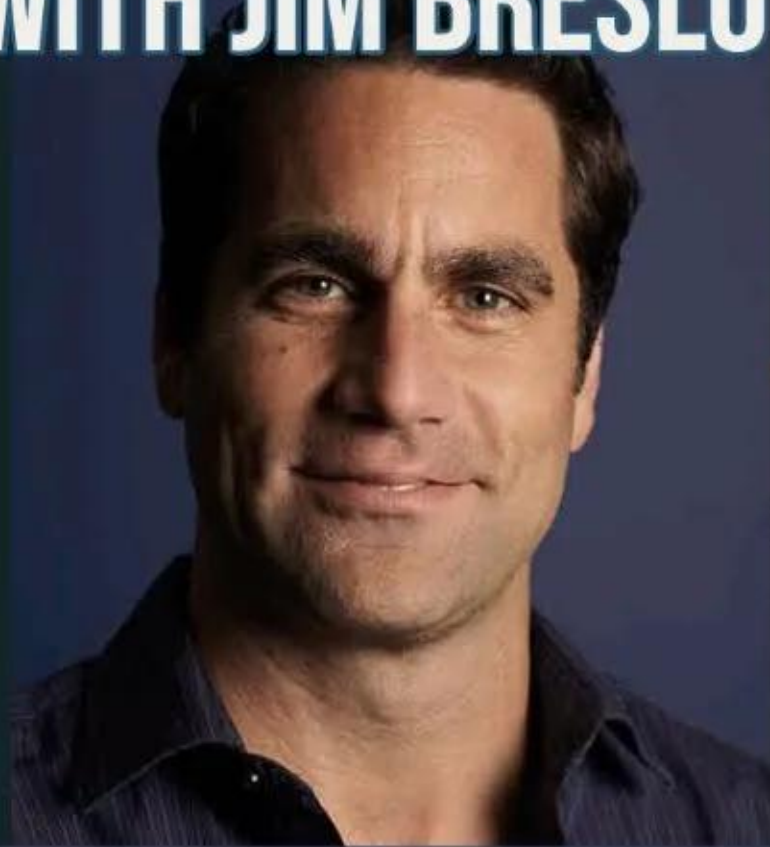


**HIDDEN TRUTH SHOW
WITH JIM BRESLO**



GEORGE HOWARD



**LIFE ON EARTH LIKELY
ARRIVED ON A COMET**

1
00:00:04,150 --> 00:00:02,470
here is our interview with george howard

2
00:00:06,230 --> 00:00:04,160
this subject is something that that

3
00:00:07,829 --> 00:00:06,240
michael parker my producer has dug into

4
00:00:11,030 --> 00:00:07,839
in fact he's interviewed graham hancock

5
00:00:13,030 --> 00:00:11,040
before um and i saw that hancock had a

6
00:00:15,430 --> 00:00:13,040
big thing on rogan i didn't get to see

7
00:00:17,590 --> 00:00:15,440
that um but i'm gonna make sure i'm

8
00:00:22,230 --> 00:00:17,600
pronouncing it correctly the younger

9
00:00:26,790 --> 00:00:24,150
as i looked into it i think the angle

10
00:00:29,349 --> 00:00:26,800
that i'm most interested in is

11
00:00:32,389 --> 00:00:29,359
this just idea in general of cosmic

12
00:00:35,350 --> 00:00:32,399
impacts yeah um and it being your

13
00:00:36,709 --> 00:00:35,360

position that we have underestimated the

14

00:00:39,910 --> 00:00:36,719

number of these

15

00:00:43,110 --> 00:00:39,920

um and therefore i guess underestimated

16

00:00:45,670 --> 00:00:43,120

the likelihood of another one

17

00:00:47,510 --> 00:00:45,680

so walk me through what you see is the

18

00:00:49,910 --> 00:00:47,520

disagreement right now in the in the

19

00:00:51,590 --> 00:00:49,920

scientific community about the number of

20

00:00:54,229 --> 00:00:51,600

times we've been

21

00:00:55,750 --> 00:00:54,239

we've had a cosmic impact no that's an

22

00:00:57,430 --> 00:00:55,760

excellent question and we do believe

23

00:00:59,590 --> 00:00:57,440

they've been far more frequent in the

24

00:01:02,069 --> 00:00:59,600

past and they're hints all over

25

00:01:03,510 --> 00:01:02,079

mythology and geology and whatnot that

26
00:01:04,310 --> 00:01:03,520
there are more impacts out there than

27
00:01:05,830 --> 00:01:04,320
we've

28
00:01:07,590 --> 00:01:05,840
been willing to acknowledge and the

29
00:01:08,710 --> 00:01:07,600
reason for that is

30
00:01:10,149 --> 00:01:08,720
that

31
00:01:11,750 --> 00:01:10,159
most of our impact estimates are done

32
00:01:13,990 --> 00:01:11,760
from asteroids

33
00:01:15,910 --> 00:01:14,000
right and they dismiss comets because

34
00:01:17,350 --> 00:01:15,920
comets are fairly rare

35
00:01:18,710 --> 00:01:17,360
and right what's the difference between

36
00:01:20,469 --> 00:01:18,720
what's the energy in an asteroid and a

37
00:01:22,710 --> 00:01:20,479
co and a comet

38
00:01:24,870 --> 00:01:22,720

yeah um that's become increasingly fuzzy

39

00:01:26,870 --> 00:01:24,880

for the years it's it's kind of a

40

00:01:27,990 --> 00:01:26,880

range you know but at the either end of

41

00:01:30,390 --> 00:01:28,000

the range

42

00:01:33,350 --> 00:01:30,400

uh a comet's um

43

00:01:35,990 --> 00:01:33,360

made of more of a frozen material and

44

00:01:38,149 --> 00:01:36,000

frozen gas is interspersed with rocky

45

00:01:39,670 --> 00:01:38,159

type stuff as far as we know you know we

46

00:01:41,749 --> 00:01:39,680

haven't been able to investigate them as

47

00:01:43,830 --> 00:01:41,759

closely as we should and then they're

48

00:01:46,870 --> 00:01:43,840

sublimating they call it as they come

49

00:01:48,630 --> 00:01:46,880

into a solar orbit and settle in as they

50

00:01:51,270 --> 00:01:48,640

get closer to the sun

51
00:01:53,190 --> 00:01:51,280
they burn off and can eventually become

52
00:01:55,590 --> 00:01:53,200
much more asteroid-like

53
00:01:57,749 --> 00:01:55,600
so some asteroids were never comets but

54
00:02:00,069 --> 00:01:57,759
many asteroids were at one time and all

55
00:02:02,630 --> 00:02:00,079
comets can become an asteroid over time

56
00:02:04,069 --> 00:02:02,640
as they burn off and leave away the

57
00:02:06,149 --> 00:02:04,079
gaseous

58
00:02:08,469 --> 00:02:06,159
material in the the frozen stuff so they

59
00:02:10,150 --> 00:02:08,479
used to refer to them as dirty snowballs

60
00:02:11,750 --> 00:02:10,160
but they're probably a lot dirtier than

61
00:02:14,790 --> 00:02:11,760
we appreciate

62
00:02:16,229 --> 00:02:14,800
but comets also fragment when they're

63
00:02:17,430 --> 00:02:16,239

going around the sun and when they come

64

00:02:18,790 --> 00:02:17,440

in particularly when they're having a

65

00:02:20,869 --> 00:02:18,800

first visit

66

00:02:23,030 --> 00:02:20,879

and we didn't appreciate that years ago

67

00:02:25,030 --> 00:02:23,040

most the impact estimates are done in

68

00:02:27,270 --> 00:02:25,040

fact all the impact estimates by nasa

69

00:02:29,510 --> 00:02:27,280

are done based off the idea that there's

70

00:02:31,589 --> 00:02:29,520

a single point in space that is a common

71

00:02:34,150 --> 00:02:31,599

right they don't account for the fact

72

00:02:36,390 --> 00:02:34,160

that when the comet is fragmenting which

73

00:02:37,750 --> 00:02:36,400

turns out to be very very common we've

74

00:02:40,390 --> 00:02:37,760

seen it several times just in our

75

00:02:43,509 --> 00:02:40,400

lifetimes that that fragmentation takes

76

00:02:45,509 --> 00:02:43,519

the form of more like a shotgun spray

77

00:02:47,910 --> 00:02:45,519

right so they're doing the impact

78

00:02:50,229 --> 00:02:47,920

estimates off of one point in space and

79

00:02:53,670 --> 00:02:50,239

don't appreciate the fact that there can

80

00:02:54,790 --> 00:02:53,680

be a a spray of material left over from

81

00:02:56,790 --> 00:02:54,800

the comet

82

00:02:59,990 --> 00:02:56,800

some of it hard and dense

83

00:03:01,750 --> 00:03:00,000

that can um result in impacts you know

84

00:03:04,630 --> 00:03:01,760

literally over a series of days and and

85

00:03:06,470 --> 00:03:04,640

we see the same phenomena in meteor

86

00:03:10,470 --> 00:03:06,480

showers right

87

00:03:13,670 --> 00:03:12,070

comets generally much bigger than

88

00:03:15,270 --> 00:03:13,680

asteroids

89

00:03:17,030 --> 00:03:15,280

um

90

00:03:18,710 --> 00:03:17,040

yeah there's one coming at us now that i

91

00:03:20,710 --> 00:03:18,720

think would be larger than most any

92

00:03:22,630 --> 00:03:20,720

asteroid they call it bb it's got a hard

93

00:03:24,949 --> 00:03:22,640

to pronounce name but there's a i think

94

00:03:26,309 --> 00:03:24,959

it's 100 kilometers wide it's not coming

95

00:03:28,149 --> 00:03:26,319

at us but it's coming into the solar

96

00:03:30,949 --> 00:03:28,159

system for its first trip

97

00:03:31,670 --> 00:03:30,959

and and what's the origin of asteroids

98

00:03:33,990 --> 00:03:31,680

and

99

00:03:36,710 --> 00:03:34,000

comets how did they start cruising

100

00:03:38,630 --> 00:03:36,720

around the the universe to begin with

101
00:03:40,309 --> 00:03:38,640
yeah at some point either in our own

102
00:03:42,229 --> 00:03:40,319
solar system in terms of the asteroids

103
00:03:44,149 --> 00:03:42,239
you know we've got an asteroid belt you

104
00:03:45,910 --> 00:03:44,159
know um

105
00:03:48,710 --> 00:03:45,920
in the outer solar system that is

106
00:03:50,630 --> 00:03:48,720
probably the result of uh some type of

107
00:03:52,229 --> 00:03:50,640
impact between two large bodies within

108
00:03:53,589 --> 00:03:52,239
our own solar system

109
00:03:55,190 --> 00:03:53,599
over time in other words something

110
00:03:56,550 --> 00:03:55,200
happened here and left a bunch of rocks

111
00:03:59,110 --> 00:03:56,560
circling around

112
00:04:00,710 --> 00:03:59,120
right then comets have been ejected at

113
00:04:02,630 --> 00:04:00,720

some point from other bodies or other

114

00:04:03,670 --> 00:04:02,640

bodies colliding out in interstellar

115

00:04:06,390 --> 00:04:03,680

space

116

00:04:08,550 --> 00:04:06,400

right and come in um both that way and

117

00:04:10,869 --> 00:04:08,560

from what they call the fort cloud

118

00:04:13,589 --> 00:04:10,879

which is hundreds of times the

119

00:04:16,390 --> 00:04:13,599

earth sun distance you know

120

00:04:17,509 --> 00:04:16,400

far far out in space there's a large

121

00:04:20,310 --> 00:04:17,519

ring

122

00:04:22,629 --> 00:04:20,320

of basically snowballs

123

00:04:24,950 --> 00:04:22,639

you know interspersed with with rocky

124

00:04:27,030 --> 00:04:24,960

material if you will within them and

125

00:04:29,110 --> 00:04:27,040

that becomes destabilized at times and

126

00:04:31,670 --> 00:04:29,120

it has a natural instability to it and

127

00:04:34,150 --> 00:04:31,680

the oort cloud can feed comets kind of

128

00:04:36,150 --> 00:04:34,160

randomly into the solar system

129

00:04:38,230 --> 00:04:36,160

and so bottom line we got things inside

130

00:04:40,230 --> 00:04:38,240

the solar system and outside the solar

131

00:04:42,230 --> 00:04:40,240

system to be concerned about

132

00:04:43,590 --> 00:04:42,240

that's exactly right and they can come

133

00:04:45,430 --> 00:04:43,600

up at any time

134

00:04:47,590 --> 00:04:45,440

so so the one that everybody seems to

135

00:04:50,230 --> 00:04:47,600

talk most about is whatever the asteroid

136

00:04:52,230 --> 00:04:50,240

or comet you tell me that impacted the

137

00:04:53,590 --> 00:04:52,240

earth that led to the extinction of the

138

00:04:55,430 --> 00:04:53,600

dinosaurs that's the one that everybody

139

00:04:56,469 --> 00:04:55,440

seems to be aware of and that's right i

140

00:04:59,110 --> 00:04:56,479

assume is

141

00:05:01,110 --> 00:04:59,120

is that commonly accepted it is commonly

142

00:05:02,950 --> 00:05:01,120

accepted and that gives us a lot of hope

143

00:05:05,110 --> 00:05:02,960

with the the comet research team which

144

00:05:07,670 --> 00:05:05,120

we call our research group that we're

145

00:05:10,070 --> 00:05:07,680

going through kind of the same paradigm

146

00:05:13,189 --> 00:05:10,080

shift that occurred when people accepted

147

00:05:16,390 --> 00:05:13,199

the um dinosaur impact in the 80s and

148

00:05:19,189 --> 00:05:16,400

early 90s it's very very almost spookily

149

00:05:21,270 --> 00:05:19,199

similar um scientific debate which is

150

00:05:23,110 --> 00:05:21,280

very very heated right

151

00:05:24,950 --> 00:05:23,120

unfortunately we don't have to know a

152

00:05:27,189 --> 00:05:24,960

nobel prize winner leading our research

153

00:05:29,990 --> 00:05:27,199

team as they did with alvarez senior at

154

00:05:32,790 --> 00:05:30,000

the time so they had a you know a

155

00:05:33,990 --> 00:05:32,800

a nobel winner was actually leading that

156

00:05:35,830 --> 00:05:34,000

effort so that brought a lot more

157

00:05:38,230 --> 00:05:35,840

attention to it

158

00:05:40,710 --> 00:05:38,240

and it was also easier for people to

159

00:05:42,550 --> 00:05:40,720

accept that something so cataclysmic um

160

00:05:44,230 --> 00:05:42,560

could have happened in the distant past

161

00:05:46,950 --> 00:05:44,240

because it separated us

162

00:05:49,510 --> 00:05:46,960

and there's long been a break between

163

00:05:52,430 --> 00:05:49,520

two paradigms of geology

164

00:05:54,230 --> 00:05:52,440

between catastrophism and uh

165

00:05:56,390 --> 00:05:54,240

uniformitarianism which is kind of

166

00:05:59,590 --> 00:05:56,400

believing that everything that that we

167

00:06:03,189 --> 00:05:59,600

see all earth changes uh are occurring

168

00:06:06,790 --> 00:06:03,199

today and are just enhanced uh erosion

169

00:06:08,870 --> 00:06:06,800

right enhanced wind features etc that

170

00:06:10,070 --> 00:06:08,880

have occurred over great amounts of time

171

00:06:13,350 --> 00:06:10,080

and they've left the earth that we see

172

00:06:15,350 --> 00:06:13,360

today well 200 years ago and many people

173

00:06:17,670 --> 00:06:15,360

today and include in our group believe

174

00:06:19,189 --> 00:06:17,680

that that's absolutely true that most of

175

00:06:21,430 --> 00:06:19,199

the features we see are caused by

176
00:06:24,870 --> 00:06:21,440
geological processes underway today but

177
00:06:28,710 --> 00:06:24,880
it's also um interrupted at time with

178
00:06:31,510 --> 00:06:28,720
catastrophic changes sudden changes

179
00:06:33,430 --> 00:06:31,520
and our event would have happened um

180
00:06:35,990 --> 00:06:33,440
only twelve thousand eight hundred and

181
00:06:38,070 --> 00:06:36,000
eighty or so years ago probably in june

182
00:06:40,790 --> 00:06:38,080
i can tell you how we got to that

183
00:06:42,749 --> 00:06:40,800
and the dinosaur impact was 65 million

184
00:06:46,390 --> 00:06:42,759
years ago so that's

185
00:06:48,950 --> 00:06:46,400
3500 times more distant in time

186
00:06:50,950 --> 00:06:48,960
so it's good to keep that timeline in uh

187
00:06:53,990 --> 00:06:50,960
in mind it's almost like if you were at

188
00:06:55,830 --> 00:06:54,000

the dinosaur comet impact and me here on

189

00:06:57,589 --> 00:06:55,840

the east coast in raleigh was at the

190

00:07:00,390 --> 00:06:57,599

younger driest event

191

00:07:02,150 --> 00:07:00,400

um or i'm at the current time

192

00:07:03,670 --> 00:07:02,160

the younger dross event would only be

193

00:07:06,309 --> 00:07:03,680

about a mile from me

194

00:07:08,870 --> 00:07:06,319

right and the the dinosaur event would

195

00:07:10,230 --> 00:07:08,880

have been 3500 miles it's a lot easier

196

00:07:12,790 --> 00:07:10,240

to swallow it

197

00:07:15,589 --> 00:07:12,800

so that one's commonly accepted how many

198

00:07:17,670 --> 00:07:15,599

others are you know major

199

00:07:19,909 --> 00:07:17,680

impacts to the earth are commonly

200

00:07:21,749 --> 00:07:19,919

accepted in science

201
00:07:24,309 --> 00:07:21,759
um well

202
00:07:27,110 --> 00:07:24,319
hundreds or i think about 175 major

203
00:07:29,110 --> 00:07:27,120
impacts but all of them date to

204
00:07:30,710 --> 00:07:29,120
you know generally more than a million

205
00:07:34,390 --> 00:07:30,720
years old although there's certainly

206
00:07:36,230 --> 00:07:34,400
some obsessions meteor crater in arizona

207
00:07:37,830 --> 00:07:36,240
is i think it's estimated to be about 55

208
00:07:39,670 --> 00:07:37,840
000 years old so that would have been

209
00:07:41,830 --> 00:07:39,680
seen by humans you know the big

210
00:07:43,270 --> 00:07:41,840
perfectly shaped bowl crater outside of

211
00:07:45,350 --> 00:07:43,280
flagstaff

212
00:07:47,110 --> 00:07:45,360
would have been witnessed by humans

213
00:07:47,830 --> 00:07:47,120

but it's not sorry that that one is how

214

00:07:50,869 --> 00:07:47,840

old

215

00:07:53,189 --> 00:07:50,879

um 55 000 years okay yeah and and and

216

00:07:54,629 --> 00:07:53,199

how far back are we dating humans at

217

00:07:57,270 --> 00:07:54,639

this point

218

00:07:59,749 --> 00:07:57,280

uh 300 000 years i believe now they just

219

00:08:01,909 --> 00:07:59,759

had a some fines in morocco that put us

220

00:08:04,629 --> 00:08:01,919

um back about that far and it used to be

221

00:08:06,790 --> 00:08:04,639

considered more like 150 200.

