

00:53:21,799 --> 00:53:19,349

beekeepers in blank city you're going to

1150

00:53:23,990 --> 00:53:21,809

find some sort of reference to yeah

1151
00:53:25,940 --> 00:53:24,000
and beekeepers are the best they will be

1152
00:53:27,840 --> 00:53:25,950
very helpful in mentoring you and

1153
00:53:30,420 --> 00:53:27,850
helping get you out of jams

1154
00:53:31,770 --> 00:53:30,430
well let that I saw that the other day

1155
00:53:33,960 --> 00:53:31,780
when you visited your neighbor to help

1156
00:53:37,820 --> 00:53:33,970
her out with her pigs look folks I won't

1157
00:53:40,140 --> 00:53:37,830
put a list of your local beekeepers

1158
00:53:42,030 --> 00:53:40,150
association on the show notes this week

1159
00:53:43,950 --> 00:53:42,040
because they're behind list pages and

1160
00:53:45,510 --> 00:53:43,960
pages for around the world but yes if

1161
00:53:46,620 --> 00:53:45,520
you google that I'm sure I'm sure you'll

1162
00:53:49,530 --> 00:53:46,630
find what you're after

1163
00:53:51,690 --> 00:53:49,540

well again I could recommend I might

1164

00:53:53,720 --> 00:53:51,700

deal where I retire you know I might be

1165

00:53:58,920 --> 00:53:53,730

like Sherlock Holmes and sit there and

1166

00:54:10,200 --> 00:53:58,930

if it was good enough for Sherlock Jamie

1167

00:54:10,210 --> 00:54:15,640

[Music]

