

Episode **596**

THE  
**SKEPTIC  
ZONE**  
PODCAST

15 March 2020

[www.skepticzone.tv](http://www.skepticzone.tv)

Mind Body Spirit Warning

Maynard at Skeptics'  
Dinner Part #2

Dick Smith - Jessica Singer  
Maia Marsh - Eran Segev

Logical Fallacies  
with Michelle Bijkersma  
"Straw Man"

Susan Gerbic  
GSow Update

Life is Wild  
with Michelle Franklin



1  
00:00:11,860 --> 00:00:09,110  
welcome to the skeptic zone the podcast

2  
00:00:13,920 --> 00:00:11,870  
from Australia for science and reason

3  
00:00:16,900 --> 00:00:13,930  
[Music]

4  
00:00:21,920 --> 00:00:16,910  
[Applause]

5  
00:00:24,480 --> 00:00:21,930  
[Music]

6  
00:00:28,500 --> 00:00:24,490  
yes it's the skeptic zone podcast

7  
00:00:31,020 --> 00:00:28,510  
episode number 596 for the 15th of March

8  
00:00:34,050 --> 00:00:31,030  
2020 which--it saunders coming to you

9  
00:00:38,340 --> 00:00:34,060  
this week from Sydney Australia and it's

10  
00:00:41,100 --> 00:00:38,350  
a different world from even this time

11  
00:00:44,910 --> 00:00:41,110  
last week what a different world it is

12  
00:00:49,350 --> 00:00:44,920  
and as we know we don't look into the

13  
00:00:53,130 --> 00:00:49,360

future we can guess I guess what's going

14

00:00:56,490 --> 00:00:53,140

to happen but yes welcome to the

15

00:00:59,340 --> 00:00:56,500

different world we will be covering the

16

00:01:01,350 --> 00:00:59,350

virus situation briefly briefly on

17

00:01:03,960 --> 00:01:01,360

today's skeptic zone I don't want to I

18

00:01:06,030 --> 00:01:03,970

don't want to fill up too many hours

19

00:01:08,610 --> 00:01:06,040

over the next weeks with it although who

20

00:01:10,800 --> 00:01:08,620

knows I thought I might give you other

21

00:01:13,440 --> 00:01:10,810

things to listen to we'll get that over

22

00:01:15,060 --> 00:01:13,450

and done with in the first segment which

23

00:01:17,070 --> 00:01:15,070

is the reading of a press release from

24

00:01:19,590 --> 00:01:17,080

the Australian skeptics about this

25

00:01:22,050 --> 00:01:19,600

weekend's mind-body-spirit festival in

26

00:01:24,149 --> 00:01:22,060

Sydney which despite advice still went

27

00:01:26,160 --> 00:01:24,159

ahead and the reason Australian skeptics

28

00:01:28,950 --> 00:01:26,170

were concerned enough to make a press

29

00:01:31,400 --> 00:01:28,960

release is that a mind-body-spirit

30

00:01:34,520 --> 00:01:31,410

festival would be a magnet for

31

00:01:38,580 --> 00:01:34,530

anti-vaxxers and people who have a very

32

00:01:41,250 --> 00:01:38,590

poor understanding of basic science such

33

00:01:43,350 --> 00:01:41,260

as germ theory and in the press release

34

00:01:48,180 --> 00:01:43,360

you'll hear us mention where you'll hear

35

00:01:52,940 --> 00:01:48,190

the mention of a medical diagnostic tool

36

00:01:56,550 --> 00:01:52,950

and this in to name it is the Metatron

37

00:01:59,070 --> 00:01:56,560

it's a Russian thing it's a it's a

38

00:02:01,770 --> 00:01:59,080

computer program that appears to show

39

00:02:05,970 --> 00:02:01,780

you a scan of your body and one of the

40

00:02:09,180 --> 00:02:05,980

claims made is it can zap viruses this

41

00:02:11,910 --> 00:02:09,190

is an appalling situation that these

42

00:02:15,270 --> 00:02:11,920

things have been peddled out over the

43

00:02:17,699 --> 00:02:15,280

last few years regardless and maybe

44

00:02:20,070 --> 00:02:17,709

after this is all settled down we can

45

00:02:24,059 --> 00:02:20,080

take some serious action against people

46

00:02:26,699 --> 00:02:24,069

who claim they can scan your body with

47

00:02:28,110 --> 00:02:26,709

Star Trek technology and zap viruses

48

00:02:30,330 --> 00:02:28,120

anyway that's coming up at the top of

49

00:02:34,020 --> 00:02:30,340

the show after that it's a special guest

50

00:02:37,320 --> 00:02:34,030

dick Smith the famous entrepreneur and

51  
00:02:39,420 --> 00:02:37,330  
Venturer in Australia he's the man who

52  
00:02:40,980 --> 00:02:39,430  
flew a helicopter around the world solo

53  
00:02:44,160 --> 00:02:40,990  
he flew a helicopter to the North Pole

54  
00:02:47,040 --> 00:02:44,170  
he piloted a balloon from Australia to

55  
00:02:50,760 --> 00:02:47,050  
New Zealand he has had a lifetime of

56  
00:02:53,790 --> 00:02:50,770  
adventures and he was one of the

57  
00:02:55,350 --> 00:02:53,800  
founders of Australian skeptics may not

58  
00:02:58,050 --> 00:02:55,360  
caught up with dick Smith a couple of

59  
00:03:00,479 --> 00:02:58,060  
weeks ago at the skeptics the Australian

60  
00:03:02,520 --> 00:03:00,489  
skeptics dinner meeting and it's a

61  
00:03:05,850 --> 00:03:02,530  
wide-ranging discussion with dick mostly

62  
00:03:08,340 --> 00:03:05,860  
about climate change and other matters

63  
00:03:10,620 --> 00:03:08,350

like population following that it's

64

00:03:13,610 --> 00:03:10,630

logical fallacies worth Michelle Vickers

65

00:03:15,900 --> 00:03:13,620

MA this week Michelle looks at straw man

66

00:03:18,229 --> 00:03:15,910

in fact I think it's one of the very

67

00:03:21,930 --> 00:03:18,239

early ones I can remember hearing about

68

00:03:24,420 --> 00:03:21,940

straw man this week after that it's an

69

00:03:28,259 --> 00:03:24,430

update from our friend susan gerbic from

70

00:03:30,150 --> 00:03:28,269

guerrilla skepticism on wikipedia then

71

00:03:33,630 --> 00:03:30,160

to round off the show Michelle Franklin

72

00:03:36,420 --> 00:03:33,640

life is wild invasive species looking at

73

00:03:39,240 --> 00:03:36,430

horses yes sometimes we think about

74

00:03:42,710 --> 00:03:39,250

insects or rats or something but in

75

00:03:45,000 --> 00:03:42,720

Australia horses are an invasive species

76

00:03:48,770 --> 00:03:45,010

but now it's time for me to run out the

77

00:03:51,780 --> 00:03:48,780

door wash my hands wash my hands oh yes

78

00:03:54,890 --> 00:03:51,790

run downstairs have look in the fridge I

79

00:03:57,360 --> 00:03:54,900

wonder if there's any chocolate left

80

00:03:59,160 --> 00:03:57,370

it's a good old standby isn't it in fact

81

00:04:01,319 --> 00:03:59,170

I noticed the other day when I was in

82

00:04:04,170 --> 00:04:01,329

the supermarket keeping my distance from

83

00:04:06,110 --> 00:04:04,180

everybody but chocolate seems to be

84

00:04:07,920 --> 00:04:06,120

selling very well at the moment

85

00:04:09,539 --> 00:04:07,930

chocolate and toilet paper I think

86

00:04:12,150 --> 00:04:09,549

there's a message there well I do that I

87

00:04:28,300 --> 00:04:12,160

hope you enjoy the skeptic zone

88

00:04:31,310 --> 00:04:28,310

[Music]

89

00:04:33,469 --> 00:04:31,320

for many years as regular skeptic zone

90

00:04:35,120 --> 00:04:33,479

now listeners will know we've been

91

00:04:36,980 --> 00:04:35,130

reporting from the festival of

92

00:04:39,710 --> 00:04:36,990

mind/body/spirit or as we call it of

93

00:04:42,560 --> 00:04:39,720

course all together now mind body wallet

94

00:04:44,930 --> 00:04:42,570

now this is every six months here in

95

00:04:46,700 --> 00:04:44,940

Sydney and around the country major

96

00:04:50,330 --> 00:04:46,710

cities Brisbane Melbourne

97

00:04:54,860 --> 00:04:50,340

I think Adelaide - this is the first

98

00:04:59,240 --> 00:04:54,870

time for me personally in almost two

99

00:05:02,379 --> 00:04:59,250

decades that I will not be attending the

100

00:05:04,879 --> 00:05:02,389

mind body wallet this time around and

101  
00:05:07,640 --> 00:05:04,889  
there's a very good reason for this and

102  
00:05:09,589 --> 00:05:07,650  
I will read now from a press release

103  
00:05:15,670 --> 00:05:09,599  
issued by the Australian skeptics on

104  
00:05:19,430 --> 00:05:15,680  
March the 12th 2020 new-age

105  
00:05:22,730 --> 00:05:19,440  
pseudoscience is no match for kovat 19

106  
00:05:25,550 --> 00:05:22,740  
by Tim Mendham in a break with

107  
00:05:27,379 --> 00:05:25,560  
decades-long tradition members of

108  
00:05:29,649 --> 00:05:27,389  
Australian skeptics will not be

109  
00:05:32,029 --> 00:05:29,659  
attending this weekend's

110  
00:05:34,279 --> 00:05:32,039  
mind/body/spirit exhibition in Sydney's

111  
00:05:37,189 --> 00:05:34,289  
darling harbour due to the dangers of

112  
00:05:40,640 --> 00:05:37,199  
the spread of kovat 19 and the ignorant

113  
00:05:41,990 --> 00:05:40,650

attitudes of some exhibitors attending

114

00:05:44,810 --> 00:05:42,000

would put our members at risk

115

00:05:47,899 --> 00:05:44,820

many of the pseudo scientific modalities

116

00:05:49,939 --> 00:05:47,909

on display reject basic scientific

117

00:05:53,330 --> 00:05:49,949

concepts such as germ theory and

118

00:05:55,730 --> 00:05:53,340

pathogen transmission we do not trust

119

00:05:57,649 --> 00:05:55,740

some of the exhibitors to understand the

120

00:06:00,469 --> 00:05:57,659

seriousness of the viral outbreak and

121

00:06:02,689 --> 00:06:00,479

the need for rigorous hygiene when

122

00:06:05,210 --> 00:06:02,699

exhibitors deny that there are such

123

00:06:08,120 --> 00:06:05,220

things as germs and they are opposed to

124

00:06:10,279 --> 00:06:08,130

vaccination then how could they offer

125

00:06:12,710 --> 00:06:10,289

anything that is not useless or

126

00:06:14,930 --> 00:06:12,720

dangerous some such as the rabidly

127

00:06:17,629 --> 00:06:14,940

anti-vaccine a group Australian

128

00:06:20,089 --> 00:06:17,639

vaccination risks network have even

129

00:06:24,379 --> 00:06:20,099

suggested that kovat 19 does not exist

130

00:06:27,890 --> 00:06:24,389

but is quote just a bad cold and quote

131

00:06:30,740 --> 00:06:27,900

in the past we have uncovered various

132

00:06:33,620 --> 00:06:30,750

medical testing machines which seem to

133

00:06:36,140 --> 00:06:33,630

do no real analysis and have no medical

134

00:06:38,810 --> 00:06:36,150

benefit at all given what we are now

135

00:06:42,520 --> 00:06:38,820

facing such equipment is nothing short

136

00:06:45,050 --> 00:06:42,530

of outrageous quote not attending

137

00:06:47,719 --> 00:06:45,060

mind/body/spirit is an extraordinary

138

00:06:49,370 --> 00:06:47,729

step for us in quote said Tim Mendham

139

00:06:52,070 --> 00:06:49,380  
executive officer for Australian

140

00:06:53,840 --> 00:06:52,080  
skeptics Inc quote many of our members

141

00:06:56,360 --> 00:06:53,850  
have been regularly attending the

142

00:06:59,330 --> 00:06:56,370  
exhibition of new-age and alternative

143

00:07:01,550 --> 00:06:59,340  
products and services for years we have

144

00:07:03,200 --> 00:07:01,560  
taken great interest in the goods on

145

00:07:05,150 --> 00:07:03,210  
show and have had interesting

146

00:07:08,360 --> 00:07:05,160  
discussions with various suppliers about

147

00:07:11,150 --> 00:07:08,370  
the methodology and efficacy of what

148

00:07:13,820 --> 00:07:11,160  
they are offering but because of the

149

00:07:16,040 --> 00:07:13,830  
current situation with kovat 19 and the

150

00:07:18,159 --> 00:07:16,050  
fact that at least some exhibitors have

151  
00:07:20,570 --> 00:07:18,169  
a minimal understanding or even

152  
00:07:23,150 --> 00:07:20,580  
antipathy to the scientific and medical

153  
00:07:26,360 --> 00:07:23,160  
issues involved we are forced to make

154  
00:07:29,749 --> 00:07:26,370  
this move note we are not asking that

155  
00:07:31,700 --> 00:07:29,759  
the exhibition be closed we just feel

156  
00:07:32,990 --> 00:07:31,710  
that the public should be aware that

157  
00:07:35,029 --> 00:07:33,000  
some of the exhibitors at

158  
00:07:37,250 --> 00:07:35,039  
mind/body/spirit have views that are

159  
00:07:39,350 --> 00:07:37,260  
diametrically opposed to the best

160  
00:07:41,719 --> 00:07:39,360  
evidence-based scientific and medical

161  
00:07:42,140 --> 00:07:41,729  
knowledge and an attitude that could be

162  
00:07:46,879 --> 00:07:42,150  
dangerous

163  
00:07:54,770 --> 00:07:46,889

unquote the New Age is no match for a

164

00:07:56,810 --> 00:07:54,780

real medical threat of course one of the

165

00:07:59,689 --> 00:07:56,820

downsides about not going to mind body

166

00:08:03,939 --> 00:07:59,699

wallet this time around is hearing

167

00:08:06,140 --> 00:08:03,949

firsthand some of the outrageously

168

00:08:09,260 --> 00:08:06,150

dangerous advice that you can normally

169

00:08:11,180 --> 00:08:09,270

hear there but this time with the

170

00:08:14,719 --> 00:08:11,190

current situation with the coronavirus

171

00:08:17,870 --> 00:08:14,729

that covered 19 I just dread to think

172

00:08:18,990 --> 00:08:17,880

what sort of nonsense is being spouted

173

00:08:21,150 --> 00:08:19,000

there

174

00:08:23,970 --> 00:08:21,160

and that press release can be found at

175

00:08:25,290 --> 00:08:23,980

skeptics calm today you with a link in

176

00:08:46,930 --> 00:08:25,300

this week's show notes

177

00:08:51,389 --> 00:08:48,290

[Music]