222

00:08:08,950 --> 00:08:06,800

so we've witnessed some impact so this

223

00:08:11,110 --> 00:08:08,960

one 55 000 years ago you're saying that

224

00:08:14,309 --> 00:08:11,120

one is commonly accepted

225

00:08:15,670 --> 00:08:14,319

yeah that's right yeah and did that

226

00:08:17,510 --> 00:08:15,680

have it you know other than creating a

227

00:08:18,950 --> 00:08:17,520

big crater on the earth uh what else did

228

00:08:20,710 --> 00:08:18,960

that one do

229

00:08:22,469 --> 00:08:20,720

do they believe yeah it would have had

230

00:08:24,070 --> 00:08:22,479

just local and regional effects it

231

00:08:25,909 --> 00:08:24,080

wouldn't have changed the global or

232

00:08:29,270 --> 00:08:25,919

hemispheric climate like the younger dry

233

00:08:30,629 --> 00:08:29,280

asset that did okay so now i can see why

234

00:08:32,389 --> 00:08:30,639

you know this is so controversial

235

00:08:34,310 --> 00:08:32,399

because we're talking about it being

236

00:08:36,949 --> 00:08:34,320

accepted what what i forgot what you

237

00:08:38,310 --> 00:08:36,959

said 60 60 million years ago for for the

238

00:08:39,430 --> 00:08:38,320

dinosaurs

239

00:08:41,350 --> 00:08:39,440

versus

240

00:08:44,870 --> 00:08:41,360

something happening

241

00:08:45,910 --> 00:08:44,880

way more recent and and and having

242

00:08:49,110 --> 00:08:45,920

uh

243

00:08:50,790 --> 00:08:49,120

impact

244

00:08:52,230 --> 00:08:50,800

yeah and it would have caused um what's

245

00:08:54,550 --> 00:08:52,240

well accepted it's kind of interesting

246

00:08:56,790 --> 00:08:54,560

that there there's a body of science

247

00:08:59,430 --> 00:08:56,800

that's been uh developing over the last

248

00:09:03,269 --> 00:08:59,440

40 or 50 years about the younger drier

249

00:09:05,190 --> 00:09:03,279

event as a climate change in itself

250

00:09:07,590 --> 00:09:05,200

and that's well accepted yeah and what

251

00:09:09,430 --> 00:09:07,600

is it so what are the two theories on

252

00:09:12,310 --> 00:09:09,440

on that younger driest event we're

253

00:09:14,310 --> 00:09:12,320

talking about 12 000 bc

254

00:09:16,870 --> 00:09:14,320

ballpark right yeah or you might have it

255

00:09:19,350 --> 00:09:16,880

even more specific but you

256

00:09:20,389 --> 00:09:19,360

your your guys your team is calling it

257

00:09:22,790 --> 00:09:20,399

uh

258

00:09:24,550 --> 00:09:22,800

um a cosmic impact and

259

00:09:27,190 --> 00:09:24,560

what does the other side say it was yeah

260

00:09:29,190 --> 00:09:27,200

they believe for reasons um undescribed

261

00:09:30,150 --> 00:09:29,200

because they will say it's a mystery

262

00:09:32,710 --> 00:09:30,160

right

263

00:09:34,710 --> 00:09:32,720

but that um in essence that there was a

264

00:09:36,470 --> 00:09:34,720

large influx of fresh water off the

265

00:09:38,550 --> 00:09:36,480

canadian ice sheet

266

00:09:41,670 --> 00:09:38,560

that broke up in some fashion and

267

00:09:42,949 --> 00:09:41,680

allowed the the large glacial lake um

268

00:09:44,150 --> 00:09:42,959

that was sitting on top of the ice sheet

269

00:09:47,269 --> 00:09:44,160

i guess you wouldn't call it glacial but

270

00:09:49,350 --> 00:09:47,279

the ice sheet lake lake agassiz

271

00:09:51,350 --> 00:09:49,360

many times the size of the great lakes

272

00:09:52,790 --> 00:09:51,360

to flow into the north atlantic and

273

00:09:54,389 --> 00:09:52,800

arctic sea

274

00:09:56,150 --> 00:09:54,399

and that was particularly damaging to

275

00:09:57,910 --> 00:09:56,160

climate in the north atlantic because it

276

00:10:00,070 --> 00:09:57,920

shut down the gulf stream that's all

277

00:10:02,230 --> 00:10:00,080

well accepted the question is what

278

00:10:04,550 --> 00:10:02,240

initiated that flow

279

00:10:06,310 --> 00:10:04,560

they consider that a mystery we offered

280

00:10:07,990 --> 00:10:06,320

up evidence that there was an impact

281

00:10:09,350 --> 00:10:08,000

into the ice sheet and other places in

282

00:10:11,110 --> 00:10:09,360

the northern hemisphere perhaps in the

283

00:10:12,389 --> 00:10:11,120

southern hemisphere as well

284

00:10:14,150 --> 00:10:12,399

uh in fact we've got a paper that

285

00:10:15,910 --> 00:10:14,160

defines the southern hemispheric impacts

286

00:10:19,509 --> 00:10:15,920

i shouldn't say perhaps

287

00:10:22,389 --> 00:10:19,519

but the that we were uh traumatized you

288

00:10:24,870 --> 00:10:22,399

know over a period of time that may have

289

00:10:26,949 --> 00:10:24,880

repeated at the same time of year before

290

00:10:29,509 --> 00:10:26,959

and after for some period of years maybe

291

00:10:32,630 --> 00:10:29,519

it went on for 100 years that we kept

292

00:10:34,870 --> 00:10:32,640

encountering a meteor shower that was

293

00:10:37,310 --> 00:10:34,880

particularly traumatic to earth

294

00:10:41,269 --> 00:10:37,320

and but during that 12

295

00:10:43,269 --> 00:10:41,279

80 plus or minus time we had a very very

296

00:10:45,590 --> 00:10:43,279

bad long weekend

297

00:10:46,949 --> 00:10:45,600

where we could have had objects that

298

00:10:47,990 --> 00:10:46,959

would have been crater producing but

299

00:10:49,990 --> 00:10:48,000

also

300

00:10:52,230 --> 00:10:50,000

hundreds of objects that would have

301
00:10:53,670 --> 00:10:52,240
really acted like nuclear bombs without

302
00:10:55,829 --> 00:10:53,680
the radiation

303
00:10:57,269 --> 00:10:55,839
all of the effects of of nuclear bombs

304
00:10:59,269 --> 00:10:57,279
you know from the high heat to the

305
00:11:00,550 --> 00:10:59,279
pressure waves etc

306
00:11:03,110 --> 00:11:00,560
uh

307
00:11:04,949 --> 00:11:03,120
can occur when you have just a 50 to 100

308
00:11:06,550 --> 00:11:04,959
meter object enter the atmosphere and

309
00:11:07,990 --> 00:11:06,560
then explode because remember these

310
00:11:09,110 --> 00:11:08,000
things are coming in

311
00:11:11,110 --> 00:11:09,120
at um

312
00:11:12,790 --> 00:11:11,120
kind of solar system speeds you know

313
00:11:14,550 --> 00:11:12,800

relative speeds between bodies in the

314

00:11:16,470 --> 00:11:14,560

solar system could be much higher than

315

00:11:18,310 --> 00:11:16,480

anything we can experience on earth

316

00:11:20,870 --> 00:11:18,320

so this stuff would come in at 70 or 80

317

00:11:22,790 --> 00:11:20,880

000 miles an hour so 100 times the speed

318

00:11:23,670 --> 00:11:22,800

of a rifle bullet

319

00:11:26,550 --> 00:11:23,680

and

320

00:11:27,670 --> 00:11:26,560

hits the atmosphere it's almost like

321

00:11:29,269 --> 00:11:27,680

somebody hitting the water when they

322

00:11:31,910 --> 00:11:29,279

jump off a bridge they don't hit the

323

00:11:34,470 --> 00:11:31,920

bottom of the river right they kind of

324

00:11:36,069 --> 00:11:34,480

explode in the water if you will sorry

325

00:11:38,069 --> 00:11:36,079

to be graphic there but

326

00:11:41,110 --> 00:11:38,079

but you hit something more dense and

327

00:11:43,750 --> 00:11:41,120

that causes a great release of kinetic

328

00:11:46,230 --> 00:11:43,760

energy and that would result in

329

00:11:48,550 --> 00:11:46,240

explosions all over the earth

330

00:11:51,190 --> 00:11:48,560

and and trauma to species

331

00:11:53,190 --> 00:11:51,200

including the human species

332

00:11:55,350 --> 00:11:53,200

so yeah i wanted to get to that next

333

00:11:57,910 --> 00:11:55,360

regardless of what caused

334

00:11:59,990 --> 00:11:57,920

this younger dryest period

335

00:12:00,949 --> 00:12:00,000

there's agreement that it that it took

336

00:12:03,829 --> 00:12:00,959

place

337

00:12:05,990 --> 00:12:03,839

is is there agreement as to what the

338

00:12:07,350 --> 00:12:06,000

effects of the younger dryas period was

339

00:12:09,590 --> 00:12:07,360

do both sides yeah pretty much agree on

340

00:12:11,750 --> 00:12:09,600

that that's right and the the the really

341

00:12:14,550 --> 00:12:11,760

the two most mysterious were the

342

00:12:17,350 --> 00:12:14,560

dissipat uh disappearance of 90

343

00:12:20,710 --> 00:12:17,360

of the megafauna in north america and

344

00:12:22,790 --> 00:12:20,720

megafauna are large mammals over uh 40

345

00:12:24,949 --> 00:12:22,800

kilograms right

346

00:12:26,949 --> 00:12:24,959

so 250

347

00:12:29,829 --> 00:12:26,959

species of animals

348

00:12:32,389 --> 00:12:29,839

went extinct around that time or

349

00:12:35,030 --> 00:12:32,399

relatively shortly thereafter they all

350

00:12:36,629 --> 00:12:35,040

crashed in population at that time

351

00:12:39,350 --> 00:12:36,639

and some of them seemed to have blinked

352

00:12:41,509 --> 00:12:39,360

out more or less precisely at that time

353

00:12:43,350 --> 00:12:41,519

and what what's one that we would

354

00:12:45,269 --> 00:12:43,360

know most about you know there were two

355

00:12:47,190 --> 00:12:45,279

species of mammoth the woolly mammoth

356

00:12:49,269 --> 00:12:47,200

and the columbia mammoth you know i've

357

00:12:51,269 --> 00:12:49,279

got a 11 foot long mammoth tusk over

358

00:12:53,509 --> 00:12:51,279

here on the wall that

359

00:12:55,750 --> 00:12:53,519

has been part of the debate uh the giant

360

00:12:59,110 --> 00:12:55,760

ground sloth which would have been a

361

00:13:02,550 --> 00:12:59,120

sloth that was you know 15 20 feet high

362

00:13:05,269 --> 00:13:02,560

uh beavers the size of suburbans

363

00:13:08,069 --> 00:13:05,279

gigantic armadillos remember all of this

364

00:13:10,150 --> 00:13:08,079

stuff jim was only 13 000 years ago

365

00:13:12,470 --> 00:13:10,160

humans walked the earth modern homo

366

00:13:13,990 --> 00:13:12,480

sapiens in north america and the places

367

00:13:15,430 --> 00:13:14,000

we lived today

368

00:13:16,470 --> 00:13:15,440

walked around

369

00:13:20,230 --> 00:13:16,480

with

370

00:13:22,389 --> 00:13:20,240

africa savannah on steroids a

371

00:13:24,949 --> 00:13:22,399

tremendously dangerous place where these

372

00:13:26,949 --> 00:13:24,959

would have had been very very crafty

373

00:13:28,870 --> 00:13:26,959

skilled people just to survive in the

374

00:13:30,550 --> 00:13:28,880

presence of these things but again back

375

00:13:32,949 --> 00:13:30,560

kind of the african savannah comparison

376
00:13:35,829 --> 00:13:32,959
you had the american lion the american

377
00:13:37,829 --> 00:13:35,839
cheetah the american jaguar

378
00:13:38,949 --> 00:13:37,839
you had horses in north america at the

379
00:13:40,949 --> 00:13:38,959
time

380