1168

00:54:21,319 --> 00:54:18,559

Kwak watch your guide to quackery health

1169

00:54:24,500 --> 00:54:21,329

fraud and intelligent decisions operated

1170

00:54:26,390 --> 00:54:24,510

by Stephan Barratt MD quite watch is now

1171

00:54:28,670 --> 00:54:26,400

an international network of people who

1172

00:54:31,520 --> 00:54:28,680

concerned about health related frauds

1173

00:54:34,609 --> 00:54:31,530

myths fans fallacies and misconduct

1174

00:54:36,589 --> 00:54:34,619

its primary focus is on quackery related

1175

00:54:38,900 --> 00:54:36,599

information that is difficult or

1176
00:54:42,290 --> 00:54:38,910
impossible to get elsewhere articles on

1177
00:54:45,920 --> 00:54:42,300
quackery include quackery how should it

1178
00:54:49,490 --> 00:54:45,930
be defined how it sells 26 ways to spot

1179
00:54:52,010 --> 00:54:49,500
it how it comes cancer patients 7

1180
00:54:54,440 --> 00:54:52,020
warning signs for bogus science why

1181
00:54:57,470 --> 00:54:54,450
health professionals become quacks and

1182
00:54:59,329 --> 00:54:57,480
many more including in-depth looks at

1183
00:55:01,430 --> 00:54:59,339
thank you puncture chiropractic

1184
00:55:04,240 --> 00:55:01,440
homeopathy naturopathy

1185
00:55:07,030 --> 00:55:04,250
and much more visit

1186
00:55:32,050 --> 00:55:07,040
www.gfi.com/webmonitor

1187
00:55:39,290 --> 00:55:36,440
the sounds of New York City I am

1188
00:55:43,160 --> 00:55:39,300

approaching Times Square it's a Friday

1189

00:55:44,680 --> 00:55:43,170

evening and to say it's bustling is an

1190

00:55:48,440 --> 00:55:44,690

understatement

1191

00:55:51,020 --> 00:55:48,450

thousands of people and we've turning

1192

00:55:53,090 --> 00:55:51,030

the corner now and my goodness me I am

1193

00:55:57,020 --> 00:55:53,100

looking right down the famous Times

1194

00:55:58,820 --> 00:55:57,030

Square but apart from the spectacle of

1195

00:56:01,800 --> 00:55:58,830

the lights you've probably familiar with

1196

00:56:08,590 --> 00:56:06,280

TV and movies the famous Time Square I'm

1197

00:56:11,560 --> 00:56:08,600

just surrounded by the most everywhere I

1198

00:56:16,150 --> 00:56:11,570

look there's bizarre things going on I'm

1199

00:56:19,960 --> 00:56:16,160

I'm surrounded by novellas actually of

1200

00:56:22,420 --> 00:56:19,970

the female variety and freaking Disney

1201
00:56:23,710 --> 00:56:22,430
characters everywhere Disney characters

1202
00:56:25,900 --> 00:56:23,720
there is Mario

1203
00:56:29,350 --> 00:56:25,910
we just passed spider-man there are all

1204
00:56:33,070 --> 00:56:29,360
these weird rocking red rocking chairs

1205
00:56:36,820 --> 00:56:33,080
which spin around and thousands upon

1206
00:56:39,250 --> 00:56:36,830
thousands of people just here to look at

1207
00:56:40,930 --> 00:56:39,260
the spectacle of Times Square shall we

1208
00:56:44,450 --> 00:56:40,940
move closer to the light what do you

1209
00:56:48,860 --> 00:56:44,460
think let's do that

1210
00:56:52,730 --> 00:56:48,870
it's it's a balmy evening it's it's very

1211
00:56:54,410 --> 00:56:52,740
well lit as you can imagine and there

1212
00:56:56,450 --> 00:56:54,420
seems to be a commotion going on up

1213
00:56:58,220 --> 00:56:56,460

ahead

1214

00:57:00,740 --> 00:56:58,230

let's see what we can find down here

1215

00:57:03,410 --> 00:57:00,750

it's probably a street performer a

1216

00:57:06,610 --> 00:57:03,420

busker I expect but we are walking

1217

00:57:08,930 --> 00:57:06,620

closer and closer to the coca-cola sign

1218

00:57:15,480 --> 00:57:08,940

we're going towards the light are we

1219

00:57:19,360 --> 00:57:17,890

it might know what there's a way through

1220

00:57:23,320 --> 00:57:19,370

the crowd actually I can see that near

1221

00:57:25,510 --> 00:57:23,330

the subway station and oh yeah it's a

1222

00:57:28,410 --> 00:57:25,520

huge crowd I've never seen such a crowd

1223

00:57:32,350 --> 00:57:28,420

around a busker before that's remarkable

1224

00:57:35,200 --> 00:57:32,360

he's a dancer or something

1225

00:57:50,020 --> 00:57:35,210

we've lost one of our party she's it's a

1226