178

00:08:52,980 --> 00:08:51,399

olice less habla Paola Dez de l'air

179

00:08:55,980 --> 00:08:52,990

Moses with other Buenos Aires in

180

00:08:57,840 --> 00:08:55,990

Argentina when the Kucha most podcasts

181

00:09:01,079 --> 00:08:57,850

Kucha mom l'm ok Kucha todo el mundo

182

00:09:03,600 --> 00:09:01,089

como the skeptic zone ojala pueden

183

00:09:05,610 --> 00:09:03,610

madeira visit Ana's algun dia esperamos

184

00:09:12,990 --> 00:09:05,620

con nuestra Ricky SEMA comida localize

185

00:09:14,910 --> 00:09:13,000

yeah podemos hablar un tango mientras

186

00:09:25,370 --> 00:09:14,920

tanto sugandha fruit and Eau de su dosa

187

00:09:25,380 --> 00:09:29,530

[Music]

188

00:09:37,860 --> 00:09:34,729

years may not spooky action at the

189

00:09:41,620 --> 00:09:39,970

look somewhere there's always great fun

190

00:09:43,630 --> 00:09:41,630

to bump into this dick Smith my dick how

191

00:09:45,370 --> 00:09:43,640

are you how are things well it's pretty

192

00:09:46,780 --> 00:09:45,380

good you certainly got out of retail at

193

00:09:49,720 --> 00:09:46,790

a good time didn't you yeah I was very

194

00:09:52,180 --> 00:09:49,730

lucky wasn't I maybe I can look into the

195

00:09:53,890 --> 00:09:52,190

future yes quite well indeed in fact

196

00:09:55,720 --> 00:09:53,900

would you would you think would you ever

197

00:09:57,670 --> 00:09:55,730

suggest anyone get into retail selling

198

00:09:59,290 --> 00:09:57,680

anything at this point in time no at the

199

00:10:01,030 --> 00:09:59,300

moment I've advised people to get out

200

00:10:03,220 --> 00:10:01,040

look Amazon is going to have an

201  
00:10:05,680 --> 00:10:03,230  
incredible effect because they just got

202  
00:10:07,870 --> 00:10:05,690  
such low overheads the only reason Jeff

203  
00:10:10,150 --> 00:10:07,880  
Bezos is the wealthiest person on earth

204  
00:10:11,830 --> 00:10:10,160  
as he knows a way of making money and

205  
00:10:14,740 --> 00:10:11,840  
employing the lowest number of people

206  
00:10:16,150 --> 00:10:14,750  
possible and he's good he got the little

207  
00:10:17,800 --> 00:10:16,160  
fingers wrapped around the government's

208  
00:10:20,170 --> 00:10:17,810  
- there with those subsidies in the US

209  
00:10:22,090 --> 00:10:20,180  
as well absolutely now he's very astute

210  
00:10:24,100 --> 00:10:22,100  
you have to hand it to him and of course

211  
00:10:25,420 --> 00:10:24,110  
what do you think why do you think

212  
00:10:27,310 --> 00:10:25,430  
people are slow to accept the the

213  
00:10:29,590 --> 00:10:27,320

climate change information that they're

214

00:10:31,570 --> 00:10:29,600

confronted with why do they deny it or

215

00:10:33,910 --> 00:10:31,580

they go look I don't know about that I

216

00:10:35,740 --> 00:10:33,920

have a famous expression that is the

217

00:10:38,380 --> 00:10:35,750

human-powered or self-deluded is

218

00:10:41,290 --> 00:10:38,390

unlimited but the reason many people

219

00:10:44,380 --> 00:10:41,300

deny the climate change issue is that

220

00:10:46,600 --> 00:10:44,390

it's so complex and then also there's

221

00:10:48,610 --> 00:10:46,610

some very vocal people saying it's all

222

00:10:50,860 --> 00:10:48,620

rubbish it's all made up and that

223

00:10:53,200 --> 00:10:50,870

persuasive people and because of that

224

00:10:55,180 --> 00:10:53,210

coupling up it's interesting I've got

225

00:10:57,010 --> 00:10:55,190

three groups of friends I've got my

226

00:10:59,080 --> 00:10:57,020

middle of the range friends and they

227

00:11:01,360 --> 00:10:59,090

basically believe in human induced

228

00:11:03,820 --> 00:11:01,370

climate change then I'll get my left key

229

00:11:05,710 --> 00:11:03,830

friends who are utterly convinced but on

230

00:11:07,600 --> 00:11:05,720

the right side I've got my right-wing

231

00:11:10,150 --> 00:11:07,610

friends who are all climate change

232

00:11:12,730 --> 00:11:10,160

deniers now all of these people are

233

00:11:16,060 --> 00:11:12,740

genuine in their beliefs some are wrong

234

00:11:17,740 --> 00:11:16,070

of course but what just what you can do

235

00:11:21,040 --> 00:11:17,750

about it I think there's going to have

236

00:11:23,350 --> 00:11:21,050

to be some major crash some Hitler walk

237

00:11:25,720 --> 00:11:23,360

into Poland moment where we all have to

238

00:11:27,940 --> 00:11:25,730

do something otherwise it's going to be

239

00:11:30,190 --> 00:11:27,950

like the Frog being heated in the water

240

00:11:32,410 --> 00:11:30,200

we're not going to do anything do you

241

00:11:33,490 --> 00:11:32,420

think the coronavirus coronavirus

242

00:11:34,600 --> 00:11:33,500

incident could be something that

243

00:11:36,310 --> 00:11:34,610

promotes that

244

00:11:38,290 --> 00:11:36,320

first no I don't think so I think the

245

00:11:40,600 --> 00:11:38,300

coronavirus might have an effect on our

246

00:11:42,400 --> 00:11:40,610

economic system which I've always

247

00:11:45,519 --> 00:11:42,410

thought is going to crash at some time

248

00:11:47,620 --> 00:11:45,529

but when it comes to climate change no I

249

00:11:49,780 --> 00:11:47,630

thought the bush fires would have a real

250

00:11:52,480 --> 00:11:49,790

effect but they are now almost forgotten

251  
00:11:54,610 --> 00:11:52,490  
by many people now the rains have come

252  
00:11:57,210 --> 00:11:54,620  
everything's okay and one of the

253  
00:11:59,290 --> 00:11:57,220  
problems is many of the people who

254  
00:12:01,690 --> 00:11:59,300  
preach and talk about climate change

255  
00:12:04,240 --> 00:12:01,700  
make out as if it's going to be an easy

256  
00:12:06,310 --> 00:12:04,250  
problem to solve it is not going to be

257  
00:12:08,500 --> 00:12:06,320  
so David Attenborough is a hundred

258  
00:12:11,920 --> 00:12:08,510  
percent correct where he said it's going

259  
00:12:13,990 --> 00:12:11,930  
to require enormous sacrifice and no

260  
00:12:15,790 --> 00:12:14,000  
politician is game enough to get up and

261  
00:12:18,100 --> 00:12:15,800  
say we're all going to have to sacrifice

262  
00:12:20,560 --> 00:12:18,110  
well it mainly means a loss of job in

263  
00:12:21,759 --> 00:12:20,570

certain sectors like mining and Industry

264

00:12:23,920 --> 00:12:21,769

it's going to be lost in those sectors

265

00:12:26,019 --> 00:12:23,930

yeah well or move the jobs it has to be

266

00:12:27,940 --> 00:12:26,029

planned see one of the problems is we

267

00:12:30,670 --> 00:12:27,950

sell a hundred billion dollars worth of

268

00:12:33,069 --> 00:12:30,680

fossil fuels every year now our economy

269

00:12:34,440 --> 00:12:33,079

will collapse without those sales so

270

00:12:36,400 --> 00:12:34,450

they have to be replaced with something

271

00:12:38,680 --> 00:12:36,410

personally I believe we should be

272

00:12:41,259 --> 00:12:38,690

looking at nuclear energy I'm Pro

273

00:12:43,689 --> 00:12:41,269

renewables but I don't believe the

274

00:12:45,400 --> 00:12:43,699

statement where people say renewables

275

00:12:48,160 --> 00:12:45,410

are now cheaper than fossil fuels that's

276

00:12:49,620 --> 00:12:48,170

simply not true they are cheaper when

277

00:12:52,480 --> 00:12:49,630

the Sun is out when the wind is blowing

278

00:12:55,420 --> 00:12:52,490

but because we don't have a low-cost

279

00:12:57,490 --> 00:12:55,430

method of storage they become very

280

00:12:59,590 --> 00:12:57,500

expensive when you look at say one year

281

00:13:01,600 --> 00:12:59,600

of output although if you look at the

282

00:13:03,400 --> 00:13:01,610

lifetime of a nuclear plant and cleaning

283

00:13:05,530 --> 00:13:03,410

the cleanup and all the possibility of

284

00:13:08,710 --> 00:13:05,540

storage maybe that's more expensive than

285

00:13:11,319 --> 00:13:08,720

renewables no no I see the problem is

286

00:13:13,150 --> 00:13:11,329

the renewables are intermittent we don't

287

00:13:16,449 --> 00:13:13,160

have a successful way of storing them

288

00:13:20,560 --> 00:13:16,459

the battery price needs to come down 40

289

00:13:23,079 --> 00:13:20,570

times not 40 percent 40 times to be

290

00:13:25,360 --> 00:13:23,089

competitive with fossil fuels how about

291

00:13:27,639 --> 00:13:25,370

the occasional gas powered plant I mean

292

00:13:28,900 --> 00:13:27,649

yes co2 but not as much no I don't

293

00:13:31,030 --> 00:13:28,910

accept that at all because we're

294

00:13:32,889 --> 00:13:31,040

doubling our population so if you change

295

00:13:35,170 --> 00:13:32,899

to gas we're going to have 50 percent

296

00:13:37,300 --> 00:13:35,180

amount of carbon but we're doubling our

297

00:13:39,790 --> 00:13:37,310

population we have one of the highest

298

00:13:41,350 --> 00:13:39,800

population growths in the developed

299

00:13:42,130 --> 00:13:41,360

world that means we're back where we

300

00:13:45,550 --> 00:13:42,140

started from

301  
00:13:48,170 --> 00:13:45,560  
no gas is not the way my pump

302  
00:13:50,389 --> 00:13:48,180  
bhadram no way that's the most dangerous

303  
00:13:53,090 --> 00:13:50,399  
form by you wouldn't want to live below

304  
00:13:56,480 --> 00:13:53,100  
a hydro dam because they collapse the

305  
00:13:59,090 --> 00:13:56,490  
worst one in the world is 25,000 died in

306  
00:14:00,710 --> 00:13:59,100  
China when a hydro dam collapse in

307  
00:14:02,900 --> 00:14:00,720  
America I think it was over a hundred

308  
00:14:05,569 --> 00:14:02,910  
there's no way that I'd want to live

309  
00:14:07,759 --> 00:14:05,579  
below a punch storage dam because of the

310  
00:14:09,170 --> 00:14:07,769  
risk of it collapsing and because she

311  
00:14:10,519 --> 00:14:09,180  
mentioned population growth there and

312  
00:14:12,079 --> 00:14:10,529  
that's one thing I've always liked about

313  
00:14:15,199 --> 00:14:12,089

use you've been someone that's tried to

314

00:14:17,750 --> 00:14:15,209

promote a conversation and that's pretty

315

00:14:19,400 --> 00:14:17,760

difficult I mean climate change is also

316

00:14:21,470 --> 00:14:19,410

a difficult one do you think population

317

00:14:24,170 --> 00:14:21,480

control is even harder than it's more

318

00:14:25,610 --> 00:14:24,180

important because everything every

319

00:14:27,680 --> 00:14:25,620

problem we have in the world today is

320

00:14:29,870 --> 00:14:27,690

harder to fix with more people and the

321

00:14:32,690 --> 00:14:29,880

fact that the United Nations has no plan

322

00:14:36,139 --> 00:14:32,700

about population we're going from 7 to

323

00:14:38,000 --> 00:14:36,149

11 million people and it's so ridiculous

324

00:14:40,250 --> 00:14:38,010

to be concentrating on climate change

325

00:14:42,769 --> 00:14:40,260

when no one's saying anything about the

326

00:14:44,960 --> 00:14:42,779

population growth one of the problems is

327

00:14:47,180 --> 00:14:44,970

we have about 3 billion people who are

328

00:14:49,009 --> 00:14:47,190

really poor in this world they want to

329

00:14:51,019 --> 00:14:49,019

raise their standard of living they

330

00:14:52,880 --> 00:14:51,029

start using fossil fuels like we have

331

00:14:54,949 --> 00:14:52,890

well the whole world will be destroyed

332

00:14:58,280 --> 00:14:54,959

even quicker so do you think this is

333

00:15:00,079 --> 00:14:58,290

like a sort of economic pyramid scheme

334

00:15:01,790 --> 00:15:00,089

by having more people like it's easy to

335

00:15:03,500 --> 00:15:01,800

have a economic growth when you add more

336

00:15:05,780 --> 00:15:03,510

people to the mix I absolutely right

337

00:15:08,569 --> 00:15:05,790

it's a Ponzi scheme and one of the yeah

338

00:15:10,300 --> 00:15:08,579

one of the problems is that our economic

339

00:15:13,040 --> 00:15:10,310

system the one I've done so well out of

340

00:15:15,439 --> 00:15:13,050

requires perpetual growth now that's

341

00:15:17,660 --> 00:15:15,449

impossible it's a finite world so one

342

00:15:19,880 --> 00:15:17,670

day there'll be a major correction and

343