00:13:43,910 --> 00:13:40,959
uh there was a larger version of our

381
00:13:46,389 --> 00:13:43,920
current bison called bison antiquis

382
00:13:48,389 --> 00:13:46,399
and all of this begins or does go

383
00:13:49,430 --> 00:13:48,399
extinct right at the time of the younger

384
00:13:51,350 --> 00:13:49,440
drives

385
00:13:52,629 --> 00:13:51,360
and as i said there's broad agreement on

386
00:13:55,990 --> 00:13:52,639
that

387
00:13:57,269 --> 00:13:56,000
just like the climate crash to be a

388
00:13:59,269 --> 00:13:57,279

mystery

389

00:14:01,030 --> 00:13:59,279

but mysteries don't endure forever and

390

00:14:03,110 --> 00:14:01,040

it seems like science has you know

391

00:14:04,710 --> 00:14:03,120

accepted the fact that this is a mystery

392

00:14:07,030 --> 00:14:04,720

and

393

00:14:10,230 --> 00:14:07,040

perhaps we won't ever solve it when in

394

00:14:12,389 --> 00:14:10,240

2007 we offered evidence that um that

395

00:14:13,990 --> 00:14:12,399

that impacts were the cause

396

00:14:15,269 --> 00:14:14,000

and what about what was the impact on

397

00:14:18,710 --> 00:14:15,279

humans

398

00:14:20,870 --> 00:14:18,720

yeah that's a great question jim and

399

00:14:23,350 --> 00:14:20,880

it's got a a interesting and kind of

400

00:14:24,470 --> 00:14:23,360

mysterious answer the original culture

401
00:14:26,710 --> 00:14:24,480
of

402
00:14:28,150 --> 00:14:26,720
paleo-indian culture to inhabit north

403
00:14:30,470 --> 00:14:28,160
america

404
00:14:33,189 --> 00:14:30,480
that was considered widespread and

405
00:14:35,269 --> 00:14:33,199
easily identified through their uh kind

406
00:14:38,230 --> 00:14:35,279
of unique spear point i usually have one

407
00:14:39,990 --> 00:14:38,240
with me but i called the clovis point

408
00:14:43,189 --> 00:14:40,000
and clovis points were found from

409
00:14:45,750 --> 00:14:43,199
seattle to miami to tierra de fuego so

410
00:14:48,230 --> 00:14:45,760
there was one common culture of indians

411
00:14:50,629 --> 00:14:48,240
that produced those points and for many

412
00:14:52,870 --> 00:14:50,639
many years most of the 20th century that

413
00:14:54,710 --> 00:14:52,880

was considered the very first indian

414

00:14:56,550 --> 00:14:54,720

culture and you might have heard the the

415

00:14:59,189 --> 00:14:56,560

idea that they came over on the bering

416

00:15:01,670 --> 00:14:59,199

land bridge you know from asia

417

00:15:04,629 --> 00:15:01,680

and very quickly populated north and

418

00:15:06,629 --> 00:15:04,639

south america well that's very true that

419

00:15:08,069 --> 00:15:06,639

sense has been very well challenged and

420

00:15:10,550 --> 00:15:08,079

people are falling off the idea that

421

00:15:12,790 --> 00:15:10,560

they were the very first people in north

422

00:15:14,389 --> 00:15:12,800

and south america right the clovis

423

00:15:16,230 --> 00:15:14,399

culture was certainly the one that's

424

00:15:19,030 --> 00:15:16,240

easily identified

425

00:15:20,710 --> 00:15:19,040

through their uh through their lithics

426

00:15:23,350 --> 00:15:20,720

through their stone tools

427

00:15:25,509 --> 00:15:23,360

but we also find older tools now you

428

00:15:27,189 --> 00:15:25,519

know sometimes reaching back 20 and 30

429

00:15:29,430 --> 00:15:27,199

000 years and that in itself was a big

430

00:15:30,949 --> 00:15:29,440

scientific debate but there's really no

431

00:15:33,430 --> 00:15:30,959

question that there weren't a whole lot

432

00:15:35,430 --> 00:15:33,440

of those people until the clovis people

433

00:15:37,189 --> 00:15:35,440

came along but jim then the clovis

434

00:15:39,030 --> 00:15:37,199

people disappear

435

00:15:41,110 --> 00:15:39,040

right at the time of the impact and the

436

00:15:43,350 --> 00:15:41,120

time of the impact is defined by what we

437

00:15:45,990 --> 00:15:43,360

call the black mat

438

00:15:48,870 --> 00:15:46,000

i'd be happy to describe that to you

439

00:15:50,790 --> 00:15:48,880

go ahead yeah the black mat um

440

00:15:53,110 --> 00:15:50,800

had actually been identified for you

441

00:15:55,350 --> 00:15:53,120

know decades at archaeological sites and

442

00:15:57,509 --> 00:15:55,360

paleontological sites where they would

443

00:15:59,189 --> 00:15:57,519

say digging to find the clovis people

444

00:16:01,110 --> 00:15:59,199

and to find the earliest north american

445

00:16:04,389 --> 00:16:01,120

indians right

446

00:16:06,150 --> 00:16:04,399

or to find the bones and remains of the

447

00:16:08,790 --> 00:16:06,160

extinct megaphone

448

00:16:11,189 --> 00:16:08,800

and those researchers noted at the time

449

00:16:13,829 --> 00:16:11,199

that they generally found them after

450

00:16:16,629 --> 00:16:13,839

they encountered a thin layer of of

451

00:16:19,670 --> 00:16:16,639

distinctly darker soil

452

00:16:21,670 --> 00:16:19,680

oftentimes underlaid by soil for several

453

00:16:23,829 --> 00:16:21,680

more meters that did not resemble the

454

00:16:25,990 --> 00:16:23,839

soil above it so you'll have a certain

455

00:16:27,430 --> 00:16:26,000

character of the soil then you'll have a

456

00:16:29,430 --> 00:16:27,440

black mat

457

00:16:31,350 --> 00:16:29,440

and then up until modern times in the

458

00:16:33,030 --> 00:16:31,360

soil column getting younger younger as

459

00:16:35,590 --> 00:16:33,040

you move up the soil

460

00:16:37,430 --> 00:16:35,600

all of that oftentimes will change color

461

00:16:39,269 --> 00:16:37,440

and character too

462

00:16:43,430 --> 00:16:39,279

so they would dig down onto the black

463

00:16:46,150 --> 00:16:43,440

matte and only below the black matte

464

00:16:47,749 --> 00:16:46,160
and never ever once above

465

00:16:49,509 --> 00:16:47,759
have they found

466

00:16:50,470 --> 00:16:49,519
the clovis tools

467

00:16:52,629 --> 00:16:50,480
or

468

00:16:54,470 --> 00:16:52,639
most of the megafauna bones particularly

469

00:16:56,629 --> 00:16:54,480
mammoth and whatnot and how are you

470

00:16:58,629 --> 00:16:56,639
talking about digging

471

00:17:00,150 --> 00:16:58,639
um depends on where you are but

472

00:17:03,269 --> 00:17:00,160
generally only two or three meters you

473

00:17:05,590 --> 00:17:03,279
know this isn't a a a long time ago from

474

00:17:07,990 --> 00:17:05,600
a soil sedimentation standpoint

475

00:17:09,750 --> 00:17:08,000
but that black mat and particularly that

476

00:17:11,750 --> 00:17:09,760

which is under it which is where we find

477

00:17:14,549 --> 00:17:11,760

the cosmic materials that provide the

478

00:17:16,789 --> 00:17:14,559

evidence for the impact

479

00:17:19,110 --> 00:17:16,799

would have been continent-wide but it

480

00:17:21,909 --> 00:17:19,120

can only be seen now digging down in

481

00:17:23,510 --> 00:17:21,919

places that have not eroded since right

482

00:17:25,990 --> 00:17:23,520

so most of our landscape one way or

483

00:17:27,990 --> 00:17:26,000

another has been reorganized and eroded

484

00:17:30,950 --> 00:17:28,000

and whatnot and and probably removed

485

00:17:32,549 --> 00:17:30,960

that evidence but in a number of places

486

00:17:35,669 --> 00:17:32,559

particularly those where they've chosen

487

00:17:38,310 --> 00:17:35,679

to do research they know that the soil

488

00:17:39,669 --> 00:17:38,320

has continued to accumulate right and if

489

00:17:41,990 --> 00:17:39,679

you go back to that regularly

490

00:17:44,549 --> 00:17:42,000

accumulating soil including in like

491

00:17:46,470 --> 00:17:44,559

caves where the sediment washes into the

492

00:17:48,710 --> 00:17:46,480

cave and you'll get a very very regular

493

00:17:50,789 --> 00:17:48,720

pulse of sediment you go back and look

494

00:17:52,710 --> 00:17:50,799

at that you have the black mat and then

495

00:17:54,470 --> 00:17:52,720

below the black mat

496

00:17:56,310 --> 00:17:54,480

is the breath of hell

497

00:17:57,990 --> 00:17:56,320

right that's where we find our very best

498

00:18:00,150 --> 00:17:58,000

evidence that there was an impact and

499

00:18:02,070 --> 00:18:00,160

that's using the very same tools the

500

00:18:03,990 --> 00:18:02,080

same metrics and the same evidence that

501

00:18:06,230 --> 00:18:04,000

they used to prove

502

00:18:08,230 --> 00:18:06,240

the comet dinosaur impact you might

503

00:18:10,230 --> 00:18:08,240

remember in in those studies that they

504

00:18:12,549 --> 00:18:10,240

called the kt boundary

505

00:18:15,110 --> 00:18:12,559

the cretaceous tertiary boundary and you

506

00:18:17,510 --> 00:18:15,120

can see it in rock right so that was

507

00:18:20,470 --> 00:18:17,520

sediment at one time 65 million years

508

00:18:22,789 --> 00:18:20,480

ago it's now formed into rock but you

509

00:18:25,110 --> 00:18:22,799

actually find a discolored different

510

00:18:27,510 --> 00:18:25,120

colored band there sometimes maybe it's

511

00:18:29,830 --> 00:18:27,520

a black band just like the black matte

512

00:18:31,510 --> 00:18:29,840

and that what the alvarez team started

513

00:18:33,830 --> 00:18:31,520

doing in 1980

514

00:18:35,590 --> 00:18:33,840

their uh insight was what is the

515

00:18:38,950 --> 00:18:35,600

geochemistry

516

00:18:41,270 --> 00:18:38,960

of that band of rock versus that below

517

00:18:43,110 --> 00:18:41,280

it and that above it is there anything

518

00:18:45,110 --> 00:18:43,120

special about that and what they

519

00:18:47,669 --> 00:18:45,120

discovered was you know ground shaking

520

00:18:50,630 --> 00:18:47,679

it's totally accepted by science now or

521

00:18:51,510 --> 00:18:50,640

99 percent there's still a few hold outs

522

00:18:53,909 --> 00:18:51,520

um

523

00:18:55,990 --> 00:18:53,919

that because there was such a it was so

524

00:18:57,990 --> 00:18:56,000

highly enriched with the rare earth

525

00:19:00,950 --> 00:18:58,000

metal iridium

526

00:19:03,350 --> 00:19:00,960

which is much more common uh in solar

527

00:19:05,190 --> 00:19:03,360

materials than it is the earth's crust

528

00:19:07,029 --> 00:19:05,200

that that in indicated that there was

529

00:19:09,110 --> 00:19:07,039

some kind of input

530

00:19:11,270 --> 00:19:09,120

into the sediment at the time which is

531

00:19:13,350 --> 00:19:11,280

now formed into rock so you find it

532

00:19:15,350 --> 00:19:13,360

enriched in that iridium

533

00:19:17,270 --> 00:19:15,360

and you know that something came from

534

00:19:19,270 --> 00:19:17,280

above at that time that we had some

535

00:19:21,110 --> 00:19:19,280

interaction with the outside but it