00:57:53,170 --> 00:57:50,030

group of group of dancers okay some sort

1227

00:57:56,530 --> 00:57:53,180

of acrobatic act I think let's keep

1228

00:57:58,360 --> 00:57:56,540

walking out pushing my way through the

1229

00:58:01,750 --> 00:57:58,370

crowds here but everyone's very

1230

00:58:07,440 --> 00:58:01,760

good-natured it's no problem whatsoever

1231

00:58:13,660 --> 00:58:10,060

as we get closer and closer to the

1232

00:58:20,589 --> 00:58:16,470

looking around me I can see giant

1233

00:58:22,509 --> 00:58:20,599

screens incredibly lit advertising

1234

00:58:25,760 --> 00:58:22,519

everything you can imagine was scrolling

1235

00:58:29,290 --> 00:58:25,770

ticker tape things

1236

00:58:35,980 --> 00:58:29,300

thousands of obviously tourists taking

1237

00:58:39,880 --> 00:58:38,230

and I my photographs been taken now I'm

1238

00:58:42,750 --> 00:58:39,890

doing a life report for the skeptic zone

1239

00:58:45,630 --> 00:58:42,760

and I'm getting my photograph taken

1240

00:58:49,349 --> 00:58:45,640

there we go

1241

00:58:58,200 --> 00:58:55,049

I mean you've seen Times Square in the

1242

00:58:59,670 --> 00:58:58,210

television and the movies but I guess

1243

00:59:02,130 --> 00:58:59,680

the thing that's really striking me

1244

00:59:08,230 --> 00:59:02,140

about actually being here in person is

1245

00:59:20,109 --> 00:59:12,310

everywhere sitting queuing up for ice

1246

00:59:22,000 --> 00:59:20,119

cream in and out of stores everybody as

1247

00:59:23,260 --> 00:59:22,010

I said seems to be good-natured and just

1248

00:59:25,800 --> 00:59:23,270

out for a good time to look at the

1249

00:59:28,080 --> 00:59:25,810

spectacle

1250

00:59:30,580 --> 00:59:28,090

it's quite something it is quite

1251

00:59:37,270 --> 00:59:34,960

see this is the triangular building so

1252

00:59:39,760 --> 00:59:37,280

you got roads going off on either side

1253

00:59:41,950 --> 00:59:39,770

yes I know I know this view yes from the

1254

00:59:43,540 --> 00:59:41,960

movies and TV of course but it's

1255

00:59:46,830 --> 00:59:43,550

interesting it's sort of mirrored on our

1256

00:59:49,060 --> 00:59:46,840

other side of their somewhat yeah I

1257

00:59:54,760 --> 00:59:49,070

suppose you better introduce yourself

1258

00:59:59,560 --> 00:59:57,340

and Jocelyn Novell Jocelyn and your

1259

01:00:04,380 --> 00:59:59,570

husband is of course Steve Novello in

1260

01:00:07,120 --> 01:00:04,390

some somewhat known in certain circles a

1261

01:00:11,770 --> 01:00:07,130

new podcast Gotha skeptics guided in

1262

01:00:13,810 --> 01:00:11,780

that but and we've lost one she's she's

1263

01:00:18,940 --> 01:00:13,820

looking at the performance I think yes

1264

01:00:22,100 --> 01:00:18,950

Julia Julia is looking at Florence I'm

1265

01:00:28,150 --> 01:00:24,890

so we're getting moving further into

1266

01:00:31,930 --> 01:00:30,579

and we have a couple of characters here

1267

01:00:35,800 --> 01:00:31,940

dressed as the Statue of Liberty with

1268

01:00:43,829 --> 01:00:38,800

I look quite good really doesn't the

1269

01:00:51,819 --> 01:00:48,339

so deeper and deeper into this amazing

1270

01:00:55,920 --> 01:00:51,829

experience and I don't know that this

1271

01:00:59,440 --> 01:00:55,930

keeps getting more crowded in a way

1272

01:01:03,460 --> 01:00:59,450

another crowded section up here where

1273

01:01:05,470 --> 01:01:03,470

everybody's sitting on that see those

1274

01:01:06,880 --> 01:01:05,480

sitting on those seats so people sit

1275

01:01:15,130 --> 01:01:06,890

there and have pictures taken of

1276

01:01:20,249 --> 01:01:17,229

well as we try to make our way through

1277

01:01:23,200 --> 01:01:20,259

the the river of people the ocean of

1278

01:01:23,710 --> 01:01:23,210

humanity which is sort of now in Times

1279

01:01:25,630 --> 01:01:23,720

Square

1280

01:01:29,109 --> 01:01:25,640

thank you very much novellas service is

1281

01:01:32,480 --> 01:01:29,119

so much fun guiding me here and it's

1282

01:01:40,360 --> 01:01:32,490

just a wonderful experience

1283

01:01:54,750 --> 01:01:45,720

[Music]