00:15:21,980 --> 00:15:19,890

we'll have to live within our means that

344

00:15:23,449 --> 00:15:21,990

doesn't seem to be happening in the

345

00:15:25,910 --> 00:15:23,459

immediate future but it will in the

346

00:15:27,889 --> 00:15:25,920

long-term future now I when you're

347

00:15:29,180 --> 00:15:27,899

growing up and when your dad was doing

348

00:15:30,980 --> 00:15:29,190

business and various things what was the

349

00:15:32,300 --> 00:15:30,990

interest rate back then is it natural to

350

00:15:34,460 --> 00:15:32,310

have about one or two three percent

351

00:15:36,350 --> 00:15:34,470

interest is that the actual like the 70s

352

00:15:38,120 --> 00:15:36,360

in the 80s that was really weirdly high

353

00:15:40,400 --> 00:15:38,130

interest wasn't it yeah absolutely look

354

00:15:43,310 --> 00:15:40,410

when I sold Dick Smith electronics must

355

00:15:44,630 --> 00:15:43,320

have been nearly over 30 years ago the

356

00:15:47,600 --> 00:15:44,640

interest rate we were getting in the

357

00:15:50,540 --> 00:15:47,610

bank was 18% Wow and someone who tried

358

00:15:52,880 --> 00:15:50,550

to borrow money was paying 28%

359

00:15:54,590 --> 00:15:52,890

so absolutely saving I don't quite

360

00:15:57,150 --> 00:15:54,600

understand now with the interest rate

361

00:15:59,850 --> 00:15:57,160

being so low I think it's moving us

362

00:16:01,889 --> 00:15:59,860

Ward's some enormous collapse because at

363

00:16:03,300 --> 00:16:01,899

the moment you can in the government

364

00:16:04,980 --> 00:16:03,310

just lowers the interest rate and that

365

00:16:07,259 --> 00:16:04,990

means we can keep growing when it's

366

00:16:11,129 --> 00:16:07,269

impossible well you can't go much below

367

00:16:13,499 --> 00:16:11,139

zero or you can effect amazing in Japan

368

00:16:15,360 --> 00:16:13,509

you actually have to pay to put your

369

00:16:18,150 --> 00:16:15,370

money in the bank so they are below zero

370

00:16:19,860 --> 00:16:18,160

they're in - rates of interest define

371

00:16:21,420 --> 00:16:19,870

amazing amazing as far as population

372

00:16:22,740 --> 00:16:21,430

control is there any country in the

373

00:16:25,079 --> 00:16:22,750

world that is what you would consider

374

00:16:26,730 --> 00:16:25,089

best practice in - maybe looking into

375

00:16:28,379 --> 00:16:26,740

their growth of their population oh yeah

376

00:16:30,240 --> 00:16:28,389

there's lots of countries first of all I

377

00:16:32,790 --> 00:16:30,250

don't believe in population control at

378

00:16:34,829 --> 00:16:32,800

all what I've said is that we need to

379

00:16:36,689 --> 00:16:34,839

have a population plan I've always said

380

00:16:38,730 --> 00:16:36,699

parents should have the number of

381

00:16:40,470 --> 00:16:38,740

children they can give a good life to we

382

00:16:42,420 --> 00:16:40,480

don't have a problem from birthrate in

383

00:16:44,699 --> 00:16:42,430

Australia it's because of enormous

384

00:16:47,009 --> 00:16:44,709

immigration but first of all what

385

00:16:49,769 --> 00:16:47,019

countries are showing the way Japan is

386

00:16:52,619 --> 00:16:49,779

going from 120 million to 90 million by

387

00:16:54,420 --> 00:16:52,629

2050 and Italy is dropping its

388

00:16:56,429 --> 00:16:54,430

population even though it's Catholic

389

00:16:58,230 --> 00:16:56,439

obviously they don't take any notice of

390

00:17:00,629 --> 00:16:58,240

the Pope fair enough in Germany the

391

00:17:02,639 --> 00:17:00,639

population is basically stabilized so

392

00:17:04,860 --> 00:17:02,649

there are some very good examples in the

393

00:17:07,319 --> 00:17:04,870

world in the developed world we're the

394

00:17:10,559 --> 00:17:07,329

worst possible example we have a growth

395

00:17:13,529 --> 00:17:10,569

rate of 1.6% per year which is going to

396

00:17:15,539 --> 00:17:13,539

take us to 100 million people at the end

397

00:17:18,329 --> 00:17:15,549

of the century when our grandkids will

398

00:17:19,860 --> 00:17:18,339

be alive now no one believes a hundred

399

00:17:22,289 --> 00:17:19,870

million is a sensible number for

400

00:17:24,179 --> 00:17:22,299

Australia yes I mean it'll be much what

401

00:17:26,579 --> 00:17:24,189

it'll be like Taiwan all along the east

402

00:17:28,860 --> 00:17:26,589

coast yes it will be and we're an arid

403

00:17:30,360 --> 00:17:28,870

country and it's probably possible to

404

00:17:32,580 --> 00:17:30,370

have a hundred million but we'll end up

405

00:17:34,529 --> 00:17:32,590

like the United States they have 50

406

00:17:36,600 --> 00:17:34,539

million people that are poor that are on

407

00:17:39,539 --> 00:17:36,610

food stamps that are on the dole they

408

00:17:41,490 --> 00:17:39,549

can't provide enough jobs for 330

409

00:17:43,380 --> 00:17:41,500

million they've gone past the sweet

410

00:17:45,180 --> 00:17:43,390

point but how do you feel about the

411

00:17:46,440 --> 00:17:45,190

universal allowance that everybody gets

412

00:17:48,029 --> 00:17:46,450

a certain amount of money from the

413

00:17:49,649 --> 00:17:48,039

government all the time regardless how

414

00:17:51,419 --> 00:17:49,659

do you feel about that scheme yes the

415

00:17:53,159 --> 00:17:51,429

universal wage I think we'll have to

416

00:17:55,590 --> 00:17:53,169

move to something like that one of our

417

00:17:59,549 --> 00:17:55,600

problems is that since the second world

418

00:18:02,159 --> 00:17:59,559

war the growth we've had is by consuming

419

00:18:05,190 --> 00:18:02,169

more up until the Second World War the

420

00:18:08,340 --> 00:18:05,200

growth was used to reduce working hours

421

00:18:10,260 --> 00:18:08,350

but now what we do is we the growth

422

00:18:12,690 --> 00:18:10,270

would end up with unemployment so we

423

00:18:15,000 --> 00:18:12,700

keep people working long hours but then

424

00:18:17,190 --> 00:18:15,010

we make more and more stuff so if you go

425

00:18:19,170 --> 00:18:17,200

into a typical shopping center half the

426

00:18:21,390 --> 00:18:19,180

stuff there is rubbish it's not needed

427

00:18:23,670 --> 00:18:21,400

but if we stop buying it the whole

428

00:18:26,130 --> 00:18:23,680

economy will collapse you mentioned

429

00:18:26,820 --> 00:18:26,140

before I mentioned a Ponzi scheme that's

430

00:18:29,550 --> 00:18:26,830

what it is

431

00:18:33,720 --> 00:18:29,560

so we need to learn to live within our

432

00:18:35,760 --> 00:18:33,730

means it's one world until we use 1.8

433

00:18:37,980 --> 00:18:35,770

times the world's resources every year

434

00:18:39,690 --> 00:18:37,990

now and it's pretty obvious that can't

435

00:18:41,160 --> 00:18:39,700

go on for very long and you've obviously

436

00:18:42,720 --> 00:18:41,170

spoken to a couple of politicians

437

00:18:44,580 --> 00:18:42,730

throughout your years and they just

438

00:18:46,500 --> 00:18:44,590

don't want to get into this it's just a

439

00:18:48,510 --> 00:18:46,510

it's a noodley horrible box of worms

440

00:18:50,700 --> 00:18:48,520

it's not so you're right too hard no not

441

00:18:53,160 --> 00:18:50,710

even the Greens the Greens don't have a

442

00:18:56,400 --> 00:18:53,170

population policy really absolutely no

443

00:18:58,140 --> 00:18:56,410

it's too hard for politicians because if

444

00:19:00,840 --> 00:18:58,150

you start talking about population

445

00:19:03,360 --> 00:19:00,850

number one you've got a talk of of

446

00:19:06,000 --> 00:19:03,370

giving people control of their of

447

00:19:07,770 --> 00:19:06,010

conception because you go to Africa

448

00:19:09,360 --> 00:19:07,780

where the mothers are having four or

449

00:19:11,220 --> 00:19:09,370

five kids they don't want four or five

450

00:19:13,200 --> 00:19:11,230

but they can there's no way they don't

451  
00:19:15,000 --> 00:19:13,210  
have contraception so that's an

452  
00:19:17,190 --> 00:19:15,010  
important thing we should be telling

453  
00:19:19,230 --> 00:19:17,200  
Australians first of all birth rate

454  
00:19:21,960 --> 00:19:19,240  
we're okay but we shouldn't be bringing

455  
00:19:24,570 --> 00:19:21,970  
in this huge number of immigrants all

456  
00:19:26,790 --> 00:19:24,580  
the time because in the end there won't

457  
00:19:28,740 --> 00:19:26,800  
be enough jobs and when you end up with

458  
00:19:31,050 --> 00:19:28,750  
generations not having a job that's a

459  
00:19:32,820 --> 00:19:31,060  
problem and it's like it's a difficult

460  
00:19:34,680 --> 00:19:32,830  
conversation to have but someone should

461  
00:19:37,140 --> 00:19:34,690  
have the conversation pick a number

462  
00:19:38,550 --> 00:19:37,150  
after wide consultation and stick with

463  
00:19:40,530 --> 00:19:38,560

it is that what to do I'm Pro

464

00:19:42,780 --> 00:19:40,540

immigration it's what's made Australia

465

00:19:44,760 --> 00:19:42,790

such a fantastic place but it's sensible

466

00:19:47,580 --> 00:19:44,770

numbers our long-term average has been

467

00:19:50,040 --> 00:19:47,590

75 thousand a year if we went back to

468

00:19:53,010 --> 00:19:50,050

that we'd stabilize our population at 30

469

00:19:54,720 --> 00:19:53,020

million that would be sensible we think

470

00:19:55,860 --> 00:19:54,730

it's great talking to you again and what

471

00:19:58,350 --> 00:19:55,870

are you the most interested in hearing

472

00:20:00,270 --> 00:19:58,360

dr. Mann talk about tonight well I'm

473

00:20:01,890 --> 00:20:00,280

gonna be interested I've got lots of

474

00:20:04,080 --> 00:20:01,900

right-wing friends who a complete

475

00:20:05,700 --> 00:20:04,090

climate change deniers hey did you

476

00:20:08,700 --> 00:20:05,710

actually know Bob Santa Maria

477

00:20:11,610 --> 00:20:08,710

I didn't - coca I'm sure he would have

478

00:20:13,830 --> 00:20:11,620

been a denier look I'm not a I'm not a

479

00:20:16,019 --> 00:20:13,840

person who has qualifications I use

480

00:20:17,909 --> 00:20:16,029

common sense and I ask lots of advice

481

00:20:19,769 --> 00:20:17,919

and I'm pretty well convinced that

482

00:20:21,990 --> 00:20:19,779

humans are affecting the climate and

483

00:20:24,000 --> 00:20:22,000

it's going to be all bad from here if we

484

00:20:27,029 --> 00:20:24,010

don't do something that's great talking

485

00:20:28,950 --> 00:20:27,039

again thank you for me with the

486

00:20:30,240 --> 00:20:28,960

president tonight who's Judy is - what

487

00:20:33,330 --> 00:20:30,250

is your duty tonight if you got me oh

488

00:20:35,070 --> 00:20:33,340

yes I am I've been put to work by Kim

489

00:20:37,220 --> 00:20:35,080

our executive officer and I'm kicking

490

00:20:40,139 --> 00:20:37,230

the names off the list as people arrived

491

00:20:41,700 --> 00:20:40,149

70 people tonight is it yeah yeah really

492

00:20:44,279 --> 00:20:41,710

good turnout I'm very happy with it yeah

493

00:20:46,139 --> 00:20:44,289

so he's one of the 97% of climatologists

494

00:20:48,690 --> 00:20:46,149

who do believe the earth is changing due

495

00:20:50,580 --> 00:20:48,700

to man-made efforts why do you think

496

00:20:53,010 --> 00:20:50,590

people are slow to accept this news or

497

00:20:57,110 --> 00:20:53,020

don't want to accept this news well I

498

00:20:59,909 --> 00:20:57,120

think it it would in it will entail

499

00:21:02,250 --> 00:20:59,919

major change and major planning and not

500

00:21:04,350 --> 00:21:02,260

that it can't be done but I think people

501  
00:21:08,130 --> 00:21:04,360  
are very very resistant to that sort of

502  
00:21:10,860 --> 00:21:08,140  
change and I was actually thinking about

503  
00:21:14,100 --> 00:21:10,870  
some not a comparable but not a

504  
00:21:16,830 --> 00:21:14,110  
comparable situation but a a similar

505  
00:21:22,380 --> 00:21:16,840  
situation with the hole in the ozone

506  
00:21:28,409 --> 00:21:22,390  
layer and and how once it was determined

507  
00:21:31,139 --> 00:21:28,419  
it was accepted and Industry accepted it

508  
00:21:33,760 --> 00:21:31,149  