536

00:19:21,909 --> 00:19:21,120

wasn't a closed system

537

00:19:25,590 --> 00:19:21,919

so

538

00:19:26,950 --> 00:19:25,600

physical things now these are very very

539

00:19:28,870 --> 00:19:26,960

small and you have to use transmission

540

00:19:31,909 --> 00:19:28,880

electron microscopes and it's it's

541

00:19:35,029 --> 00:19:31,919

detailed forensic um

542

00:19:37,510 --> 00:19:35,039

tools are needed but when the the hack

543

00:19:39,350 --> 00:19:37,520

that we used if you will was to go to

544

00:19:41,110 --> 00:19:39,360

well-dated archaeological sites

545

00:19:42,870 --> 00:19:41,120

particularly those where the clovis

546

00:19:44,950 --> 00:19:42,880

people were noted where you got to the

547

00:19:47,669 --> 00:19:44,960

black mat and below that you'd find the

548

00:19:49,669 --> 00:19:47,679

clovis tools and you test that soil

549

00:19:52,070 --> 00:19:49,679

and you find a whole variety of

550

00:19:54,710 --> 00:19:52,080

materials that would not be there unless

551
00:19:55,909 --> 00:19:54,720
there was an incredible conflagration

552
00:19:58,710 --> 00:19:55,919
you know

553
00:20:00,870 --> 00:19:58,720
high heat high pressure impact

554
00:20:02,390 --> 00:20:00,880
and this excuse me and this was debated

555
00:20:04,870 --> 00:20:02,400
on the joe rogan

556
00:20:07,669 --> 00:20:04,880
show right yeah that's right and rogan's

557
00:20:09,909 --> 00:20:07,679
been a tremendous booster to you know uh

558
00:20:11,990 --> 00:20:09,919
to our hypothesis yeah yeah so so people

559
00:20:14,789 --> 00:20:12,000
can go can go look that up it's graham

560
00:20:17,110 --> 00:20:14,799
hancock on the on the rogan show i guess

561
00:20:20,230 --> 00:20:17,120
to see that debate um and i guess you

562
00:20:22,149 --> 00:20:20,240
would say that hancock won the debate

563
00:20:24,390 --> 00:20:22,159

hancock did win the debate they actually

564

00:20:27,510 --> 00:20:24,400

they've been on him and randall carlson

565

00:20:29,110 --> 00:20:27,520

have done uh probably up to 20 shows now

566

00:20:30,950 --> 00:20:29,120

if you take both of their appearances

567

00:20:32,470 --> 00:20:30,960

separate and together and those have

568

00:20:33,669 --> 00:20:32,480

been some of the most popular rogan

569

00:20:34,950 --> 00:20:33,679

episodes but

570

00:20:36,470 --> 00:20:34,960

joe did a great thing i don't think he's

571

00:20:37,750 --> 00:20:36,480

done it a lot maybe he'll do it more in

572

00:20:39,590 --> 00:20:37,760

the future seeing how much grief he's

573

00:20:40,789 --> 00:20:39,600

taking these days but he did have a

574

00:20:43,430 --> 00:20:40,799

debate

575

00:20:45,510 --> 00:20:43,440

and he had the pro and con sides and he

576

00:20:47,430 --> 00:20:45,520

had one of the researchers on our team

577

00:20:50,149 --> 00:20:47,440

and graham hancock

578

00:20:52,070 --> 00:20:50,159

um on one side and randall carlson so

579

00:20:53,990 --> 00:20:52,080

that was three and then on the other

580

00:20:56,549 --> 00:20:54,000

side he had um

581

00:20:59,110 --> 00:20:56,559

a researcher named mark defont and

582

00:21:00,870 --> 00:20:59,120

michael shermer who you might have come

583

00:21:02,390 --> 00:21:00,880

across you know shurmer who's kind of a

584

00:21:05,590 --> 00:21:02,400

professional skeptic and has his own

585

00:21:07,430 --> 00:21:05,600

podcast and they took the skeptical view

586

00:21:09,270 --> 00:21:07,440

and both of them had been long time

587

00:21:11,669 --> 00:21:09,280

skeptics of our hypothesis said they

588

00:21:13,750 --> 00:21:11,679

debated on rogan jim

589

00:21:15,270 --> 00:21:13,760

and it was a hell of a debate

590

00:21:18,950 --> 00:21:15,280

subsequently

591

00:21:21,110 --> 00:21:18,960

both defaunt and shurmur came around

592

00:21:22,789 --> 00:21:21,120

and said on twitter that they had

593

00:21:24,870 --> 00:21:22,799

changed their mind

594

00:21:27,029 --> 00:21:24,880

that some of our additional evidence had

595

00:21:28,710 --> 00:21:27,039

changed their mind and that hasn't made

596

00:21:30,390 --> 00:21:28,720

it on rogan yet but it's one of the most

597

00:21:32,470 --> 00:21:30,400

exciting things that have happened to us

598

00:21:34,950 --> 00:21:32,480

of that type where you had your dug-in

599

00:21:36,549 --> 00:21:34,960

critics who spent hours debating their

600

00:21:37,750 --> 00:21:36,559

their case and how often do you see that

601
00:21:39,669 --> 00:21:37,760
these days you've really got to

602
00:21:41,110 --> 00:21:39,679
appreciate their intellectual integrity

603
00:21:43,110 --> 00:21:41,120
yeah yeah a lot of people don't like to

604
00:21:44,950 --> 00:21:43,120
change opinions today all right

605
00:21:46,549 --> 00:21:44,960
let's stick through a few things i want

606
00:21:48,549 --> 00:21:46,559
to make sure that way i just asked you

607
00:21:50,230 --> 00:21:48,559
um quick questions on

608
00:21:53,190 --> 00:21:50,240
going back to the dinosaurs

609
00:21:55,990 --> 00:21:53,200
what what survived that uh that comment

610
00:21:56,789 --> 00:21:56,000
what what species survived

611
00:21:58,789 --> 00:21:56,799
well

612
00:22:01,750 --> 00:21:58,799
fortunately since we're here kind of uh

613
00:22:03,510 --> 00:22:01,760

a small rodent very early mammals right

614

00:22:05,270 --> 00:22:03,520

those things that could burrow and live

615

00:22:06,870 --> 00:22:05,280

beneath the ground

616

00:22:08,310 --> 00:22:06,880

uh

617

00:22:09,750 --> 00:22:08,320

survive when you say road are you

618

00:22:12,310 --> 00:22:09,760

talking about rats

619

00:22:14,230 --> 00:22:12,320

yeah yeah yeah maybe more like a mole

620

00:22:16,230 --> 00:22:14,240

you know that so

621

00:22:18,470 --> 00:22:16,240

so moles what you're saying is the moles

622

00:22:19,750 --> 00:22:18,480

we see today were around

623

00:22:21,590 --> 00:22:19,760

when the dinosaurs are here is what

624

00:22:23,430 --> 00:22:21,600

you're saying yeah not the moles we see

625

00:22:25,430 --> 00:22:23,440

today but kind of a species much like

626
00:22:27,430 --> 00:22:25,440
that okay you know small rodent-like

627
00:22:29,350 --> 00:22:27,440
creatures and then they supposedly

628
00:22:30,230 --> 00:22:29,360
evolved into us and you had a great show

629
00:22:32,870 --> 00:22:30,240
on that

630
00:22:33,750 --> 00:22:32,880
last week yeah yeah yeah well we can we

631
00:22:35,270 --> 00:22:33,760
can

632
00:22:36,789 --> 00:22:35,280
get into that for a minute if we have

633
00:22:39,350 --> 00:22:36,799
time um

634
00:22:41,110 --> 00:22:39,360
and uh you said some reptiles

635
00:22:42,710 --> 00:22:41,120
yeah that's right the the you know

636
00:22:44,470 --> 00:22:42,720
alligators and crocodiles and that kind

637
00:22:45,669 --> 00:22:44,480
of stuff are essentially dinosaurs that

638
00:22:47,270 --> 00:22:45,679

made it

639

00:22:48,950 --> 00:22:47,280

right and little lizard the little

640

00:22:50,870 --> 00:22:48,960

lizards in our backyards are are

641

00:22:52,950 --> 00:22:50,880

dinosaurs essentially

642

00:22:54,950 --> 00:22:52,960

yeah that's right and and so are the

643

00:22:58,070 --> 00:22:54,960

birds right that there's an increasing

644

00:23:00,310 --> 00:22:58,080

connection between uh birds having been

645

00:23:01,110 --> 00:23:00,320

um in one way or another descended from

646

00:23:03,510 --> 00:23:01,120

the

647

00:23:05,110 --> 00:23:03,520

same class of of of creatures that we

648

00:23:06,549 --> 00:23:05,120

call dinosaurs

649

00:23:08,310 --> 00:23:06,559

and all that obviously makes sense as

650

00:23:10,149 --> 00:23:08,320

far as it being a comment explaining why

651
00:23:12,149 --> 00:23:10,159
birds would survive

652
00:23:14,390 --> 00:23:12,159
yeah as opposed to most other things

653
00:23:16,310 --> 00:23:14,400
yeah and and and just like uh the

654
00:23:18,789 --> 00:23:16,320
younger driest event it seemed to

655
00:23:20,870 --> 00:23:18,799
preferentially take out the larger

656
00:23:23,110 --> 00:23:20,880
creatures right because they would have

657
00:23:26,310 --> 00:23:23,120
required more biomass they would have

658
00:23:28,310 --> 00:23:26,320
lost their food source for decades etc

659
00:23:29,830 --> 00:23:28,320
and it seems like those that can

660
00:23:32,870 --> 00:23:29,840
struggle through

661
00:23:34,390 --> 00:23:32,880
um have to be kind of smaller in stature

662
00:23:36,310 --> 00:23:34,400
right

663
00:23:38,390 --> 00:23:36,320

um okay and then ticking through some

664

00:23:41,590 --> 00:23:38,400

big events from the past and whether you

665

00:23:42,549 --> 00:23:41,600

think it's comment related or not etc so

666

00:23:46,149 --> 00:23:42,559

um

667

00:23:47,669 --> 00:23:46,159

one is is the the biblical flood which

668

00:23:50,070 --> 00:23:47,679

we don't know if that's historical or

669

00:23:52,549 --> 00:23:50,080

not so give us your just quick take on

670

00:23:54,149 --> 00:23:52,559

on the noah's ark flood is is that

671

00:23:55,830 --> 00:23:54,159

historical or not

672

00:23:57,269 --> 00:23:55,840

and if so

673

00:23:59,430 --> 00:23:57,279

a lot of people very appropriately

674

00:24:00,630 --> 00:23:59,440

speculate that the younger driest event

675

00:24:03,909 --> 00:24:00,640

would have been the origin of those

676

00:24:07,029 --> 00:24:03,919

flood stories but now according to the

677

00:24:09,190 --> 00:24:07,039

bible they have it pegged around 2500 bc

678

00:24:10,789 --> 00:24:09,200

for the flood yeah right whereas you're

679

00:24:12,470 --> 00:24:10,799

talking about the driest event being 12

680

00:24:14,390 --> 00:24:12,480

000 bc right

681

00:24:16,230 --> 00:24:14,400

that's right but i don't subscribe to

682

00:24:18,070 --> 00:24:16,240

the the younger driest event which is my

683

00:24:20,549 --> 00:24:18,080

subject being the source the biblical

684

00:24:22,470 --> 00:24:20,559

flood i think it was um what was a

685

00:24:26,390 --> 00:24:22,480

subsequent impact

686

00:24:28,630 --> 00:24:26,400

roughly uh 6 000 bc or 8 000 years ago

687

00:24:30,630 --> 00:24:28,640

okay so and again i'm just pulling this

688

00:24:33,430 --> 00:24:30,640

stuff off of wikipedia so

689

00:24:34,630 --> 00:24:33,440

as far as what you know biblical

690

00:24:36,870 --> 00:24:34,640

scholars

691

00:24:38,950 --> 00:24:36,880

apparently put the noah's flood around

692

00:24:39,669 --> 00:24:38,960

2500 bc

693

00:24:41,510 --> 00:24:39,679

but

694

00:24:43,430 --> 00:24:41,520

who knows right yeah that's right who