1284

01:02:00,430 --> 01:01:57,130

thank you for listening to the skeptic

1285

01:02:03,270 --> 01:02:00,440

zone and my word what a pleasure it has

1286

01:02:07,000 --> 01:02:03,280

been and still is to be here in New York

1287

01:02:08,920 --> 01:02:07,010

it's a apart from the terrible heat and

1288

01:02:11,520 --> 01:02:08,930

humidity wow it's been hot and humid but

1289

01:02:16,920 --> 01:02:11,530

we've had big showers - big rain just

1290

01:02:20,320 --> 01:02:16,930

just pouring rain brief but pouring rain

1291

01:02:22,210 --> 01:02:20,330

but I must say ladies and gentlemen boys

1292

01:02:24,600 --> 01:02:22,220

and girls cats and dogs there's

1293

01:02:28,870 --> 01:02:24,610

something about New York I really like

1294

01:02:32,560 --> 01:02:28,880

there's it's got a it's got a certain

1295

01:02:34,480 --> 01:02:32,570

something it really does I find it suits

1296

01:02:36,070 --> 01:02:34,490

me very well I hope to be back everyone

1297

01:02:40,600 --> 01:02:36,080

tells me to be back in the autumn or the

1298

01:02:42,460 --> 01:02:40,610

fall when the weather is a bit cooler so

1299

01:02:45,300 --> 01:02:42,470

I might aim to do that one year I think

1300

01:02:48,130 --> 01:02:45,310

that would be pretty good I have seen so

1301

01:02:50,410 --> 01:02:48,140

so little of this city and I want to see

1302

01:02:53,020 --> 01:02:50,420

so much more something to aim for I

1303

01:02:55,270 --> 01:02:53,030

think and a big big thank you to the New

1304

01:02:56,830 --> 01:02:55,280

York sceptics and the New England

1305

01:02:59,010 --> 01:02:56,840

skeptics who have been putting this

1306

01:03:02,260 --> 01:02:59,020

conference together under some

1307

01:03:03,760 --> 01:03:02,270

difficulties it must be said not their

1308

01:03:07,570 --> 01:03:03,770

fault there were some problems with the

1309

01:03:10,120 --> 01:03:07,580

the building which they are resolved and

1310

01:03:12,490 --> 01:03:10,130

from the point of view of the speakers I

1311

01:03:15,040 --> 01:03:12,500

think and the the attendees it's just

1312

01:03:17,490 --> 01:03:15,050

been a wonderful convention and thank

1313

01:03:19,720 --> 01:03:17,500

you very much to Michael Feldman and

1314

01:03:22,330 --> 01:03:19,730

everybody who has been looking after me

1315

01:03:24,070 --> 01:03:22,340

so well coming up next week on the

1316

01:03:27,040 --> 01:03:24,080

skeptics own I'll bring you some

1317

01:03:29,170 --> 01:03:27,050

interviews from Nexus maybe James Randi

1318

01:03:30,370 --> 01:03:29,180

Harriet Hall I think I interviewed some

1319

01:03:32,050 --> 01:03:30,380

other people I'll get some more

1320

01:03:34,990 --> 01:03:32,060

interviews tomorrow just before I leave

1321

01:03:36,820 --> 01:03:35,000

but as always it's always a bit of a

1322

01:03:40,840 --> 01:03:36,830

mystery to me to see what comes up by

1323

01:03:43,300 --> 01:03:40,850

the the time another week goes by but

1324

01:03:49,280 --> 01:03:43,310

for this week from New York City this is

1325

01:03:55,500 --> 01:03:51,660

you've been listening to the skeptic

1326

01:03:58,410 --> 01:03:55,510

zone podcast visit our website at WWF

1327

01:04:02,310 --> 01:03:58,420

Tech's on TV for contacts an archive of

1328

01:04:04,980 --> 01:04:02,320

all episodes since 2008 and our online

1329

01:04:07,670 --> 01:04:04,990

store please support the skeptic zone by

1330

01:04:10,710 --> 01:04:07,680

following us on Twitter at skeptic zone

1331

01:04:13,620 --> 01:04:10,720

liking us on facebook and leaving a

1332

01:04:16,620 --> 01:04:13,630

review on iTunes you can also show your

1333

01:04:20,100 --> 01:04:16,630

support by subscribing via PayPal for as

1334

01:04:22,440 --> 01:04:20,110

little as 99 cents a week the skeptic

1335

01:04:24,210 --> 01:04:22,450

zone is an independent production the

1336

01:04:26,370 --> 01:04:24,220

views and opinions expressed on the

1337

01:04:28,910 --> 01:04:26,380

skeptic zone and not necessarily those

1338

01:04:40,140 --> 01:04:28,920

Australian skeptics or any other

1339

01:04:48,000 --> 01:04:40,150

skeptical organisation will pause while

1340

01:04:51,360 --> 01:04:48,010

we go there's no one coming out of Uncle

1341

01:04:54,360 --> 01:04:51,370

Tom's famous pie since 93

1342

01:04:57,080 --> 01:04:54,370

Oh different world with tradies we're

1343

01:05:03,200 --> 01:04:57,090

here he's my slice totally clear horizon

1344

01:05:05,760 --> 01:05:03,210

getting onto the road ok and ok so

1345

01:05:08,700 --> 01:05:05,770

somehow I think that'll probably make it

1346

01:05:10,110 --> 01:05:08,710

into the bloopers he normally puts

1347

01:05:14,160 --> 01:05:10,120

things like that in the bloopers of the