and politicians accepted it and steps

509  
00:21:37,660 --> 00:21:33,770  
were taken to phase out CFC

510  
00:21:41,920 --> 00:21:37,670  
and it was a no-brainer and the the

511  
00:21:45,790 --> 00:21:41,930  
necessary action was taken and I why

512  
00:21:48,580 --> 00:21:45,800  
this is so different it's a bit of a

513  
00:21:52,980 --> 00:21:48,590

mystery really but except that it's more

514

00:21:57,010 --> 00:21:52,990

complicated and there are many many more

515

00:21:58,720 --> 00:21:57,020

serious sort of industrial interests

516

00:22:04,930 --> 00:21:58,730

such as the coal industry working

517

00:22:06,550 --> 00:22:04,940

against it yes why do you think people

518

00:22:07,990 --> 00:22:06,560

are a bit slow to accept this the

519

00:22:10,810 --> 00:22:08,000

climate science or they just don't want

520

00:22:14,500 --> 00:22:10,820

it look I think there's so many

521

00:22:17,850 --> 00:22:14,510

different reasons I think one of the big

522

00:22:21,040 --> 00:22:17,860

ones these days that's particularly

523

00:22:23,380 --> 00:22:21,050

personal at the moment is that there is

524

00:22:26,310 --> 00:22:23,390

a whole lot of alternative facts

525

00:22:29,440 --> 00:22:26,320

available to them so people are I guess

526

00:22:31,840 --> 00:22:29,450

if they're that way inclined or if

527

00:22:34,180 --> 00:22:31,850

somebody misson forms them and sets them

528

00:22:37,060 --> 00:22:34,190

on a trajectory of researching things

529

00:22:39,400 --> 00:22:37,070

online in that direction then they'll be

530

00:22:41,680 --> 00:22:39,410

able to confirm those false you know

531

00:22:44,710 --> 00:22:41,690

ideas and find the facts that support

532

00:22:46,180 --> 00:22:44,720

whatever have you ever been looking up

533

00:22:48,640 --> 00:22:46,190

something and gone down the wrong way

534

00:22:50,350 --> 00:22:48,650

rabbit-hole online I mean I know it

535

00:22:51,490 --> 00:22:50,360

dietary stuff I was sucked in for a

536

00:22:53,110 --> 00:22:51,500

while with the whole gluten thing

537

00:22:55,000 --> 00:22:53,120

because I was reading men oh that makes

538

00:22:57,400 --> 00:22:55,010

sense until I realized I was reading a

539

00:22:59,230 --> 00:22:57,410

page that was in no way scientific yeah

540

00:23:01,360 --> 00:22:59,240

I've been down the rabbit hole many

541

00:23:03,700 --> 00:23:01,370

times many many times

542

00:23:06,810 --> 00:23:03,710

fortunately most of the time I'm able to

543

00:23:09,310 --> 00:23:06,820

call my way back to reality to the light

544

00:23:11,320 --> 00:23:09,320

but you know that that's quite tricky

545

00:23:15,610 --> 00:23:11,330

sometimes you know you actually need to

546

00:23:17,170 --> 00:23:15,620

be vigilant in the way that you you know

547

00:23:19,960 --> 00:23:17,180

look at the information that's available

548

00:23:22,420 --> 00:23:19,970

and if you're surrounded by other people

549

00:23:24,790 --> 00:23:22,430

who are also down that rabbit hole then

550

00:23:27,580 --> 00:23:24,800

you're far less likely to be inclined to

551  
00:23:29,740 --> 00:23:27,590  
you know to try to get out and and

552  
00:23:31,000 --> 00:23:29,750  
look at you know reality so people

553  
00:23:33,250 --> 00:23:31,010  
always making fun of critical thinking

554  
00:23:34,779 --> 00:23:33,260  
but never at any time except maybe the

555  
00:23:36,010 --> 00:23:34,789  
you know maybe that middle-age just

556  
00:23:37,630 --> 00:23:36,020  
could have used a bit of it but you know

557  
00:23:39,789 --> 00:23:37,640  
we could probably critical think it's

558  
00:23:41,409 --> 00:23:39,799  
more important than ever now I think

559  
00:23:43,570 --> 00:23:41,419  
it's yeah I think it's always been

560  
00:23:47,140 --> 00:23:43,580  
important and there's always been

561  
00:23:51,340 --> 00:23:47,150  
different elements in society that have

562  
00:23:53,320 --> 00:23:51,350  
tried to suppress you know people who do

563  
00:23:54,250 --> 00:23:53,330

think critically and challenge that the

564

00:23:55,870 --> 00:23:54,260

status quo

565

00:23:57,580 --> 00:23:55,880

there's better the interests you know

566

00:23:59,769 --> 00:23:57,590

there's people who don't want certain

567

00:24:02,200 --> 00:23:59,779

facts to come to light and you know

568

00:24:04,269 --> 00:24:02,210

that's it's the eternal challenge to

569

00:24:09,389 --> 00:24:04,279

remain vigilant against those those

570

00:24:14,019 --> 00:24:11,769

around good to see you here today it's a

571

00:24:16,120 --> 00:24:14,029

big night of politically charged climate

572

00:24:17,590 --> 00:24:16,130

action well it shouldn't be politically

573

00:24:19,450 --> 00:24:17,600

charged it's a scientific question

574

00:24:21,399 --> 00:24:19,460

people who make it political are wrong

575

00:24:23,080 --> 00:24:21,409

yes and which is what I've been asking

576

00:24:24,940 --> 00:24:23,090

people why do you think people are so

577

00:24:26,380 --> 00:24:24,950

slow to accept accept the scientific

578

00:24:28,330 --> 00:24:26,390

data and what why do you think they

579

00:24:30,639 --> 00:24:28,340

don't want to well it's a psychological

580

00:24:33,669 --> 00:24:30,649

question I think but I have some

581

00:24:35,560 --> 00:24:33,679

hypotheses about that I think first of

582

00:24:37,060 --> 00:24:35,570

all because people don't want what don't

583

00:24:38,740 --> 00:24:37,070

want it to be true because you know if

584

00:24:40,649 --> 00:24:38,750

the reality is hard and I think people

585

00:24:44,560 --> 00:24:40,659

generally are not quick to accept

586

00:24:46,180 --> 00:24:44,570

difficult truths the other thing is you

587

00:24:48,399 --> 00:24:46,190

will find that most of the people who

588

00:24:51,549 --> 00:24:48,409

don't accept climate science tend to be

589

00:24:53,889 --> 00:24:51,559

older and there might be a little bit of

590

00:24:55,240 --> 00:24:53,899

guilt in that you know the kind of world

591

00:24:58,269 --> 00:24:55,250

that we've created and we are leaving

592

00:24:59,830 --> 00:24:58,279

our children is not as good as for

593

00:25:02,289 --> 00:24:59,840

example the previous generation has left

594

00:25:05,740 --> 00:25:02,299

us so I think there is definitely an

595

00:25:06,630 --> 00:25:05,750

element of that but in the end I don't

596

00:25:09,279 --> 00:25:06,640

know that there is actually

597

00:25:11,919 --> 00:25:09,289

psychological research about that so I

598

00:25:13,810 --> 00:25:11,929

don't know whether my hypothesis holds

599

00:25:15,880 --> 00:25:13,820

water or not number of people have said

600

00:25:17,710 --> 00:25:15,890

that people don't trust experts as much

601  
00:25:19,389 --> 00:25:17,720  
because they feel they can do their own

602  
00:25:20,320 --> 00:25:19,399  
research on the web and that can lead

603  
00:25:22,840 --> 00:25:20,330  
them anywhere

604  
00:25:24,200 --> 00:25:22,850  
I actually think first of all I think

605  
00:25:27,810 --> 00:25:24,210  
it's a new phenomenon

606  
00:25:29,730 --> 00:25:27,820  
science is still by and large really

607  
00:25:31,500 --> 00:25:29,740  
trusted I mean there's surveys that are

608  
00:25:33,570 --> 00:25:31,510  
done about what you know what kind of

609  
00:25:36,450 --> 00:25:33,580  
institutions do you trust in scientific

610  
00:25:38,760 --> 00:25:36,460  
institutions in science in general or

611  
00:25:41,159 --> 00:25:38,770  
for example scientists as a profession

612  
00:25:43,680 --> 00:25:41,169  
it's generally very highly trusted in

613  
00:25:44,940 --> 00:25:43,690

all the surveys around the world so it's

614

00:25:46,169 --> 00:25:44,950

not I don't think it's actually true

615

00:25:48,029 --> 00:25:46,179

that scientists are not trust by their

616

00:25:49,350 --> 00:25:48,039

trusted but all experts are not trusted

617

00:25:51,450 --> 00:25:49,360

but they're definitely not trusted as

618

00:25:53,610 --> 00:25:51,460

much as they used to be and I think

619

00:25:55,110 --> 00:25:53,620

actually the climate debate is part of

620

00:25:57,360 --> 00:25:55,120

that it's not I think it's a course not

621

00:26:00,350 --> 00:25:57,370

an effect here what happened is that

622

00:26:02,669 --> 00:26:00,360

polit for political reasons people

623

00:26:04,289 --> 00:26:02,679

making it appear as if climate

624

00:26:06,120 --> 00:26:04,299

scientists have an agenda and they're

625

00:26:09,000 --> 00:26:06,130

not being honest and I think that's

626

00:26:10,740 --> 00:26:09,010

creating that kind of less less trust of

627

00:26:12,779 --> 00:26:10,750

experts especially expertise in climate

628

00:26:13,919 --> 00:26:12,789

science climate science another issue

629

00:26:15,779 --> 00:26:13,929

you've been across which is a bit

630

00:26:17,430 --> 00:26:15,789

different with the coronavirus do you

631

00:26:19,590 --> 00:26:17,440

think the effect of that only community

632

00:26:24,060 --> 00:26:19,600

might affect the anti-vaxxer at all

633

00:26:26,070 --> 00:26:24,070

either way no you think they'll still be

634

00:26:27,390 --> 00:26:26,080

sauce of everything no fine they'll find

635

00:26:29,220 --> 00:26:27,400

something you know it's likely like the

636

00:26:32,430 --> 00:26:29,230

you know mercury okay so you know

637

00:26:35,190 --> 00:26:32,440

mercury was taken out of Excel vaccines

638

00:26:37,230 --> 00:26:35,200

in 2001 I think they're still talking

639

00:26:38,789 --> 00:26:37,240

about it as if it's there and all they

640

00:26:41,010 --> 00:26:38,799

found something else you know it's a

641

00:26:42,570 --> 00:26:41,020

no-no that they're against vaccines

642

00:26:44,330 --> 00:26:42,580

they're not against something about the

643

00:26:46,950 --> 00:26:44,340

vaccines their gains vaccines and

644

00:26:50,299 --> 00:26:46,960

they'll find something and of course

645

00:26:52,770 --> 00:26:50,309

there's already you know the normal

646

00:26:54,659 --> 00:26:52,780

conspiracy here is going around yes it's

647

00:26:56,430 --> 00:26:54,669

manufactured it's the you know big big

648

00:26:58,649 --> 00:26:56,440

pharma created if the Chinese created it

649

00:27:16,450 --> 00:26:58,659

whatever and I'm sure they ante the

650

00:27:22,340 --> 00:27:19,820

calling all skeptics or listeners the

651  
00:27:24,710 --> 00:27:22,350  
eleven or near Glasgow are already

652  
00:27:27,379 --> 00:27:24,720  
planning to visit something then you're

653  
00:27:30,529 --> 00:27:27,389  
in luck because Glasgow skeptics have

654  
00:27:32,539 --> 00:27:30,539  
got your Monday nights sorted we are

655  
00:27:34,639 --> 00:27:32,549  
committed to filling up every available

656  
00:27:37,730 --> 00:27:34,649  
Monday night talks on science and

657  
00:27:39,980 --> 00:27:37,740  
skepticism past speakers include Eugenie

658  
00:27:42,289 --> 00:27:39,990  
Scott Jerry Coyne make up Marshall Nate

659  
00:27:45,470 --> 00:27:42,299  
Phelps tormund Cecil from cognitive

660  
00:27:47,659 --> 00:27:45,480  
dissonance PZ Myers Richard Wiseman EC

661  
00:27:50,239 --> 00:27:47,669  
drilling Noah Heath and Eli from the

662  
00:27:52,580 --> 00:27:50,249  
scathing atheist Simon Singh Rebecca

663  
00:27:55,489 --> 00:27:52,590

Watson and a multitude of local

664

00:27:57,409 --> 00:27:55,499

academics and skeptics there's literally

665

00:27:59,539 --> 00:27:57,419

nothing better you can do on a Monday

666

00:28:01,940 --> 00:27:59,549

night in Glasgow it doesn't involve

667

00:28:03,919 --> 00:28:01,950

taking your clothes off so come join us

668

00:28:06,139 --> 00:28:03,929

we've also got a vibrant online

669

00:28:08,060 --> 00:28:06,149

community you can find us on Facebook

670

00:28:11,119 --> 00:28:08,070

Twitter and get involved with the

671

00:28:13,620 --> 00:28:11,129

discussion Glasgow skeptics self-help

672

00:28:36,460 --> 00:28:13,630

for your brain

673

00:28:38,380 --> 00:28:36,470

[Music]

674

00:28:41,150 --> 00:28:38,390

logical fallacies

675

00:28:44,310 --> 00:28:41,160

[Music]