695

00:24:45,990 --> 00:24:43,440

knows um but we've got an interesting

696

00:24:48,390 --> 00:24:46,000

intersection um our same research team

697

00:24:52,310 --> 00:24:48,400

and i did myself we went over to

698

00:24:54,630 --> 00:24:52,320

um to jordan in 2014 and 2015 and we

699

00:24:57,750 --> 00:24:54,640

published a paper last year which is now

700

00:25:00,310 --> 00:24:57,760

arguably the most read scientific

701
00:25:02,070 --> 00:25:00,320
publication on earth right now and it'll

702
00:25:03,950 --> 00:25:02,080
die away at some point but we published

703
00:25:06,149 --> 00:25:03,960
a paper that said in

704
00:25:08,390 --> 00:25:06,159
1700 bc

705
00:25:10,789 --> 00:25:08,400
uh settlement which was already been dug

706
00:25:13,269 --> 00:25:10,799
over there for the last 15 years called

707
00:25:15,750 --> 00:25:13,279
tal hamam may have been the origin of

708
00:25:18,549 --> 00:25:15,760
the sodom myth because when you dig into

709
00:25:20,230 --> 00:25:18,559
talhamam you get down a meter or two

710
00:25:21,750 --> 00:25:20,240
and you find a burn layer where

711
00:25:23,590 --> 00:25:21,760
everything was actually you know

712
00:25:24,870 --> 00:25:23,600
completely destroyed it's just north of

713
00:25:26,950 --> 00:25:24,880

the dead sea and has a lot of

714

00:25:30,549 --> 00:25:26,960

geographical clues that suggest it was

715

00:25:32,230 --> 00:25:30,559

sodom so we actually think um

716

00:25:33,830 --> 00:25:32,240

that there were subsequent impacts the

717

00:25:36,230 --> 00:25:33,840

younger dryas that was certainly the

718

00:25:37,269 --> 00:25:36,240

largest and most devastating and globe

719

00:25:40,630 --> 00:25:37,279

changing

720

00:25:42,630 --> 00:25:40,640

but then there were regional to you know

721

00:25:44,549 --> 00:25:42,640

hemispheric events that happen

722

00:25:48,070 --> 00:25:44,559

subsequently and you can see that in the

723

00:25:51,430 --> 00:25:48,080

tree ring record right that trees

724

00:25:54,310 --> 00:25:51,440

all over the earth stop growing together

725

00:25:55,269 --> 00:25:54,320

i believe five times in the last 12 000

726
00:25:57,029 --> 00:25:55,279
years

727
00:26:00,470 --> 00:25:57,039
and the debate that's well accepted the

728
00:26:02,870 --> 00:26:00,480
debate is was that caused by volcanoes

729
00:26:04,549 --> 00:26:02,880
or caused by potentially impacts

730
00:26:07,029 --> 00:26:04,559
so we believe there was a tremendous

731
00:26:08,789 --> 00:26:07,039
impact 13 000 years ago and the number

732
00:26:11,269 --> 00:26:08,799
of subsequent ones that haven't been

733
00:26:13,990 --> 00:26:11,279
accepted or acknowledged yet

734
00:26:15,750 --> 00:26:14,000
and the noah flood

735
00:26:17,590 --> 00:26:15,760
where do you believe that took place if

736
00:26:19,590 --> 00:26:17,600
it truly took place

737
00:26:21,190 --> 00:26:19,600
yeah we've got a kind of a related team

738
00:26:24,630 --> 00:26:21,200

of researchers that's done more on that

739

00:26:27,350 --> 00:26:24,640

and they believe the 8 000 um year ago

740

00:26:29,590 --> 00:26:27,360

event or 6000 bc where there's a

741

00:26:31,190 --> 00:26:29,600

well-defined climate crash then

742

00:26:33,430 --> 00:26:31,200

could have been caused by an impact in

743

00:26:35,269 --> 00:26:33,440

the indian ocean

744

00:26:37,430 --> 00:26:35,279

and not only would have that caused

745

00:26:38,549 --> 00:26:37,440

havoc in the nearby middle east but it

746

00:26:40,870 --> 00:26:38,559

would have

747

00:26:42,390 --> 00:26:40,880

lofted tremendous amounts of water into

748

00:26:44,549 --> 00:26:42,400

the atmosphere

749

00:26:45,350 --> 00:26:44,559

and that helps explain how you could

750

00:26:47,269 --> 00:26:45,360

have

751
00:26:49,269 --> 00:26:47,279
probably not exactly but you you know

752
00:26:51,990 --> 00:26:49,279
mythologically reported as having 40

753
00:26:55,029 --> 00:26:52,000
days and 40 nights of rain

754
00:26:56,630 --> 00:26:55,039
okay what about uh atlantis which i've

755
00:26:59,110 --> 00:26:56,640
got pegged according to wikipedia at

756
00:27:00,470 --> 00:26:59,120
6000 bc

757
00:27:02,310 --> 00:27:00,480
um

758
00:27:04,630 --> 00:27:02,320
yeah well a little bit well i don't know

759
00:27:06,710 --> 00:27:04,640
why they have 6 000 because what plato

760
00:27:08,950 --> 00:27:06,720
told us and that's the the the first

761
00:27:12,070 --> 00:27:08,960
reporter of atlantis he said 9 000 years

762
00:27:15,029 --> 00:27:12,080
before my own time okay and that was i

763
00:27:16,789 --> 00:27:15,039

believe roughly 600 bc 500 or 600 bc

764

00:27:18,789 --> 00:27:16,799

when he was around so you add the

765

00:27:20,870 --> 00:27:18,799

numbers up and that matches the end of

766

00:27:23,510 --> 00:27:20,880

the younger dryas

767

00:27:25,590 --> 00:27:23,520

right so that's a hell of a coincidence

768

00:27:27,190 --> 00:27:25,600

when you take forensic investigations

769

00:27:28,470 --> 00:27:27,200

like we've been doing

770

00:27:31,190 --> 00:27:28,480

that

771

00:27:33,830 --> 00:27:31,200

suggest or we we believe provide proof

772

00:27:37,430 --> 00:27:33,840

and evidence that there was an impact 12

773

00:27:39,110 --> 00:27:37,440

000 years ago and then you look at plato

774

00:27:41,669 --> 00:27:39,120

with no such tools

775

00:27:43,909 --> 00:27:41,679

reporting from oral tradition

776

00:27:45,510 --> 00:27:43,919

that at the same time or he probably was

777

00:27:48,470 --> 00:27:45,520

describing the end of it so it had been

778

00:27:50,149 --> 00:27:48,480

1200 years there was a 1200 year climate

779

00:27:51,990 --> 00:27:50,159

crash after the younger driest event

780

00:27:54,470 --> 00:27:52,000

that's what defines the younger driest

781

00:27:56,789 --> 00:27:54,480

climate period is 1200 years of

782

00:27:59,190 --> 00:27:56,799

absolutely frigid global cold and that

783

00:28:00,830 --> 00:27:59,200

is well accepted it would have been 25

784

00:28:04,870 --> 00:28:00,840

degrees cooler in the northern

785

00:28:07,750 --> 00:28:04,880

hemisphere for 1200 long miserable years

786

00:28:11,190 --> 00:28:07,760

and then we pop out of it instantly

787

00:28:14,070 --> 00:28:11,200

right 11 600 years ago and that time

788

00:28:15,510 --> 00:28:14,080

matches exactly when plato

789

00:28:17,190 --> 00:28:15,520

said that

790

00:28:18,230 --> 00:28:17,200

that an island civilization became

791

00:28:21,190 --> 00:28:18,240

submerged

792

00:28:22,630 --> 00:28:21,200

but you know in the in the writings and

793

00:28:24,149 --> 00:28:22,640

you know in our presentations and

794

00:28:26,549 --> 00:28:24,159

whatnot we kind of

795

00:28:28,070 --> 00:28:26,559

we got enough to handle with the with

796

00:28:31,430 --> 00:28:28,080

the the impact

797

00:28:33,510 --> 00:28:31,440

right and that's controversial enough

798

00:28:35,909 --> 00:28:33,520

so we don't address directly what i call

799

00:28:37,110 --> 00:28:35,919

precursor civilizations atlantis and

800

00:28:38,710 --> 00:28:37,120

anybody that would have had high

801
00:28:40,230 --> 00:28:38,720
technology obviously there were people

802
00:28:42,310 --> 00:28:40,240
around the clovis people for instance

803
00:28:44,230 --> 00:28:42,320
but were there people with greater

804
00:28:46,310 --> 00:28:44,240
understanding sophistication and higher

805
00:28:47,990 --> 00:28:46,320
culture there very well may have been

806
00:28:50,149 --> 00:28:48,000
but we don't address that in their pa in

807
00:28:51,830 --> 00:28:50,159
the papers because the evidence is scans

808
00:28:53,029 --> 00:28:51,840
the scant first of all

809
00:28:54,070 --> 00:28:53,039
and

810
00:28:56,070 --> 00:28:54,080
you kind of got to stick to your

811
00:28:59,190 --> 00:28:56,080
knitting which is a catastrophe but the

812
00:29:02,470 --> 00:28:59,200
catastrophe being proven provides a lot

813
00:29:05,590 --> 00:29:02,480

of ammunition to the atlantis believers

814

00:29:06,870 --> 00:29:05,600

like randall carlson and graham hancock

815

00:29:08,630 --> 00:29:06,880

right

816

00:29:10,389 --> 00:29:08,640

and and the believers would say that

817

00:29:13,350 --> 00:29:10,399

this event

818

00:29:15,110 --> 00:29:13,360

caused the oceans to rise and therefore

819

00:29:16,389 --> 00:29:15,120

cover up this this

820

00:29:17,669 --> 00:29:16,399

continent

821

00:29:20,389 --> 00:29:17,679

or island

822

00:29:24,149 --> 00:29:20,399

and um but then once we pull out of that

823

00:29:25,190 --> 00:29:24,159

period why wouldn't it re-emerge

824

00:29:26,710 --> 00:29:25,200

um

825

00:29:29,269 --> 00:29:26,720

because you got a rising of the oceans

826

00:29:31,029 --> 00:29:29,279

and then a receding i presume

827

00:29:32,870 --> 00:29:31,039

at some point

828

00:29:34,389 --> 00:29:32,880

yeah i'm not an expert in in making

829

00:29:35,990 --> 00:29:34,399

their arguments

830

00:29:38,389 --> 00:29:36,000

over atlantis

831

00:29:41,110 --> 00:29:38,399

but uh you you have a tremendous rise of

832

00:29:42,230 --> 00:29:41,120

sea level or actually

833

00:29:44,310 --> 00:29:42,240

when the younger drive starts you

834

00:29:47,350 --> 00:29:44,320

actually have a drop you have an initial

835

00:29:48,149 --> 00:29:47,360

influx of water then things freeze back

836

00:29:50,310 --> 00:29:48,159

up

837

00:29:52,630 --> 00:29:50,320

for 1200 years a lot of that water is

838

00:29:55,669 --> 00:29:52,640

locked back up and then you have another

839

00:29:57,350 --> 00:29:55,679

melt water pulse 1200 years later when

840

00:29:59,669 --> 00:29:57,360

the seas rise and i believe the

841

00:30:02,549 --> 00:29:59,679

precursor civilization community say

842

00:30:04,630 --> 00:30:02,559

that that's what what uh submerged those

843

00:30:07,590 --> 00:30:04,640

lands it also has a tie-in to go beckley

844

00:30:08,950 --> 00:30:07,600

tepee if you've come across that temple

845

00:30:12,710 --> 00:30:08,960

in turkey

846

00:30:15,750 --> 00:30:12,720

and that's the oldest acknowledged uh

847

00:30:17,190 --> 00:30:15,760

cuban temple gathering place megalithic

848

00:30:20,070 --> 00:30:17,200

large stone

849

00:30:23,190 --> 00:30:20,080

construction location on earth and we

850

00:30:24,870 --> 00:30:23,200

believe that that was actually uh

851

00:30:27,830 --> 00:30:24,880

or elements of our team believed that

852

00:30:29,990 --> 00:30:27,840

that was a a time stamp where the people

853

00:30:32,070 --> 00:30:30,000

who had survived the catastrophe wanted

854