676

00:28:46,380 --> 00:28:44,320

what are the logical fallacies and why

677

00:28:50,490 --> 00:28:46,390

is it important that critical thinkers

678

00:28:53,430 --> 00:28:50,500

should know about them a logical fallacy

679

00:28:55,020 --> 00:28:53,440

is an error we can make in reasoning but

680

00:28:58,790 --> 00:28:55,030

it usually crops up when we are

681

00:29:01,590 --> 00:28:58,800

discussing or arguing our point of view

682

00:29:03,870 --> 00:29:01,600

some people might even knowingly use

683

00:29:04,560 --> 00:29:03,880

them to try and score cheap points in an

684

00:29:08,460 --> 00:29:04,570

argument

685

00:29:11,040 --> 00:29:08,470

due to intellectual laziness they are

686

00:29:13,320 --> 00:29:11,050

traps we can fall into but if we know

687

00:29:15,570 --> 00:29:13,330

what to look out for we can spot them

688

00:29:20,880 --> 00:29:15,580

when they occur and stop ourselves from

689

00:29:24,660 --> 00:29:20,890

using them this week we'll look at straw

690

00:29:27,570 --> 00:29:24,670

man this is when we substitute a

691

00:29:31,250 --> 00:29:27,580

person's actual position or argument

692

00:29:33,660 --> 00:29:31,260

with a distorted exaggerated or

693

00:29:36,870 --> 00:29:33,670

misrepresented version of their position

694

00:29:39,710 --> 00:29:36,880

or point of view a straw man or a figure

695

00:29:42,990 --> 00:29:39,720

made out of straw is easy to burn down

696

00:29:45,540 --> 00:29:43,000

it is far easier to attack something

697

00:29:48,270 --> 00:29:45,550

weak even if it has nothing to do with

698

00:29:50,210 --> 00:29:48,280

what your opponent is trying to say than

699

00:29:53,910 --> 00:29:50,220

to attack a strong argument

700

00:29:56,550 --> 00:29:53,920

she said she briefly saw something that

701  
00:29:59,100 --> 00:29:56,560  
appeared light and creepy and she

702  
00:30:01,650 --> 00:29:59,110  
couldn't figure out what it was why

703  
00:30:04,980 --> 00:30:01,660  
would she resort to ghosts as an

704  
00:30:07,200 --> 00:30:04,990  
explanation the original person did not

705  
00:30:08,160 --> 00:30:07,210  
actually state that she thought she saw

706  
00:30:11,010 --> 00:30:08,170  
a ghost

707  
00:30:13,380 --> 00:30:11,020  
her point has been taken further and

708  
00:30:17,250 --> 00:30:13,390  
built-up into something more extreme

709  
00:30:19,830 --> 00:30:17,260  
that is considered nonsense it's much

710  
00:30:22,650 --> 00:30:19,840  
easier to just knock down a suggestion

711  
00:30:24,510 --> 00:30:22,660  
that a ghost appeared that to delve into

712  
00:30:27,180 --> 00:30:24,520  
the possible causes of what was

713  
00:30:30,740 --> 00:30:27,190

experienced especially if no

714

00:30:33,060 --> 00:30:30,750

explanations can be provided by

715

00:30:35,700 --> 00:30:33,070

misrepresenting the original claim it

716

00:30:38,850 --> 00:30:35,710

can then be dismissed outright rather

717

00:30:41,280 --> 00:30:38,860

than addressed the government is hiding

718

00:30:43,740 --> 00:30:41,290

the fact that aliens are living on earth

719

00:30:45,410 --> 00:30:43,750

that Air Force testing ranges are

720

00:30:48,420 --> 00:30:45,420

off-limits and highly guarded is

721

00:30:51,990 --> 00:30:48,430

evidence that aliens are being held

722

00:30:54,159 --> 00:30:52,000

there of course the air force range is

723

00:30:56,950 --> 00:30:54,169

off-limits and highly guarded

724

00:30:59,830 --> 00:30:56,960

this is true no matter what country

725

00:31:02,019 --> 00:30:59,840

you're in but this fact has nothing to

726

00:31:04,200 --> 00:31:02,029

do with whether or not aliens or

727

00:31:07,690 --> 00:31:04,210

anything else are being kept a secret

728

00:31:10,930 --> 00:31:07,700

you skeptics say you can test my psychic

729

00:31:14,289 --> 00:31:10,940

abilities but your tests are impossible

730

00:31:16,870 --> 00:31:14,299

to pass I never said I was 100 percent

731

00:31:19,269 --> 00:31:16,880

accurate this excuse from people

732

00:31:21,909 --> 00:31:19,279

claiming psychic powers in order to not

733

00:31:24,600 --> 00:31:21,919

be tested is one we've heard again and

734

00:31:27,370 --> 00:31:24,610

again over the decades

735

00:31:29,259 --> 00:31:27,380

skeptics never impose a condition of

736

00:31:32,500 --> 00:31:29,269

being a hundred percent accurate in a

737

00:31:34,509 --> 00:31:32,510

test of paranormal powers our real

738

00:31:36,460 --> 00:31:34,519

position is that we will test someone

739

00:31:39,940 --> 00:31:36,470

based on what they say their success

740

00:31:42,789 --> 00:31:39,950

rate is maybe they only claim seventy

741

00:31:47,049 --> 00:31:42,799

five percent accuracy that's fine

742

00:31:49,389 --> 00:31:47,059

we can test for that by saying we insist

743

00:31:51,940 --> 00:31:49,399

on a hundred percent they are using a

744

00:31:54,549 --> 00:31:51,950

totally exaggerated and false condition

745

00:31:58,960 --> 00:31:54,559

of a test to make it appear that

746

00:32:01,990 --> 00:31:58,970

skeptics are unreasonable many so-called

747

00:32:05,230 --> 00:32:02,000

psychics will look for any excuse not to

748

00:32:07,720 --> 00:32:05,240

take the skeptics challenge but you

749

00:32:10,320 --> 00:32:07,730

might be interested to know that many

750

00:32:13,240 --> 00:32:10,330

people claiming to be water diviners

751

00:32:15,759 --> 00:32:13,250

that is to have the power to find

752

00:32:19,029 --> 00:32:15,769

underground water or metals using

753

00:32:23,080 --> 00:32:19,039

divining rods or pendulums often claimed

754

00:32:25,389 --> 00:32:23,090

to be a hundred percent accurate it can

755

00:32:28,509 --> 00:32:25,399

be tricky to tell when your opponent

756

00:32:31,090 --> 00:32:28,519

sets up a straw man to burn down if you

757

00:32:33,669 --> 00:32:31,100

spot it point out that what they are

758

00:32:35,530 --> 00:32:33,679

saying is not really representative of

759

00:32:38,440 --> 00:32:35,540

your point of view

760

00:32:41,710 --> 00:32:38,450

as always don't get too upset if you

761

00:32:50,320 --> 00:32:41,720

miss it logical fallacies can slip by

762

00:32:52,900 --> 00:32:50,330

anyone knowing a logical fallacy when

763

00:32:55,600 --> 00:32:52,910

you hear one and even knowing its name

764

00:32:59,290 --> 00:32:55,610

is important when arguing your point of

765

00:33:02,110 --> 00:32:59,300

view however you may come across as

766

00:33:04,720 --> 00:33:02,120

arrogant and not get very far if you

767

00:33:08,410 --> 00:33:04,730

call it out by name to your opponent

768

00:33:10,750 --> 00:33:08,420

when you hear it being used if your

769

00:33:13,570 --> 00:33:10,760

opponent calls you out for using one

770

00:33:17,170 --> 00:33:13,580

it's time to stop and think about how

771

00:33:19,480 --> 00:33:17,180

you are making your case use your

772

00:33:22,810 --> 00:33:19,490

knowledge of logical fallacies wisely

773

00:33:25,060 --> 00:33:22,820

and remember that even if your point of

774

00:33:28,090 --> 00:33:25,070

view is right and you know all the

775

00:33:31,600 --> 00:33:28,100

pitfalls in arguing your case it doesn't

776

00:33:35,020 --> 00:33:31,610

always mean you'll win on the day and a

777

00:33:40,810 --> 00:33:35,030

skeptics we must also remember that we

778

00:33:42,550 --> 00:33:40,820

too can be wrong at times i'm michelle

779

00:33:51,350 --> 00:33:42,560

beakers Marv from The Vic skeptics

780

00:33:51,360 --> 00:33:58,560

[Music]

781

00:34:05,140 --> 00:34:02,080

all right dr. Paulie here we've got our

782

00:34:09,250 --> 00:34:05,150

skeptic on 20/20 conference committee

783

00:34:11,109 --> 00:34:09,260

meeting so just to start off Sarah what

784

00:34:14,379 --> 00:34:11,119

remind me again what are the dates of

785

00:34:18,010 --> 00:34:14,389

our skeptic on this year 23rd to the

786

00:34:19,389 --> 00:34:18,020

25th of October 20 2001 excellent now

787

00:34:23,710 --> 00:34:19,399

that's good it's right towards the end

788

00:34:27,220 --> 00:34:23,720

of the year and Simon remind me have we

789

00:34:29,649 --> 00:34:27,230

booked a venue for skeptic on we've

790

00:34:32,500 --> 00:34:29,659

booked a fantastic venue for this year's

791

00:34:36,909 --> 00:34:32,510

conference we've got the mantra on view

792

00:34:40,659 --> 00:34:36,919

close to plenty of parking and transport

793

00:34:42,790 --> 00:34:40,669

by the Gold Coast tram service almost to

794

00:34:46,540 --> 00:34:42,800

your door next one and have you got the

795

00:34:48,280 --> 00:34:46,550

the address for me around you a few

796

00:34:50,710 --> 00:34:48,290

avenues paradise

797

00:34:54,220 --> 00:34:50,720

ah fantastic I guess that's why it's

798

00:34:56,919 --> 00:34:54,230

called manager on view and encases so

799

00:34:59,470 --> 00:34:56,929

who we got books with respect to our

800

00:35:01,290 --> 00:34:59,480

speakers well it's early days but we

801  
00:35:03,970 --> 00:35:01,300  
have a confirmed dr. Karl from the ABC

802  
00:35:07,270 --> 00:35:03,980  
exam he was very keen to come along and

803  
00:35:09,970 --> 00:35:07,280  
our main international speakers are the

804  
00:35:12,280 --> 00:35:09,980  
famous skeptic podcasters skeptics with

805  
00:35:13,900 --> 00:35:12,290  
a k' awesome what if we got all three

806  
00:35:15,609 --> 00:35:13,910  
coming a lot we've actually got all

807  
00:35:17,490 --> 00:35:15,619  
three coming along the first time that

808  
00:35:19,690 --> 00:35:17,500  
all three of them have come to Australia

809  
00:35:20,710 --> 00:35:19,700  
so coming all the way from the UK so

810  
00:35:23,020 --> 00:35:20,720  
that's very exciting

811  
00:35:27,370 --> 00:35:23,030  
ah excellent that's that's really great

812  
00:35:28,740 --> 00:35:27,380  
and Sarah have we got somewhere for

813  
00:35:30,270 --> 00:35:28,750

people to be able to look up information

814

00:35:36,460 --> 00:35:30,280

we've got a website

815

00:35:40,900 --> 00:35:36,470

okay website is [www.pevs.com](http://www.pevs.com) slash skip

816

00:35:42,760 --> 00:35:40,910

upon - 2020 great and they said our

817

00:35:45,609 --> 00:35:42,770

official website all and official

818

00:35:47,260 --> 00:35:45,619

websites toneless I fell we'll keep

819

00:35:51,000 --> 00:35:47,270

working on that in the background let's

820

00:35:57,490 --> 00:35:54,220

skeptic on 2020 the Australian skeptics

821

00:36:00,310 --> 00:35:57,500

National Convention 23rd to the 25th of

822

00:36:03,790 --> 00:36:00,320

October 2020 so first Paradise

823

00:36:11,170 --> 00:36:03,800

Queensland for more information this

824

00:36:37,900 --> 00:36:11,180

wwg see skeptics calm / skeptic on -

825

00:36:49,130 --> 00:36:46,190

here's susan gerbic hello skeptic zone

826

00:36:50,930 --> 00:36:49,140

listeners it is i susan goreck here to

827

00:36:55,400 --> 00:36:50,940

give you updates on her fight against

828

00:37:00,470 --> 00:36:58,430

as you know I run the amazing gso W

829

00:37:02,809 --> 00:37:00,480

project we are attempting to write

830

00:37:05,539 --> 00:37:02,819

maintain all Wikipedia pages concerning

831

00:37:08,660 --> 00:37:05,549

science and the paranormal and in all

832

00:37:10,999 --> 00:37:08,670

languages yes we know that is insane

833

00:37:13,339 --> 00:37:11,009

but still we are continuing with the

834

00:37:15,440 --> 00:37:13,349

task today I'd like to tell you about

835

00:37:18,859 --> 00:37:15,450

two recent additions to English

836

00:37:22,370 --> 00:37:18,869

Wikipedia the first is Shalom house and

837

00:37:25,910 --> 00:37:22,380

that spelled sha LOM and it was written

838

00:37:27,620 --> 00:37:25,920

by gso W editor Aaron this is the first

839

00:37:31,130 --> 00:37:27,630

time I've heard of Shalom house but once

840

00:37:33,019 --> 00:37:31,140

I read Aaron's work I was like wow so

841

00:37:36,140 --> 00:37:33,029

Shalom house is located north of Perth

842

00:37:38,200 --> 00:37:36,150

in Western Australia it is a Christians

843

00:37:41,990 --> 00:37:38,210

men only drug rehabilitation facility

844

00:37:44,029 --> 00:37:42,000

that was started in 2012 by a former

845

00:37:44,900 --> 00:37:44,039

meth addict and drug dealer with no

846

00:37:47,509 --> 00:37:44,910

medical training

847

00:37:49,339 --> 00:37:47,519

it's a tough love center that forces

848

00:37:51,559 --> 00:37:49,349

residents to sign a power of attorney

849

00:37:53,569 --> 00:37:51,569

over to Shalom house giving control of

850

00:37:55,309 --> 00:37:53,579

finances over to the group at the

851  
00:37:57,470 --> 00:37:55,319  
beginning of treatment the residents are

852  
00:37:59,930 --> 00:37:57,480  
not allowed cell phones books magazines

853  
00:38:01,970 --> 00:37:59,940  
music video and cannot leave

854  
00:38:03,680 --> 00:38:01,980  
unaccompanied they have to work

855  
00:38:05,960 --> 00:38:03,690  
full-time at the house and also

856  
00:38:08,450 --> 00:38:05,970  
volunteer at other charities they're not

857  
00:38:10,009 --> 00:38:08,460  
allowed to swear they do not have to be

858  
00:38:12,049 --> 00:38:10,019  
religious to attend but they have to

859  
00:38:14,599 --> 00:38:12,059  
study the Bible and attend Christian

860  
00:38:17,299 --> 00:38:14,609  
services our doctor visits once a week

861  
00:38:19,160 --> 00:38:17,309  
but there's no doctor on-site Shaolin

862  
00:38:20,839 --> 00:38:19,170  
does not keep statistics and people who

863  
00:38:23,089 --> 00:38:20,849

leave the program are not tracked to see

864

00:38:24,920 --> 00:38:23,099

if they relapse the reason they do not

865

00:38:27,259 --> 00:38:24,930

keep track of statistics is because they

866

00:38:30,920 --> 00:38:27,269

are quote not trying to prove anything

867

00:38:33,319 --> 00:38:30,930

unquote a journalist named Sarah Brooks

868

00:38:35,089 --> 00:38:33,329

keep in mind Australian skeptics for a

869

00:38:36,680 --> 00:38:35,099

possible Barry Williams award for good

870

00:38:38,569 --> 00:38:36,690

journalism Sarah

871

00:38:40,670 --> 00:38:38,579

Brooks writing for the community news

872

00:38:43,099 --> 00:38:40,680

group did an investigation and found

873

00:38:45,380 --> 00:38:43,109

that of approximately a thousand men

874

00:38:48,230 --> 00:38:45,390

that entered the program only 49

875

00:38:50,839 --> 00:38:48,240

completed it which is a success rate of

876

00:38:54,160 --> 00:38:50,849

under five percent the average rate of

877

00:38:56,450 --> 00:38:54,170

publicly funded services is 35 percent

878

00:38:58,670 --> 00:38:56,460

residents were required to sign up for a

879

00:39:00,230 --> 00:38:58,680

year but the journalist discovered in

880

00:39:02,390 --> 00:39:00,240

some cases people were still in

881

00:39:05,059 --> 00:39:02,400

treatment three years later the average

882

00:39:08,420 --> 00:39:05,069

time for publicly funded services is one

883

00:39:09,080 --> 00:39:08,430

to three months what Erin the GSO W

884

00:39:10,580 --> 00:39:09,090

editor does

885

00:39:14,630 --> 00:39:10,590

covered is that Shalom house has

886

00:39:17,090 --> 00:39:14,640

received two awards one in 2017 from the

887

00:39:20,090 --> 00:39:17,100

Telstra Western Australian charity and

888

00:39:22,850 --> 00:39:20,100

in 2019 a non profit of the Year award

889

00:39:24,650 --> 00:39:22,860

from my business awards what Erin

890

00:39:27,350 --> 00:39:24,660

discovered that prior cheese rewrite of

891

00:39:29,240 --> 00:39:27,360

the Wikipedia page someone editing with

892

00:39:31,340 --> 00:39:29,250

the username Shalom house I've been

893

00:39:33,470 --> 00:39:31,350

editing the Wikipedia page it was

894

00:39:35,800 --> 00:39:33,480

complete fluff until Erin got involved

895

00:39:38,570 --> 00:39:35,810

and rewrote the entire Wikipedia page

896

00:39:41,110 --> 00:39:38,580

and now I'm going to quote something

897

00:39:44,480 --> 00:39:41,120

Erin wrote in the GSO W secret cabal

898

00:39:46,310 --> 00:39:44,490

quote what I'm coming to appreciate more

899

00:39:48,860 --> 00:39:46,320

and more about Wikipedia is the ability

900

00:39:52,130 --> 00:39:48,870

to have all of the relevant information

901  
00:39:53,930 --> 00:39:52,140  
on one page it took me ages to find all

902  
00:39:56,540 --> 00:39:53,940  
the articles I use for the Shalom house

903  
00:39:58,190 --> 00:39:56,550  
page far more time than Joe average

904  
00:40:00,920 --> 00:39:58,200  
would put into finding out about it an

905  
00:40:03,020 --> 00:40:00,930  
organization meaning all of the nasty

906  
00:40:05,150 --> 00:40:03,030  
stuff slips through the cracks and goes

907  
00:40:06,710 --> 00:40:05,160  
unnoticed I wonder if they would have

908  
00:40:08,690 --> 00:40:06,720  
won the awards they did if the judges

909  
00:40:11,480 --> 00:40:08,700  
had access to the information I've

910  
00:40:14,330 --> 00:40:11,490  
posted now Joe average gets full

911  
00:40:15,800 --> 00:40:14,340  
disclosure with one click but what

912  
00:40:17,480 --> 00:40:15,810  
really makes me happy is knowing that

913  
00:40:19,400 --> 00:40:17,490

there are going to be parents of addicts

914

00:40:21,410 --> 00:40:19,410

who will now avoid Shalom house and

915

00:40:25,910 --> 00:40:21,420

hopefully get effective treatment

916

00:40:27,860 --> 00:40:25,920

instead unquote congratulations Erin so

917

00:40:29,360 --> 00:40:27,870

the next Wikipedia page is dealing with

918

00:40:32,990 --> 00:40:29,370

a story I'm sure you've all read about

919

00:40:34,220 --> 00:40:33,000

on social media a few weeks ago do you

920

00:40:35,590 --> 00:40:34,230

remember the four year old that was

921

00:40:38,060 --> 00:40:35,600

really sick with the flu and

922

00:40:39,740 --> 00:40:38,070

experiencing seizures and the mother

923

00:40:42,260 --> 00:40:39,750

reached out to a Facebook group for

924

00:40:45,260 --> 00:40:42,270

advice they told her to use breast milk

925

00:40:48,050 --> 00:40:45,270

time and elderberry the child was later

926  
00:40:50,600 --> 00:40:48,060  
hospitalized and died the Facebook group

927  
00:40:52,820 --> 00:40:50,610  
is run by Larry cook who is anti vaccine

928  
00:40:55,820 --> 00:40:52,830  
and has no medical training

929  
00:40:58,120 --> 00:40:55,830  
he is funded by no donations and t-shirt

930  
00:41:01,520 --> 00:40:58,130  
and book sales he raised more than

931  
00:41:03,680 --> 00:41:01,530  
\$100,000 on a GoFundMe campaign he also

932  
00:41:07,370 --> 00:41:03,690  
recommends anti vaccine literature and

933  
00:41:08,750 --> 00:41:07,380  
receives the cuts of those sales so

934  
00:41:10,550 --> 00:41:08,760  
while the story was all over social

935  
00:41:12,470 --> 00:41:10,560  
media and people were outraged over the

936  
00:41:14,570 --> 00:41:12,480  
death of this child and complaining that

937  
00:41:17,930 --> 00:41:14,580  
Facebook should not allow this kind of

938  
00:41:21,050 --> 00:41:17,940

nonsense gso w editor Robin Canton

939

00:41:22,940 --> 00:41:21,060

decided he wanted to take action in a

940

00:41:24,680 --> 00:41:22,950

few days he had done his research

941

00:41:27,140 --> 00:41:24,690

and published a brand-new Wikipedia page

942

00:41:28,910 --> 00:41:27,150

for everyone to find the media often

943

00:41:31,280 --> 00:41:28,920

does not have the time to do the

944

00:41:32,900 --> 00:41:31,290

research and with a well-written

945

00:41:34,819 --> 00:41:32,910

Wikipedia page they can review the

946

00:41:36,650 --> 00:41:34,829

citations that Robin left them to find

947

00:41:39,829 --> 00:41:36,660

so they can fully understand this group

948

00:41:43,609 --> 00:41:39,839

which is called stop mandatory

949

00:41:46,609 --> 00:41:43,619

vaccinations yes that is his name and it

950

00:41:48,410 --> 00:41:46,619

also has a website the Facebook page has

951  
00:41:52,790 --> 00:41:48,420  
over a hundred and seventy eight

952  
00:41:55,490 --> 00:41:52,800  
thousand members folks we have a lot of

953  
00:41:57,380 --> 00:41:55,500  
work to do if you're a sick and tired of

954  
00:41:58,550 --> 00:41:57,390  
this nonsense and are hoping to learn

955  
00:42:01,339 --> 00:41:58,560  
how to fight back

956  
00:42:03,410 --> 00:42:01,349  
please join us training takes a few

957  
00:42:06,140 --> 00:42:03,420  
months but you finish at your own pace

958  
00:42:09,050 --> 00:42:06,150  
once trained you can contribute so much

959  
00:42:10,970 --> 00:42:09,060  
more than outrage on social media what

960  
00:42:13,609 --> 00:42:10,980  
are you waiting for we are waiting for

961  
00:42:15,170 --> 00:42:13,619  
you approached me on Facebook and I'll

962  
00:42:16,790 --> 00:42:15,180  
give you a pre training assignment to

963  
00:42:17,329 --> 00:42:16,800

complete to give you an idea of what to

964

00:42:19,880 --> 00:42:17,339

expect

965

00:42:21,710 --> 00:42:19,890

if after completing that you decide to

966

00:42:24,020 --> 00:42:21,720

continue with training you will join

967

00:42:26,540 --> 00:42:24,030

your peers and the secret cabal located

968

00:42:29,260 --> 00:42:26,550

in a private Facebook group now how

969

00:42:32,470 --> 00:42:29,270

often do you get to join an actual cabal

970

00:42:43,280 --> 00:42:32,480

thanks everyone

971

00:42:48,000 --> 00:42:45,780

skeptics cafe is held on the third

972

00:42:50,880 --> 00:42:48,010

Monday of every month at the Dan

973

00:42:54,030 --> 00:42:50,890

O'Connell Hotel in Melbourne on Monday

974

00:42:56,819 --> 00:42:54,040

March 16th Chris guest president of the

975

00:42:59,280 --> 00:42:56,829

Vic skeptics examines the curious career

976

00:43:03,180 --> 00:42:59,290

of the acclaimed archaeologist James

977

00:43:05,940 --> 00:43:03,190

mallet in the middle of the 20th century

978

00:43:08,400 --> 00:43:05,950

mallet changed our understanding of the

979

00:43:10,950 --> 00:43:08,410

Neolithic period in Anatolia with

980

00:43:14,849 --> 00:43:10,960

amazing discoveries at Hajj Allah and

981

00:43:17,010 --> 00:43:14,859

Charlton who yuck controversies abounded

982

00:43:20,250 --> 00:43:17,020

when he documented the doric treasure

983

00:43:23,490 --> 00:43:20,260

the baker inscription and discovered a

984

00:43:26,190 --> 00:43:23,500

continuity of fabric designs dating from

985

00:43:29,309 --> 00:43:26,200

the neolithic era to modern times in

986

00:43:32,609 --> 00:43:29,319

Turkey for more information see the

987

00:43:37,130 --> 00:43:32,619

skeptics cafe Facebook page or the Vic

988

00:43:40,680 --> 00:43:37,140

skeptics website app vic skeptics

989

00:43:54,390 --> 00:43:40,690

wordpress.com slash events

990

00:44:07,390 --> 00:43:54,400

[Music]

991

00:44:09,100 --> 00:44:07,400

life is wild with Michelle Franklin hi

992

00:44:11,230 --> 00:44:09,110

guys I just wanted to give you a heads

993

00:44:13,090 --> 00:44:11,240

up that the sound quality of my report

994

00:44:14,920 --> 00:44:13,100

might be a bit off this week we're

995

00:44:17,170 --> 00:44:14,930

finally getting some much-needed rain in

996

00:44:18,520 --> 00:44:17,180

the north and it's woken up some of the

997

00:44:21,910 --> 00:44:18,530

creatures that are usually a bit more

998

00:44:23,860 --> 00:44:21,920

quiet so my apologies but I'm sure you

999

00:44:27,910 --> 00:44:23,870

won't mind a few background insects and

1000

00:44:29,770 --> 00:44:27,920

maybe the occasional frog chorus today I

1001  
00:44:32,980 --> 00:44:29,780  
want to talk to you about invasive

1002  
00:44:35,770 --> 00:44:32,990  
species which means any organism that is

1003  
00:44:38,020 --> 00:44:35,780  
moved to a new location and which

1004  
00:44:40,180 --> 00:44:38,030  
possesses traits that allow it to then

1005  
00:44:43,570 --> 00:44:40,190  
invade and move into new areas

1006  
00:44:44,890 --> 00:44:43,580  
unassisted and in this context I'm also

1007  
00:44:47,600 --> 00:44:44,900  
going to include the factor that it

1008  
00:44:50,910 --> 00:44:47,610  
causes harm in the new environment

1009  
00:44:53,620 --> 00:44:50,920  
[Music]