00:30:34,230 --> 00:30:32,080

to memorialize it for

855

00:30:36,870 --> 00:30:34,240

you know future generations many many

856

00:30:38,630 --> 00:30:36,880

generations and that they actually

857

00:30:40,549 --> 00:30:38,640

arranged that temple so that it would

858

00:30:43,909 --> 00:30:40,559

suggest the date that we've been talking

859

00:30:45,830 --> 00:30:43,919

about of 12 1280 uh

860

00:30:48,149 --> 00:30:45,840

before now yeah

861

00:30:50,710 --> 00:30:48,159

and are we in any particular period now

862

00:30:53,190 --> 00:30:50,720

according to you guys as far as still

863

00:30:55,750 --> 00:30:53,200

feeling the effect higher impact

864

00:30:58,710 --> 00:30:55,760

yeah it's not nearly as great a threat

865

00:31:00,470 --> 00:30:58,720

okay but it's a little bit like uh

866

00:31:02,549 --> 00:31:00,480

traffic jim

867

00:31:04,710 --> 00:31:02,559

in that you have the torrid meteor

868

00:31:06,789 --> 00:31:04,720

stream which causes two meteor showers a

869

00:31:09,830 --> 00:31:06,799

year in late june

870

00:31:11,269 --> 00:31:09,840

early july and then in late october

871

00:31:13,909 --> 00:31:11,279

early november

872

00:31:17,190 --> 00:31:13,919

and we encounter that stream

873

00:31:19,669 --> 00:31:17,200

of disintegrating comet material and we

874

00:31:21,509 --> 00:31:19,679

know it is the tar ed meteor shower

875

00:31:23,669 --> 00:31:21,519

uh there's particularly a group of

876

00:31:26,230 --> 00:31:23,679

astronomers that for 40 or 50 years in

877

00:31:29,029 --> 00:31:26,240

in great britain that have argued that

878

00:31:31,269 --> 00:31:29,039

that has been the source of

879

00:31:33,029 --> 00:31:31,279

multiple impacts through the ages

880

00:31:35,029 --> 00:31:33,039

and that when we identified the younger

881

00:31:37,750 --> 00:31:35,039

driest impact

882

00:31:39,750 --> 00:31:37,760

that that would have been the first very

883

00:31:42,710 --> 00:31:39,760

bad bad day that we had from the

884

00:31:44,070 --> 00:31:42,720

disintegration of the um the tarid

885

00:31:46,549 --> 00:31:44,080

meteor comet which you actually call

886

00:31:49,509 --> 00:31:46,559

comet inky so you would have had a we

887

00:31:52,870 --> 00:31:49,519

estimate a 60 mile wide comet coming to

888

00:31:54,710 --> 00:31:52,880

the solar system about 20 000 years ago

889

00:31:56,389 --> 00:31:54,720

then it becomes it begins to

890

00:31:58,310 --> 00:31:56,399

disintegrate

891

00:31:59,269 --> 00:31:58,320

now it's all you know down to little

892

00:32:01,590 --> 00:31:59,279

bits

893

00:32:03,990 --> 00:32:01,600

we hope all most of it

894

00:32:05,509 --> 00:32:04,000

and that earlier in its stages of

895

00:32:08,230 --> 00:32:05,519

disintegration there was a lot more

896

00:32:10,230 --> 00:32:08,240

large material so if you think about us

897

00:32:12,470 --> 00:32:10,240

passing into this meteor stream twice a

898

00:32:14,870 --> 00:32:12,480

year it's a little bit like someone with

899

00:32:16,470 --> 00:32:14,880

a blindfold walking across a highway

900

00:32:18,310 --> 00:32:16,480

into traffic

901
00:32:19,750 --> 00:32:18,320
if you think about it most the time

902
00:32:22,310 --> 00:32:19,760
probably not in southern california but

903
00:32:24,870 --> 00:32:22,320
around here on your you know uh

904
00:32:26,070 --> 00:32:24,880
smaller cities uh traffic most the time

905
00:32:27,909 --> 00:32:26,080
you can walk across the highway and

906
00:32:31,029 --> 00:32:27,919
you're probably gonna make it across

907
00:32:33,750 --> 00:32:31,039
there might be some near misses right

908
00:32:34,870 --> 00:32:33,760
but if you go hit it during rush hour

909
00:32:35,830 --> 00:32:34,880
they're going to be a lot more cars

910
00:32:37,669 --> 00:32:35,840
you're going to hit they're also going

911
00:32:39,590 --> 00:32:37,679
to be some trucks in there

912
00:32:42,549 --> 00:32:39,600
and that's what we believe

913
00:32:44,710 --> 00:32:42,559

happens when we have these

914

00:32:46,950 --> 00:32:44,720

larger periods of trauma is you're

915

00:32:49,190 --> 00:32:46,960

hitting a particularly enhanced part of

916

00:32:51,590 --> 00:32:49,200

the target meteor stream but fortunately

917

00:32:52,870 --> 00:32:51,600

that stuff is disintegrating okay and

918

00:32:54,389 --> 00:32:52,880

you're going to have less and less

919

00:32:56,310 --> 00:32:54,399

danger of it

920

00:32:59,590 --> 00:32:56,320

when was the last time you believed we

921

00:33:01,990 --> 00:32:59,600

were hit by anything of any size

922

00:33:03,830 --> 00:33:02,000

well we know the last time was in 1908

923

00:33:06,950 --> 00:33:03,840

in siberia and that's very relevant

924

00:33:10,310 --> 00:33:06,960

that's called the tunguska impact

925

00:33:12,630 --> 00:33:10,320

and that leveled 1 000 square miles of

926
00:33:14,389 --> 00:33:12,640
tundra in siberia

927
00:33:15,509 --> 00:33:14,399
absolutely leveled it knocked down every

928
00:33:17,830 --> 00:33:15,519
tree

929
00:33:20,470 --> 00:33:17,840
and also produced some of the same

930
00:33:23,750 --> 00:33:20,480
evidence that we find at the black mat

931
00:33:25,909 --> 00:33:23,760
particularly in the microspherules okay

932
00:33:27,830 --> 00:33:25,919
and that when you encounter these heat

933
00:33:29,269 --> 00:33:27,840
this kind of heat it could be 3000

934
00:33:31,750 --> 00:33:29,279
degrees centigrade

935
00:33:33,909 --> 00:33:31,760
and it also whips with the concussion of

936
00:33:36,389 --> 00:33:33,919
the explosion of the object

937
00:33:40,070 --> 00:33:36,399
it lifts both the

938
00:33:42,310 --> 00:33:40,080

soil and the material on the earth today

939

00:33:45,269 --> 00:33:42,320

mixes it with the material from the

940

00:33:47,830 --> 00:33:45,279

impactor and it vaporizes

941

00:33:50,789 --> 00:33:47,840

both silicates and metallics parts of

942

00:33:52,389 --> 00:33:50,799

the soil that that turns into a vapor

943

00:33:54,950 --> 00:33:52,399

that vapor

944

00:33:57,430 --> 00:33:54,960

freezes if you will it's molten for a

945

00:34:00,070 --> 00:33:57,440

moment and freezes in these little tiny

946

00:34:01,750 --> 00:34:00,080

bits and that falls back and creates a

947

00:34:03,909 --> 00:34:01,760

layer they found that at ten gospels so

948

00:34:05,990 --> 00:34:03,919

that was in 1908 and that would wipe out

949

00:34:07,269 --> 00:34:06,000

a city now and how big an object was

950

00:34:09,190 --> 00:34:07,279

that

951
00:34:11,510 --> 00:34:09,200
i think they say it's like 150 200

952
00:34:13,430 --> 00:34:11,520
meters so not terribly big but we you

953
00:34:15,829 --> 00:34:13,440
could see hundreds of those when you

954
00:34:18,230 --> 00:34:15,839
encounter a particular parts of the

955
00:34:19,349 --> 00:34:18,240
torah meteor stream uh at particular

956
00:34:20,790 --> 00:34:19,359
times

957
00:34:23,430 --> 00:34:20,800
on those bad weekends when you're

958
00:34:25,109 --> 00:34:23,440
walking across certain rush hour

959
00:34:28,389 --> 00:34:25,119
when you're walking across that highway

960
00:34:30,470 --> 00:34:28,399
right so 150 meters wide and that ended

961
00:34:32,950 --> 00:34:30,480
up impacting how large an area

962
00:34:35,669 --> 00:34:32,960
um a thousand square kilometers

963
00:34:38,550 --> 00:34:35,679

wow devastated it knocked every single

964

00:34:39,510 --> 00:34:38,560

tree flat and incinerated them yeah

965

00:34:42,470 --> 00:34:39,520

um

966

00:34:44,710 --> 00:34:42,480

the extinction again uh forgive me for

967

00:34:47,510 --> 00:34:44,720

relying on wikipedia but uh

968

00:34:49,190 --> 00:34:47,520

woolly mammoth yeah they've they've got

969

00:34:50,950 --> 00:34:49,200

i guess maybe there's multiple species

970

00:34:52,629 --> 00:34:50,960

of woolly mammoth but you know according

971

00:34:55,430 --> 00:34:52,639

to the the most commonly accepted is

972

00:34:57,030 --> 00:34:55,440

that it went extinct 2000 bc

973

00:34:58,950 --> 00:34:57,040

yeah that's right like i said we're not

974

00:35:00,790 --> 00:34:58,960

saying that in an instant all of these

975

00:35:03,270 --> 00:35:00,800

animals disappeared

976

00:35:05,349 --> 00:35:03,280

right but it was so traumatic that no

977

00:35:08,150 --> 00:35:05,359

one disputes that the mammoth begins a

978

00:35:10,630 --> 00:35:08,160

severe decline and in fact

979

00:35:12,790 --> 00:35:10,640

regionally becomes extinct 12 000 years

980

00:35:15,349 --> 00:35:12,800

ago but there were certainly holdouts

981

00:35:17,030 --> 00:35:15,359

around the world and and those the last

982

00:35:18,790 --> 00:35:17,040

remaining mammoths remember what i said

983

00:35:20,310 --> 00:35:18,800

about them taking larger things out and

984

00:35:21,510 --> 00:35:20,320

it probably is related to that same

985

00:35:23,910 --> 00:35:21,520

phenomenon

986

00:35:26,069 --> 00:35:23,920

but one way or another the pygmy mammoth

987

00:35:27,430 --> 00:35:26,079

survived smaller myths

988

00:35:29,030 --> 00:35:27,440

so even during the times of the

989

00:35:30,470 --> 00:35:29,040

egyptians that time period you just

990

00:35:32,150 --> 00:35:30,480

pointed out you know two or three

991

00:35:34,069 --> 00:35:32,160

thousand bc during the time of the

992

00:35:36,630 --> 00:35:34,079

construction of the pyramids there were

993

00:35:39,109 --> 00:35:36,640

still mammoth remaining on wrangle

994

00:35:40,230 --> 00:35:39,119

island north of siberia in the arctic

995

00:35:41,829 --> 00:35:40,240

ocean

996

00:35:44,310 --> 00:35:41,839

right so there were some holdouts there

997

00:35:46,630 --> 00:35:44,320

was some refugia they call it where you

998

00:35:48,390 --> 00:35:46,640

know there were some leftovers so and is

999

00:35:51,109 --> 00:35:48,400

there anything in particular that caused

1000

00:35:53,349 --> 00:35:51,119

their final extinction

1001
00:35:55,510 --> 00:35:53,359
uh probably human hunting one sort or

1002
00:35:57,349 --> 00:35:55,520
another or just the natural decline of

1003
00:35:59,589 --> 00:35:57,359
the population finally reached an end

1004
00:36:01,430 --> 00:35:59,599
point i don't think that they claim on

1005
00:36:03,589 --> 00:36:01,440
wrangle island they did but but we

1006
00:36:04,550 --> 00:36:03,599
believe that the humans that were left

1007
00:36:07,109 --> 00:36:04,560
over

1008
00:36:09,589 --> 00:36:07,119
might have helped uh accentuate the

1009
00:36:11,589 --> 00:36:09,599
extinction that was already underway

1010
00:36:13,349 --> 00:36:11,599
right so the clovis people or whatever