1010  
00:44:55,840 --> 00:44:53,630  
now before I get too far into this I

1011  
00:44:58,510 --> 00:44:55,850  
need to acknowledge that we are an

1012  
00:45:00,220 --> 00:44:58,520  
invasive species and we've spread across

1013  
00:45:01,600 --> 00:45:00,230

the planet and caused a lot of damage so

1014

00:45:05,170 --> 00:45:01,610

that's just something that we're going

1015

00:45:07,810 --> 00:45:05,180

to have to accept but accepting that an

1016

00:45:09,370 --> 00:45:07,820

invasive species here doesn't mean that

1017

00:45:11,770 --> 00:45:09,380

we have to accept the damage that it

1018

00:45:14,290 --> 00:45:11,780

will cause in the future we can and do

1019

00:45:16,240 --> 00:45:14,300

with varying levels of success take

1020

00:45:18,910 --> 00:45:16,250

steps to try to reduce the impact that

1021

00:45:21,910 --> 00:45:18,920

humans have on the world we exclude

1022

00:45:23,980 --> 00:45:21,920

people from vulnerable areas and we

1023

00:45:26,110 --> 00:45:23,990

place restrictions on human activities

1024

00:45:28,660 --> 00:45:26,120

to reduce impacts like polluting and

1025

00:45:30,640 --> 00:45:28,670

over consuming resources and in some

1026  
00:45:34,780 --> 00:45:30,650  
places we even try to reduce population

1027  
00:45:37,240 --> 00:45:34,790  
growth by limiting reproduction it's the

1028  
00:45:40,660 --> 00:45:37,250  
same when we manage invasive animals and

1029  
00:45:42,280 --> 00:45:40,670  
plants we may have to accept that some

1030  
00:45:44,860 --> 00:45:42,290  
of them are here to stay and we can't

1031  
00:45:46,540 --> 00:45:44,870  
get rid of them all but just because we

1032  
00:45:48,010 --> 00:45:46,550  
can't prevent something entirely it

1033  
00:45:50,650 --> 00:45:48,020  
doesn't mean we shouldn't try to reduce

1034  
00:45:52,480 --> 00:45:50,660  
the harm invasive species have done a

1035  
00:45:54,460 --> 00:45:52,490  
lot of damage throughout history and

1036  
00:45:56,560 --> 00:45:54,470  
there are a lot of them out there but it

1037  
00:45:58,330 --> 00:45:56,570  
doesn't mean we should just give up and

1038  
00:46:00,730 --> 00:45:58,340

accept the situation because there's a

1039

00:46:04,090 --> 00:46:00,740

lot more damage left to be done and we

1040

00:46:06,640 --> 00:46:04,100

can prevent some of it the example that

1041

00:46:09,520 --> 00:46:06,650

I want to use today is horses in

1042

00:46:10,990 --> 00:46:09,530

Kosciusko National Park and the reason

1043

00:46:13,090 --> 00:46:11,000

that I want to use this example is

1044

00:46:15,460 --> 00:46:13,100

because it demonstrates how invasive

1045

00:46:18,700 --> 00:46:15,470

species can change the dynamic of an

1046

00:46:21,580 --> 00:46:18,710

ecosystem and how it responds to major

1047

00:46:24,880 --> 00:46:21,590

disturbance horses have been in

1048

00:46:26,800 --> 00:46:24,890

Australia for 230 years and for about a

1049

00:46:28,750 --> 00:46:26,810

hundred and sixty of those years they've

1050

00:46:32,230 --> 00:46:28,760

been recognized as a feral invasive

1051

00:46:34,120 --> 00:46:32,240

species there was a time when we relied

1052

00:46:36,550 --> 00:46:34,130

on the horses through pioneer and

1053

00:46:38,650 --> 00:46:36,560

Explorer days through Wars and fires and

1054

00:46:41,320 --> 00:46:38,660

droughts and of course they're beautiful

1055

00:46:43,120 --> 00:46:41,330

and charismatic and fun to ride so who

1056

00:46:46,020 --> 00:46:43,130

can blame us for adopting them into our

1057

00:46:49,630 --> 00:46:46,030

culture and writing poems about them

1058

00:46:51,640 --> 00:46:49,640

also for context about a third of

1059

00:46:53,290 --> 00:46:51,650

Kosciusko National Park has recently

1060

00:46:54,730 --> 00:46:53,300

burned in the devastating bush fires

1061

00:46:58,990 --> 00:46:54,740

that ripped through the southern parts

1062

00:47:00,120 --> 00:46:59,000

of Australia now fires not necessarily a

1063

00:47:02,710 --> 00:47:00,130

bad thing

1064

00:47:03,790 --> 00:47:02,720

ecosystems rely on intermittent small

1065

00:47:06,550 --> 00:47:03,800

disturbances

1066

00:47:08,590 --> 00:47:06,560

to maintain their biodiversity when

1067

00:47:10,750 --> 00:47:08,600

there's no disturbance the strongest and

1068

00:47:12,970 --> 00:47:10,760

most dominant species out-compete the

1069

00:47:15,550 --> 00:47:12,980

others and the less competitive pioneer

1070

00:47:18,370 --> 00:47:15,560

species don't have any room to grow if

1071

00:47:20,110 --> 00:47:18,380

there's too much disturbance however it

1072

00:47:22,390 --> 00:47:20,120

might knock out all the species at the

1073

00:47:24,520 --> 00:47:22,400

same time the balance of an ecosystem

1074

00:47:26,560 --> 00:47:24,530

relies on intermittent small

1075

00:47:28,660 --> 00:47:26,570

disturbances which knock back the

1076

00:47:31,390 --> 00:47:28,670

dominant species without removing them

1077

00:47:34,930 --> 00:47:31,400

all and makes room for pioneer species

1078

00:47:38,020 --> 00:47:34,940

to spread and breed it's a constant

1079

00:47:40,060 --> 00:47:38,030

fluctuation between competitive dominant

1080

00:47:42,280 --> 00:47:40,070

species and invasive pioneer species

1081

00:47:45,490 --> 00:47:42,290

with the end result that we have a

1082

00:47:47,770 --> 00:47:45,500

biodiverse environment with a range of

1083

00:47:50,560 --> 00:47:47,780

species that can thrive in a wide range

1084

00:47:53,590 --> 00:47:50,570

of conditions this biodiversity or

1085

00:47:56,580 --> 00:47:53,600

diverse range of life is what gives an

1086

00:47:59,860 --> 00:47:56,590

ecosystem its resilience against change

1087

00:48:02,680 --> 00:47:59,870

if all the animals or plants were the

1088

00:48:05,020 --> 00:48:02,690

same and only adapted to one specific

1089

00:48:07,180 --> 00:48:05,030

set of conditions that is present at the

1090

00:48:09,130 --> 00:48:07,190

moment then when a fire or something

1091

00:48:11,730 --> 00:48:09,140

like that does happen it would have the

1092

00:48:14,650 --> 00:48:11,740

potential to knock out the entire system

1093

00:48:17,860 --> 00:48:14,660

small disturbances often come in the

1094

00:48:20,770 --> 00:48:17,870

form of fires and or floods and when

1095

00:48:22,630 --> 00:48:20,780

this disturbance subsides there's space

1096

00:48:25,060 --> 00:48:22,640

left in the landscape for the pioneer

1097

00:48:27,700 --> 00:48:25,070

species to take hold for a while and the

1098

00:48:30,880 --> 00:48:27,710

ecosystem can recover and start another

1099

00:48:33,310 --> 00:48:30,890

cycle but if the disturbance is too big

1100

00:48:35,170 --> 00:48:33,320

or if you add in multiple disturbances

1101

00:48:38,110 --> 00:48:35,180

close together like a bad fire season

1102

00:48:40,500 --> 00:48:38,120

followed by flooding in those cases the

1103

00:48:43,150 --> 00:48:40,510

recovery can be difficult and slow and

1104

00:48:45,240 --> 00:48:43,160

this can also be impacted by an

1105

00:48:48,040 --> 00:48:45,250

ever-increasing large invasive

1106

00:48:51,880 --> 00:48:48,050

population of heavy hard hoofed and high

1107

00:48:53,590 --> 00:48:51,890

consuming herbivores in 2014 horse

1108

00:48:55,990 --> 00:48:53,600

numbers in the whole of the Australian

1109

00:48:58,660 --> 00:48:56,000

Alps were estimated to be a little over

1110

00:49:01,420 --> 00:48:58,670

nine thousand of which six thousand were

1111

00:49:03,910 --> 00:49:01,430

in the Kosciuszko National Park at that

1112

00:49:05,890 --> 00:49:03,920

time the Kosciuszko National Park plan of

1113

00:49:08,200 --> 00:49:05,900

management provided the legal guidance

1114

00:49:10,420 --> 00:49:08,210

for the management of feral horses and

1115

00:49:12,580 --> 00:49:10,430

it required the distribution and

1116

00:49:14,680 --> 00:49:12,590

abundance of feral horses to be reduced

1117

00:49:17,680 --> 00:49:14,690

and populations to be eradicated were

1118

00:49:20,830 --> 00:49:17,690

over feasible aerial surveys were

1119

00:49:22,750 --> 00:49:20,840

he did in 2019 and they found that the

1120

00:49:26,100 --> 00:49:22,760

total number of horses in the Alps had

1121

00:49:29,590 --> 00:49:26,110

actually increased to over 25,000 with

1122

00:49:31,630 --> 00:49:29,600

19,000 in Kosciusko this came shortly

1123

00:49:34,480 --> 00:49:31,640

after the Kosciusko wild horse heritage

1124

00:49:36,100 --> 00:49:34,490

bill came into effect in 2018 for the

1125

00:49:38,470 --> 00:49:36,110

purpose of establishing a wild horse

1126  
00:49:40,230 --> 00:49:38,480  
heritage management plan which will

1127  
00:49:42,910 --> 00:49:40,240  
identify the heritage value of

1128  
00:49:45,190 --> 00:49:42,920  
sustainable wild horse populations and

1129  
00:49:48,400 --> 00:49:45,200  
set out how that heritage value will be

1130  
00:49:51,160 --> 00:49:48,410  
protected keeping in mind that horses

1131  
00:49:53,500 --> 00:49:51,170  
are big most of them are fast enough to

1132  
00:49:55,150 --> 00:49:53,510  
run away when fires approach and there's

1133  
00:49:56,890 --> 00:49:55,160  
a reasonable chance that their numbers

1134  
00:49:59,680 --> 00:49:56,900  
are still at about this same level

1135  
00:50:01,320 --> 00:49:59,690  
following the recent fires many of them

1136  
00:50:03,640 --> 00:50:01,330  
are now likely to be starving to death

1137  
00:50:05,560 --> 00:50:03,650  
this means that when they've consumed

1138  
00:50:08,020 --> 00:50:05,570

all the resources that are left in their

1139

00:50:10,540 --> 00:50:08,030

regular home range they'll move out in

1140

00:50:12,400 --> 00:50:10,550

search of new habitats within the

1141

00:50:14,350 --> 00:50:12,410

already devastated ecosystems of

1142

00:50:16,840 --> 00:50:14,360

Kosciusko National Park that are trying

1143

00:50:18,640 --> 00:50:16,850

to recover now as an example consider

1144

00:50:21,100 --> 00:50:18,650

the northern corroboree frog a

1145

00:50:23,080 --> 00:50:21,110

critically endangered native frog that

1146

00:50:25,330 --> 00:50:23,090

lives in the few remaining delicates

1147

00:50:28,150 --> 00:50:25,340

Magnum bog habitats in the Kosciusko

1148

00:50:29,800 --> 00:50:28,160

National Park they were on the brink of

1149

00:50:30,280 --> 00:50:29,810

destruction already due to climate

1150

00:50:32,320 --> 00:50:30,290

change

1151  
00:50:34,150 --> 00:50:32,330  
feral animal impacts and most

1152  
00:50:36,010 --> 00:50:34,160  
significantly the devastating effects of

1153  
00:50:38,920 --> 00:50:36,020  
the kidron fungus which has all but

1154  
00:50:41,050 --> 00:50:38,930  
wiped them out wild populations were

1155  
00:50:43,000 --> 00:50:41,060  
estimated to be less than 50 individuals

1156  
00:50:45,160 --> 00:50:43,010  
at one point but captive breeding

1157  
00:50:47,920 --> 00:50:45,170  
programs combined with small-scale horse

1158  
00:50:51,220 --> 00:50:47,930  
exclusion fencing has had some success

1159  
00:50:52,420 --> 00:50:51,230  
in recovering their numbers the New

1160  
00:50:55,060 --> 00:50:52,430  
South Wales threatened species

1161  
00:50:56,920 --> 00:50:55,070  
scientific committee has listed habitat

1162  
00:50:58,930 --> 00:50:56,930  
degradation and loss caused by feral

1163  
00:51:00,490 --> 00:50:58,940

horses as a key threatening process

1164

00:51:02,860 --> 00:51:00,500

under schedule four of the New South

1165

00:51:05,110 --> 00:51:02,870

Wales biodiversity conservation Act

1166

00:51:07,390 --> 00:51:05,120

these horses are destroying many of the

1167

00:51:10,450 --> 00:51:07,400

bog communities which are not evolved to

1168

00:51:12,250 --> 00:51:10,460

cope with heavy hard hoofed animals the

1169

00:51:14,170 --> 00:51:12,260

horses are stirring up sediment and

1170

00:51:16,660 --> 00:51:14,180

defecating in the precious remaining

1171

00:51:19,090 --> 00:51:16,670

water the hooves are compacting soils

1172

00:51:21,670 --> 00:51:19,100

causing erosion and vegetation loss in

1173

00:51:23,410 --> 00:51:21,680

the soft grounds and creek lines and now

1174

00:51:25,120 --> 00:51:23,420

they're also starving to death over

1175

00:51:27,400 --> 00:51:25,130

consuming the limited remaining

1176

00:51:30,100 --> 00:51:27,410

resources and spreading out to invade

1177

00:51:30,880 --> 00:51:30,110

new areas what happens when this now

1178

00:51:34,089 --> 00:51:30,890

protector

1179

00:51:36,069 --> 00:51:34,099