1011
00:36:15,270 --> 00:36:13,359
the others that were left would have

1012
00:36:17,430 --> 00:36:15,280
would have hunted the rest of them to

1013
00:36:21,030 --> 00:36:17,440

extinction possibly and i had the

1014

00:36:21,990 --> 00:36:21,040

sabretooth tiger at 8 000 b.c

1015

00:36:25,750 --> 00:36:22,000

that's right

1016

00:36:27,829 --> 00:36:25,760

they were thriving before 12 000 years

1017

00:36:30,150 --> 00:36:27,839

ago and go into severe decline about

1018

00:36:33,109 --> 00:36:30,160

that time i've got a saber-toothed tiger

1019

00:36:35,910 --> 00:36:33,119

skull right there actually oh wow yeah

1020

00:36:38,710 --> 00:36:35,920

and why would that species have gone

1021

00:36:40,630 --> 00:36:38,720

extinct compared to others

1022

00:36:42,230 --> 00:36:40,640

yeah you could have a loss of genetic

1023

00:36:44,069 --> 00:36:42,240

diversity you could have a change in

1024

00:36:46,150 --> 00:36:44,079

their food source

1025

00:36:47,270 --> 00:36:46,160

you could have a you know other climate

1026

00:36:49,990 --> 00:36:47,280

down

1027

00:36:51,510 --> 00:36:50,000

periods you know we're losing um species

1028

00:36:53,510 --> 00:36:51,520

today now and you could have had human

1029

00:36:55,430 --> 00:36:53,520

honey for the same reason that probably

1030

00:36:57,589 --> 00:36:55,440

not of the saber-tooth but again brought

1031

00:36:58,710 --> 00:36:57,599

on originally by the younger driest

1032

00:37:00,710 --> 00:36:58,720

that's right

1033

00:37:02,390 --> 00:37:00,720

the reducing the population of them

1034

00:37:04,870 --> 00:37:02,400

significantly to the point where they're

1035

00:37:06,870 --> 00:37:04,880

becoming endangered that's right

1036

00:37:09,109 --> 00:37:06,880

and then through some combination of

1037

00:37:11,510 --> 00:37:09,119

factors that is still to be determined

1038

00:37:13,190 --> 00:37:11,520

um they eventually blinked out but you

1039

00:37:15,349 --> 00:37:13,200

need something you know we can't explain

1040

00:37:17,109 --> 00:37:15,359

everything in absolute detail for how

1041

00:37:18,470 --> 00:37:17,119

this played out because there's simply

1042

00:37:19,990 --> 00:37:18,480

enough research being done in it and

1043

00:37:22,790 --> 00:37:20,000

we'll probably spend many generations

1044

00:37:25,349 --> 00:37:22,800

trying to puzzle it all out but but the

1045

00:37:27,829 --> 00:37:25,359

the key thing to know is that all of

1046

00:37:30,550 --> 00:37:27,839

these processes were set

1047

00:37:31,829 --> 00:37:30,560

uh in motion at the same time 12 000

1048

00:37:34,230 --> 00:37:31,839

years ago

1049

00:37:35,910 --> 00:37:34,240

and you find indications all over the

1050

00:37:37,750 --> 00:37:35,920

northern hemisphere and parts of the

1051

00:37:41,349 --> 00:37:37,760

southern hemisphere that that was a

1052

00:37:44,230 --> 00:37:41,359

dramatic time and we don't accept that

1053

00:37:45,510 --> 00:37:44,240

right we we we leave that mystery as a

1054

00:37:47,510 --> 00:37:45,520

mystery and that's why it's appropriate

1055

00:37:49,190 --> 00:37:47,520

to be on the hidden truth show because

1056

00:37:51,270 --> 00:37:49,200

th this is a truth

1057

00:37:53,190 --> 00:37:51,280

that isn't accepted because of a

1058

00:37:54,710 --> 00:37:53,200

long-standing scientific debate you know

1059

00:37:58,190 --> 00:37:54,720

that goes back to the

1060

00:38:00,310 --> 00:37:58,200

18th and 19th century between

1061

00:38:01,910 --> 00:38:00,320

uniformitarians that believe all

1062

00:38:04,150 --> 00:38:01,920

geological processes that we see

1063

00:38:05,030 --> 00:38:04,160

operating today calls everything we see

1064

00:38:06,790 --> 00:38:05,040

today

1065

00:38:08,470 --> 00:38:06,800

and catastrophists

1066

00:38:10,150 --> 00:38:08,480

and the catastrophes were obviously

1067

00:38:11,829 --> 00:38:10,160

related to the faithful back in that

1068

00:38:15,589 --> 00:38:11,839

time they were going from the bible and

1069

00:38:18,230 --> 00:38:15,599

going from the deluge and as more uh

1070

00:38:19,349 --> 00:38:18,240

rational empirical science you know came

1071

00:38:23,990 --> 00:38:19,359

into

1072

00:38:26,790 --> 00:38:24,000

they properly rejected a lot of the

1073

00:38:29,990 --> 00:38:26,800

biblical received wisdom right

1074

00:38:30,950 --> 00:38:30,000

and but then they totally rejected it

1075

00:38:35,349 --> 00:38:30,960

so

1076

00:38:39,030 --> 00:38:35,359

i just mentioned as being part of the

1077

00:38:41,589 --> 00:38:39,040

research or that the flood etc uh was

1078

00:38:43,349 --> 00:38:41,599

caused by god and then you are becoming

1079

00:38:44,950 --> 00:38:43,359

an empirical

1080

00:38:46,550 --> 00:38:44,960

rational evidence-based researcher

1081

00:38:49,109 --> 00:38:46,560

you're going to reject anybody anything

1082

00:38:51,910 --> 00:38:49,119

that you that is supposedly god driven

1083

00:38:54,710 --> 00:38:51,920

right so they rejected the catastrophist

1084

00:38:56,470 --> 00:38:54,720

explanations when actually although it

1085

00:38:58,550 --> 00:38:56,480

was embedded in the faith

1086

00:39:00,630 --> 00:38:58,560

they're very physical means for those

1087

00:39:02,710 --> 00:39:00,640

things to happen and they're actually

1088

00:39:05,349 --> 00:39:02,720

physical evidence that those things did

1089

00:39:07,270 --> 00:39:05,359

happen but we're still suffering from

1090

00:39:09,270 --> 00:39:07,280

having tossed away kind of thrown out

1091

00:39:11,910 --> 00:39:09,280

the baby with the bathwater

1092

00:39:14,310 --> 00:39:11,920

and thrown out biblical knowledge with

1093

00:39:16,310 --> 00:39:14,320

its understanding of catastrophism and

1094

00:39:17,589 --> 00:39:16,320

we need to bring that back and mix it

1095

00:39:19,190 --> 00:39:17,599

back in just like we did with the

1096

00:39:21,670 --> 00:39:19,200

dinosaurs but understand that things

1097

00:39:23,670 --> 00:39:21,680

happen more recently too

1098

00:39:26,310 --> 00:39:23,680

and where do you stand on the issue of

1099

00:39:29,510 --> 00:39:26,320

the perhaps ever having been even more

1100

00:39:31,990 --> 00:39:29,520

intelligent life than humans today on

1101

00:39:34,550 --> 00:39:32,000

earth that were wiped out by

1102

00:39:36,870 --> 00:39:34,560

a cosmic event

1103

00:39:39,190 --> 00:39:36,880

personally i'm open-minded to it and i

1104

00:39:40,470 --> 00:39:39,200

believe graham hancock's onto something

1105

00:39:43,510 --> 00:39:40,480

but it's going to be very very difficult

1106

00:39:45,589 --> 00:39:43,520

to find the evidence right

1107

00:39:48,150 --> 00:39:45,599

um we could get to your show last week

1108

00:39:50,069 --> 00:39:48,160

but i'm a panspermist as well and i wish

1109

00:39:51,750 --> 00:39:50,079

panspermia had come up on the on the

1110

00:39:52,950 --> 00:39:51,760

recent show i heard about the evolution

1111

00:39:55,030 --> 00:39:52,960

of humans and

1112

00:39:55,910 --> 00:39:55,040

and and how things jumped ahead and i

1113

00:39:58,550 --> 00:39:55,920

remember he was talking about the

1114

00:40:00,710 --> 00:39:58,560

cambrian explosion etcetera we'll touch

1115

00:40:02,710 --> 00:40:00,720

on it real quickly because the headline

1116

00:40:05,190 --> 00:40:02,720

from from that was him making the point

1117

00:40:08,470 --> 00:40:05,200

that he doesn't believe that evolution

1118

00:40:10,950 --> 00:40:08,480

can explain the existence of humans he

1119

00:40:13,270 --> 00:40:10,960

doesn't think that based on

1120

00:40:14,309 --> 00:40:13,280

his analysis or various scientists that

1121

00:40:16,230 --> 00:40:14,319

evolution

1122

00:40:18,309 --> 00:40:16,240

moves quick enough to have developed

1123

00:40:20,710 --> 00:40:18,319

humans on earth yeah well i probably

1124

00:40:23,190 --> 00:40:20,720

don't need to dig a deeper hole with the

1125

00:40:24,870 --> 00:40:23,200

skeptics but uh on a personal basis i'm

1126
00:40:27,670 --> 00:40:24,880
involved you know with another research

1127
00:40:30,069 --> 00:40:27,680
group uh uh mr chandra wickramasinghe

1128
00:40:31,510 --> 00:40:30,079
who worked with sir fred hoyle who was

1129
00:40:34,790 --> 00:40:31,520
the preeminent scientist in great

1130
00:40:37,030 --> 00:40:34,800
britain in the 50s 60s and 70s and

1131
00:40:38,790 --> 00:40:37,040
chandra and sir fred proposed in the

1132
00:40:40,870 --> 00:40:38,800
early 70s

1133
00:40:43,510 --> 00:40:40,880
that

1134
00:40:46,069 --> 00:40:43,520
life on earth isn't a closed system

1135
00:40:47,829 --> 00:40:46,079
and that we're receiving microbial input

1136
00:40:49,190 --> 00:40:47,839
from space all the time that includes

1137
00:40:51,990 --> 00:40:49,200
dna

1138
00:40:54,630 --> 00:40:52,000

and that actually life is absolutely

1139

00:40:57,750 --> 00:40:54,640

abundant and comets in fact

1140

00:40:59,030 --> 00:40:57,760

are boiling cauldrons of life and

1141

00:41:00,950 --> 00:40:59,040

viruses

1142

00:41:03,829 --> 00:41:00,960

and they went out and looked uh at the

1143

00:41:06,630 --> 00:41:03,839

spectra of galactic clouds that we would

1144

00:41:07,589 --> 00:41:06,640

call you know dust clouds out you know

1145

00:41:09,990 --> 00:41:07,599

um

1146

00:41:11,430 --> 00:41:10,000

in uh interstellar space

1147

00:41:13,270 --> 00:41:11,440

they looked at that spectrum you know

1148

00:41:15,109 --> 00:41:13,280

what that spectra matches jim when you

1149

00:41:16,390 --> 00:41:15,119

look at the the the light feature and

1150

00:41:17,510 --> 00:41:16,400

the nature of the light that's coming

1151
00:41:18,790 --> 00:41:17,520
from there

1152
00:41:20,550 --> 00:41:18,800
e coli

1153
00:41:22,309 --> 00:41:20,560
exactly

1154
00:41:24,870 --> 00:41:22,319
right so they've got graphs that show

1155
00:41:27,030 --> 00:41:24,880
what equalized light looks like

1156
00:41:30,069 --> 00:41:27,040
and they believe and frankly i believe

1157
00:41:31,589 --> 00:41:30,079
as well that microbial life in a

1158
00:41:34,069 --> 00:41:31,599
desiccated

1159
00:41:36,230 --> 00:41:34,079
hibernated form not talking about living

1160
00:41:37,430 --> 00:41:36,240
things actually living now floating out

1161
00:41:39,670 --> 00:41:37,440
in space

1162
00:41:42,309 --> 00:41:39,680
um unentombed

1163
00:41:43,910 --> 00:41:42,319

but within well actually entombed within

1164

00:41:45,109 --> 00:41:43,920

cosmic dust

1165

00:41:48,309 --> 00:41:45,119

that

1166

00:41:50,069 --> 00:41:48,319