and hungry population of horses moves

1180

00:51:38,769 --> 00:51:36,079

into the last remnants of suitable

1181

00:51:40,390 --> 00:51:38,779

corroboree frog habitat creates erosion

1182

00:51:42,789 --> 00:51:40,400

and runoff channels which drain the

1183

00:51:44,740 --> 00:51:42,799

swamplands tramples and destroys the

1184

00:51:47,170 --> 00:51:44,750

Spagna moss and other vegetation that

1185

00:51:49,120 --> 00:51:47,180

the frogs require for nesting and forces

1186

00:51:51,519 --> 00:51:49,130

them to lay their eggs in areas that put

1187

00:51:53,259 --> 00:51:51,529

them at risk of desiccation undermining

1188

00:51:55,000 --> 00:51:53,269

the significant efforts that have gone

1189

00:51:57,250 --> 00:51:55,010

into breeding and reintroducing them

1190

00:51:59,200 --> 00:51:57,260

into the wild what's even the point of

1191

00:52:01,839 --> 00:51:59,210

having protected areas such as Kosciusko

1192

00:52:04,779 --> 00:52:01,849

National Park if we legislate to allow

1193

00:52:06,730 --> 00:52:04,789

it to be overrun with a feral invasive

1194

00:52:09,309 --> 00:52:06,740

species which is recognized as a key

1195

00:52:10,960 --> 00:52:09,319

threatening process and what's the point

1196

00:52:12,730 --> 00:52:10,970

of having breeding programs for our

1197

00:52:14,589 --> 00:52:12,740

critically endangered native animals

1198

00:52:16,750 --> 00:52:14,599

well we won't protect the few remaining

1199

00:52:19,990 --> 00:52:16,760

places that we have left to release them

1200

00:52:21,759 --> 00:52:20,000

so the situation right now is that there

1201

00:52:24,220 --> 00:52:21,769

are a lot of highly disturbed and

1202

00:52:25,990 --> 00:52:24,230

vulnerable ecosystems out there with

1203

00:52:28,539 --> 00:52:26,000

reduced numbers of endangered and

1204

00:52:30,609 --> 00:52:28,549

critically endangered species those who

1205

00:52:32,680 --> 00:52:30,619

managed to survive the fires so far are

1206

00:52:34,450 --> 00:52:32,690

now competing with large numbers of

1207

00:52:36,990 --> 00:52:34,460

protected horses that are moving through

1208

00:52:40,180 --> 00:52:37,000

the landscape and destroying as they go

1209

00:52:41,769 --> 00:52:40,190

so the situation right now is that there

1210

00:52:43,930 --> 00:52:41,779

are a lot of highly disturbed and

1211

00:52:45,609 --> 00:52:43,940

vulnerable ecosystems out there with

1212

00:52:48,609 --> 00:52:45,619

reduced numbers of endangered and

1213

00:52:50,920 --> 00:52:48,619

critically endangered species those who

1214

00:52:52,660 --> 00:52:50,930

managed to survive the fires so far and

1215

00:52:54,609 --> 00:52:52,670

now competing with large numbers of

1216

00:52:56,380 --> 00:52:54,619

protected horses that are moving through

1217

00:53:00,819 --> 00:52:56,390

the landscape consuming and destroying

1218

00:53:03,430 --> 00:53:00,829

as they go so what's the answer we can

1219

00:53:05,529 --> 00:53:03,440

build food stations and shelters for the

1220

00:53:07,480 --> 00:53:05,539

endangered species but what's to stop

1221

00:53:09,670 --> 00:53:07,490

the horses from capitalizing on these

1222

00:53:12,519 --> 00:53:09,680

resources and can continuing to

1223

00:53:14,319 --> 00:53:12,529

out-compete the smaller animals wild

1224

00:53:16,839 --> 00:53:14,329

harvested horses was used in the past

1225

00:53:19,900 --> 00:53:16,849

and it can take some animals out of the

1226  
00:53:22,690 --> 00:53:19,910  
wild and make use of them sterilization

1227  
00:53:25,180 --> 00:53:22,700  
is another option but like wild harvest

1228  
00:53:28,930 --> 00:53:25,190  
it it's a slow and expensive and

1229  
00:53:31,749 --> 00:53:28,940  
relatively small-scale solution aerial

1230  
00:53:34,120 --> 00:53:31,759  
culling is a real and viable option and

1231  
00:53:37,359 --> 00:53:34,130  
many have supported that since long

1232  
00:53:39,039 --> 00:53:37,369  
before this most recent fire event it's

1233  
00:53:42,460 --> 00:53:39,049  
able to be deployed at a much broader

1234  
00:53:45,480 --> 00:53:42,470  
scale than live harvest or sterilization

1235  
00:53:48,130 --> 00:53:45,490  
and it's significantly more cost of

1236  
00:53:50,830 --> 00:53:48,140  
the good news is that since I wrote this

1237  
00:53:52,570 --> 00:53:50,840  
report a month ago I've now learned that

1238  
00:53:54,730 --> 00:53:52,580

the New South Wales National Parks and

1239

00:53:56,710 --> 00:53:54,740

Wildlife Service plans to remove up to

1240

00:53:59,560 --> 00:53:56,720

four thousand horses from the most

1241

00:54:01,840 --> 00:53:59,570

sensitive areas of Kosciusko in my

1242

00:54:04,180 --> 00:54:01,850

opinion that's a really good start

1243

00:54:07,750 --> 00:54:04,190

although four thousand out of nineteen

1244

00:54:10,300 --> 00:54:07,760

thousand is not a big portion of them

1245

00:54:12,520 --> 00:54:10,310

and I'm worried about how long it'll

1246

00:54:15,790 --> 00:54:12,530

take if they try to catch everyone alive

1247

00:54:17,260 --> 00:54:15,800

and remove it will they be helped do it

1248

00:54:21,310 --> 00:54:17,270

in time for it to make much difference

1249

00:54:23,260 --> 00:54:21,320

to the frogs and remember that horses

1250

00:54:25,660 --> 00:54:23,270

are just one example that I chose to

1251

00:54:28,300 --> 00:54:25,670

demonstrate this point multiplied this

1252

00:54:30,550 --> 00:54:28,310

impact out to all the invasive species

1253

00:54:32,280 --> 00:54:30,560

that we have in this country and try to

1254

00:54:35,830 --> 00:54:32,290

imagine the impact on our unique

1255

00:54:39,760 --> 00:54:35,840

ecosystems of deer and goats pigs

1256

00:54:43,000 --> 00:54:39,770

rabbits cats foxes dogs donkeys camels

1257

00:54:45,040 --> 00:54:43,010

buffalo toads and all the different fish

1258

00:54:48,010 --> 00:54:45,050

and birds and insects and plants as well

1259

00:54:49,960 --> 00:54:48,020

as human activity and of course horses

1260

00:54:52,780 --> 00:54:49,970

so when you see arguments around

1261

00:54:55,300 --> 00:54:52,790

ecosystem management ask yourself how do

1262

00:54:56,950 --> 00:54:55,310

you think we should best proceed keeping

1263

00:54:59,230 --> 00:54:56,960

in mind the potential that these

1264

00:55:01,720 --> 00:54:59,240

invasive species have to impact on our

1265

00:55:03,400 --> 00:55:01,730

ecosystems in the event of all the major

1266

00:55:04,760 --> 00:55:03,410

disturbances that will come in the

1267

00:55:21,670 --> 00:55:04,770

future

1268

00:55:26,810 --> 00:55:24,080

thank you for listening to the skeptic

1269

00:55:30,440 --> 00:55:26,820

zone next week it's the welcome return

1270

00:55:31,970 --> 00:55:30,450

of the book of Tim Tim Mendham only

1271

00:55:34,160 --> 00:55:31,980

dropped by the studio the other day to

1272

00:55:35,780 --> 00:55:34,170

record some more book of Tim we're going

1273

00:55:39,710 --> 00:55:35,790

to kick off with a three-part story

1274

00:55:43,730 --> 00:55:39,720

about water divining about well in order

1275

00:55:45,380 --> 00:55:43,740

to 2013 a major water divining test so

1276

00:55:48,140 --> 00:55:45,390

that's a bit of gold fashioned

1277

00:55:51,370 --> 00:55:48,150

skepticism also next week more from

1278

00:55:54,140 --> 00:55:51,380

skeptic on 2019 with Maynard and

1279

00:55:58,970 --> 00:55:54,150

undoubtedly something covering the

1280

00:56:02,030 --> 00:55:58,980

current worldwide situation despite

1281

00:56:04,160 --> 00:56:02,040

these challenging times that face us all

1282

00:56:06,470 --> 00:56:04,170

I still appreciate very much and still

1283

00:56:10,040 --> 00:56:06,480

vital to the skeptic zone that people

1284

00:56:12,050 --> 00:56:10,050

keep contributing with PayPal or patreon

1285

00:56:13,730 --> 00:56:12,060

maybe the skeptic zone is a welcome

1286

00:56:15,680 --> 00:56:13,740

relief from some of the news going

1287

00:56:17,510 --> 00:56:15,690

around at the moment maybe it's still

1288

00:56:20,030 --> 00:56:17,520

keeping you company on your walks or

1289

00:56:23,960 --> 00:56:20,040

your long drives or your commute I'm

1290

00:56:26,420 --> 00:56:23,970

very grateful for everybody who

1291

00:56:28,460 --> 00:56:26,430

contributes to the skeptic zone and I've

1292

00:56:31,550 --> 00:56:28,470

said this for years and it's true

1293

00:56:33,530 --> 00:56:31,560

without your support there would be no

1294

00:56:36,770 --> 00:56:33,540

skeptic zone as simple as that so thank

1295

00:56:41,150 --> 00:56:36,780

you very much go to WWE peg zone TV and

1296

00:56:43,550 --> 00:56:41,160

click the patreon link in fact I'll tell

1297

00:56:45,349 --> 00:56:43,560

you that one of the consequences of the

1298

00:56:49,000 --> 00:56:45,359

worldwide situation at the moment is the

1299

00:56:52,220 --> 00:56:49,010

Australian dollar continues to dive and

1300

00:56:54,410 --> 00:56:52,230

which means that if you're contributing

1301  
00:56:57,400 --> 00:56:54,420  
to the show from the United States in US

1302  
00:57:00,920 --> 00:56:57,410  
dollars on patreon or PayPal your

1303  
00:57:03,260 --> 00:57:00,930  
contribution suddenly is worth a lot

1304  
00:57:06,230 --> 00:57:03,270  
more I think the dollar is hovering

1305  
00:57:07,820 --> 00:57:06,240  
around 62 cents at the moment so if

1306  
00:57:09,890 --> 00:57:07,830  
you're chipping in for five dollars a

1307  
00:57:13,070 --> 00:57:09,900  
week that five dollars magically

1308  
00:57:15,080 --> 00:57:13,080  
transformed into almost 10 but for this

1309  
00:57:17,240 --> 00:57:15,090  
week this is Richard Saunders wishing

1310  
00:57:21,980 --> 00:57:17,250  
you all very well signing off from

1311  
00:57:27,380 --> 00:57:24,480  
you've been listening to the skeptic

1312  
00:57:34,080 --> 00:57:27,390  
zone podcast please visit our website at

1313  
00:57:37,580 --> 00:57:34,090

wwlp.com tax and to access the bat

1314

00:57:40,230 --> 00:57:37,590

catalog of episodes going back to 2008

1315

00:57:43,530 --> 00:57:40,240

you can follow the skeptic zone podcast

1316

00:57:45,810 --> 00:57:43,540

on twitter at skeptic zone visit our

1317

00:57:49,170 --> 00:57:45,820

facebook page or leave a review on

1318

00:57:52,560 --> 00:57:49,180

itunes you can also support the skeptic

1319

00:57:54,900 --> 00:57:52,570

zone via patreon or PayPal the skeptic

1320

00:57:56,850 --> 00:57:54,910

zone podcast is an independent

1321

00:57:59,070 --> 00:57:56,860

production reviews and opinions

1322

00:58:01,200 --> 00:57:59,080

expressed on the skeptic zone are not

1323

00:58:04,140 --> 00:58:01,210

necessarily those of Australian skeptics

1324

00:58:17,060 --> 00:58:04,150

or any other skeptical organisation

1325

00:58:22,890 --> 00:58:20,540

hello people who listen after the music

1326  
00:58:26,300 --> 00:58:22,900  
let's play the dice game so wash your

1327  
00:58:28,260 --> 00:58:26,310  
hands I think that's the advice to do

1328  
00:58:29,820 --> 00:58:28,270  
whatever we're doing these days wash

1329  
00:58:31,920 --> 00:58:29,830  
your hands and we'll play the dice game

1330  
00:58:35,580 --> 00:58:31,930  
for those who don't you know I roll a 10

1331  
00:58:37,260 --> 00:58:35,590  
sided die three times and you use your

1332  
00:58:39,450 --> 00:58:37,270  
psychic powers or your dumb luck or

1333  
00:58:40,950 --> 00:58:39,460  
whatever the hell you want to do some

1334  
00:58:43,800 --> 00:58:40,960  
people actually have skeptic zone

1335  
00:58:46,470 --> 00:58:43,810  
10-sided dice when I'm giving talks and

1336  
00:58:49,500 --> 00:58:46,480  
I'm out and about I I wash my hands and

1337  
00:58:51,420 --> 00:58:49,510  
I give people I give people souvenir

1338  
00:58:54,060 --> 00:58:51,430

10-sided dice so they can play along so

1339

00:58:56,010 --> 00:58:54,070

if you're one of those people let's play

1340

00:59:01,800 --> 00:58:56,020

along here we go the first number this

1341

00:59:04,170 --> 00:59:01,810

week is seven now I don't have a skeptic

1342

00:59:05,730 --> 00:59:04,180

zone pen I should maybe I should when

1343

00:59:07,620 --> 00:59:05,740

this is all over you know

1344

00:59:08,820 --> 00:59:07,630

remember that seven class usually write

1345

00:59:14,340 --> 00:59:08,830

it down but it seemed to be painless

1346

00:59:16,910 --> 00:59:14,350

right and the next number four seven and

1347

00:59:21,420 --> 00:59:16,920

four okay guess the last one here we go