those forms of life uh including things

1167

00:41:51,190 --> 00:41:50,079

that like diatoms and whatnot i'll give

1168

00:41:52,950 --> 00:41:51,200

you some more evidence on that in a

1169

00:41:55,270 --> 00:41:52,960

moment

1170

00:41:57,349 --> 00:41:55,280

could survive by being entombed in a

1171

00:42:00,150 --> 00:41:57,359

piece of cosmic dust

1172

00:42:02,630 --> 00:42:00,160

okay and it wouldn't destroy their dna

1173

00:42:04,710 --> 00:42:02,640

and their uh life processes and that's

1174

00:42:06,710 --> 00:42:04,720

been proved the tardigrade little little

1175

00:42:08,550 --> 00:42:06,720

tiny thing called a water bear which is

1176

00:42:10,309 --> 00:42:08,560

found all over the earth

1177

00:42:12,870 --> 00:42:10,319

they've taken those nasa hats and

1178

00:42:15,030 --> 00:42:12,880

exposed them to interstellar space put

1179

00:42:17,349 --> 00:42:15,040

them on the outside of the space station

1180

00:42:19,510 --> 00:42:17,359

and those little buggers survive so what

1181

00:42:21,910 --> 00:42:19,520

that suggests is if we had an impact in

1182

00:42:23,829 --> 00:42:21,920

the earth and it launched including

1183

00:42:26,390 --> 00:42:23,839

things and these aren't even microbial i

1184

00:42:28,870 --> 00:42:26,400

mean they're visible under you know

1185

00:42:30,309 --> 00:42:28,880

low power microscopes and it launches

1186

00:42:31,670 --> 00:42:30,319

that stuff out into space a lot of that

1187

00:42:33,750 --> 00:42:31,680

stuff would survive

1188

00:42:35,109 --> 00:42:33,760

so there's no reason to believe

1189

00:42:38,069 --> 00:42:35,119

that over

1190

00:42:41,109 --> 00:42:38,079

uh galactic time scales that there isn't

1191

00:42:44,630 --> 00:42:41,119

vast transfers of that material and that

1192

00:42:46,230 --> 00:42:44,640

would include dna and that probably all

1193

00:42:48,390 --> 00:42:46,240

forms of life we see on the earth are

1194

00:42:50,390 --> 00:42:48,400

reflected somewhere else

1195

00:42:51,829 --> 00:42:50,400

and that that dna and material is

1196

00:42:53,510 --> 00:42:51,839

floating around i'll give you an example

1197

00:42:55,750 --> 00:42:53,520

you know the russians

1198

00:42:58,630 --> 00:42:55,760

tested the outside of the space station

1199

00:43:00,670 --> 00:42:58,640

i believe it was six times between about

1200

00:43:02,390 --> 00:43:00,680

2013 and

1201
00:43:05,430 --> 00:43:02,400
2017

1202
00:43:06,870 --> 00:43:05,440
and actually swipe the window

1203
00:43:08,069 --> 00:43:06,880
on the outside of the space station or

1204
00:43:09,349 --> 00:43:08,079
one of the windows maybe it's the big

1205
00:43:11,750 --> 00:43:09,359
one that you sometimes see them looking

1206
00:43:14,790 --> 00:43:13,430
and then brought that material back to

1207
00:43:15,670 --> 00:43:14,800
earth

1208
00:43:16,630 --> 00:43:15,680
and

1209
00:43:18,950 --> 00:43:16,640
it was

1210
00:43:21,030 --> 00:43:18,960
filled with bacteria

1211
00:43:23,750 --> 00:43:21,040
and diatoms

1212
00:43:25,190 --> 00:43:23,760
there was actually a scum

1213
00:43:27,270 --> 00:43:25,200

of

1214

00:43:28,870 --> 00:43:27,280

formally living living material on the

1215

00:43:31,270 --> 00:43:28,880

outside of the space station that's damn

1216

00:43:33,349 --> 00:43:31,280

hard to explain and the only way they

1217

00:43:35,750 --> 00:43:33,359

were able to explain it without using

1218

00:43:36,870 --> 00:43:35,760

the work of of fred and chandra

1219

00:43:40,150 --> 00:43:36,880

was that

1220

00:43:43,430 --> 00:43:40,160

that material had been lofted by some

1221

00:43:45,910 --> 00:43:43,440

mechanism yet understood from the earth

1222

00:43:48,870 --> 00:43:45,920

into the orbit of the space station and

1223

00:43:49,670 --> 00:43:48,880

had covered it then

1224

00:43:52,230 --> 00:43:49,680

so

1225

00:43:54,309 --> 00:43:52,240

that suggests that if that can happen

1226
00:43:56,069 --> 00:43:54,319
why wouldn't it float further into space

1227
00:43:57,589 --> 00:43:56,079
or move further out into the solar

1228
00:43:59,430 --> 00:43:57,599
system or other

1229
00:44:01,109 --> 00:43:59,440
solar systems and other you know parts

1230
00:44:02,950 --> 00:44:01,119
of our galaxy

1231
00:44:03,829 --> 00:44:02,960
to to feed

1232
00:44:04,630 --> 00:44:03,839
life

1233
00:44:11,990 --> 00:44:04,640
in

1234
00:44:15,270 --> 00:44:12,000
and galactic transfer

1235
00:44:18,150 --> 00:44:15,280
of genetic and life material that we

1236
00:44:20,069 --> 00:44:18,160
don't acknowledge yet

1237
00:44:22,790 --> 00:44:20,079
and then what about the issue of

1238
00:44:25,750 --> 00:44:22,800

evolution because either way

1239

00:44:27,190 --> 00:44:25,760

whether we ultimately evolved from these

1240

00:44:28,950 --> 00:44:27,200

microbes or whatever you call them that

1241

00:44:30,470 --> 00:44:28,960

came from out of space making all of us

1242

00:44:33,109 --> 00:44:30,480

essentially aliens

1243

00:44:35,109 --> 00:44:33,119

or alien life but still you need enough

1244

00:44:36,550 --> 00:44:35,119

time for that to evolve on earth is it

1245

00:44:39,510 --> 00:44:36,560

your view that there has been enough

1246

00:44:41,109 --> 00:44:39,520

time i think it's assisted by panspermic

1247

00:44:42,950 --> 00:44:41,119

processes that there's no question

1248

00:44:45,670 --> 00:44:42,960

evolution is in place and i am not

1249

00:44:47,670 --> 00:44:45,680

opposed to darwinian evolution

1250

00:44:51,589 --> 00:44:47,680

as generally understood i just think it

1251

00:44:54,790 --> 00:44:51,599

it needs an amendment to accept the fact

1252

00:44:56,470 --> 00:44:54,800

that um evolution is a galactic

1253

00:44:59,510 --> 00:44:56,480

phenomenon

1254

00:45:01,589 --> 00:44:59,520

and that the evolved pieces of that it

1255

00:45:03,670 --> 00:45:01,599

may evolve someplace more quickly or

1256

00:45:04,710 --> 00:45:03,680

some places older so it's had longer to

1257

00:45:07,510 --> 00:45:04,720

evolve

1258

00:45:10,150 --> 00:45:07,520

but parts of those genes and those

1259

00:45:13,030 --> 00:45:10,160

processes make it to other places and

1260

00:45:14,309 --> 00:45:13,040

influence the evolution here for

1261

00:45:16,470 --> 00:45:14,319

instance the

1262

00:45:19,030 --> 00:45:16,480

octopus and the

1263

00:45:22,230 --> 00:45:19,040

appears very very suddenly

1264

00:45:24,230 --> 00:45:22,240

in the geological or the animal record

1265

00:45:27,270 --> 00:45:24,240

it didn't have time to evolve

1266

00:45:28,550 --> 00:45:27,280

there's a wonderful piece uh

1267

00:45:30,790 --> 00:45:28,560

written up whether it was a paper and

1268

00:45:33,349 --> 00:45:30,800

then a great follow-up article did deep

1269

00:45:35,030 --> 00:45:33,359

article in cosmos explaining all of this

1270

00:45:37,109 --> 00:45:35,040

but but um

1271

00:45:38,950 --> 00:45:37,119

our panspermic team actually believes

1272

00:45:40,470 --> 00:45:38,960

that that you could have been seated

1273

00:45:41,670 --> 00:45:40,480

with the octopus

1274

00:45:43,990 --> 00:45:41,680

and it could have

1275

00:45:45,589 --> 00:45:44,000

grown here after it came in in cosmic

1276

00:45:47,430 --> 00:45:45,599

material now i know that stuff's hard to

1277

00:45:49,109 --> 00:45:47,440

believe but remember there's a lot of

1278

00:45:50,550 --> 00:45:49,119

stuff floating around out there we're

1279

00:45:52,230 --> 00:45:50,560

talking about it earlier and you think

1280

00:45:54,790 --> 00:45:52,240

of it as lifeless

1281

00:45:56,470 --> 00:45:54,800

but no one has ever directly tested

1282

00:45:58,470 --> 00:45:56,480

these propositions

1283

00:46:00,390 --> 00:45:58,480

but again if you indirectly test them

1284

00:46:02,950 --> 00:46:00,400

through spectra and whatnot

1285

00:46:04,870 --> 00:46:02,960

um you can see indications that the the

1286

00:46:06,309 --> 00:46:04,880

there's more life out there or there is

1287

00:46:07,829 --> 00:46:06,319

life out there that we don't acknowledge

1288

00:46:09,670 --> 00:46:07,839

you know we haven't tested this yeah go

1289

00:46:12,710 --> 00:46:09,680

ahead sorry and the octopus would have

1290

00:46:16,309 --> 00:46:12,720

arrived here in what form

1291

00:46:18,150 --> 00:46:16,319

um probably is ova you know as that that

1292

00:46:19,829 --> 00:46:18,160

some portion of them that only takes a

1293

00:46:21,910 --> 00:46:19,839

few right

1294

00:46:23,349 --> 00:46:21,920

could have come in and then rebirth

1295

00:46:25,030 --> 00:46:23,359

themselves if you will now i know this

1296

00:46:26,710 --> 00:46:25,040

sounds like crazy crazy stuff i should

1297

00:46:29,510 --> 00:46:26,720

give you a good citation so people could

1298

00:46:30,710 --> 00:46:29,520

go dig back in because it's frozen

1299

00:46:32,630 --> 00:46:30,720

a frozen

1300

00:46:34,309 --> 00:46:32,640

octopus egg essentially yeah there you

1301
00:46:38,710 --> 00:46:34,319
go

1302
00:46:40,550 --> 00:46:38,720
the time scales you're dealing with

1303
00:46:42,950 --> 00:46:40,560
you know we give ourselves

1304
00:46:44,790 --> 00:46:42,960
uh we say well my gosh we've had you

1305
00:46:46,309 --> 00:46:44,800
know 800 million years or 400 million

1306
00:46:47,910 --> 00:46:46,319
years or when you were talking last week

1307
00:46:49,750 --> 00:46:47,920
you know you go back and find life going

1308
00:46:50,870 --> 00:46:49,760
back 2 billion years

1309
00:46:51,750 --> 00:46:50,880
we say

1310
00:46:53,829 --> 00:46:51,760
we

1311
00:46:55,109 --> 00:46:53,839
accept that that must be enough time to

1312
00:46:58,470 --> 00:46:55,119
evolve

1313
00:47:00,470 --> 00:46:58,480

okay why isn't it also easily accepted

1314

00:47:02,790 --> 00:47:00,480

that if

1315

00:47:04,710 --> 00:47:02,800

it shows a a a tremendous

1316

00:47:08,309 --> 00:47:04,720

self-centeredness jim

1317

00:47:10,230 --> 00:47:08,319

to say that life began here okay and

1318

00:47:12,309 --> 00:47:10,240

it's interesting people will sooner

1319

00:47:15,510 --> 00:47:12,319

believe that aliens will enter people's

1320

00:47:18,150 --> 00:47:15,520

bedrooms and probe them right then they

1321

00:47:20,950 --> 00:47:18,160

will believe what i told you about

1322

00:47:22,549 --> 00:47:20,960

microbial life being entombed in cosmic

1323

00:47:25,190 --> 00:47:22,559

dust and floating around they say that's

1324

00:47:27,109 --> 00:47:25,200

crazy talk but a significant percentage

1325

00:47:28,390 --> 00:47:27,119

of those people believe that they're

1326

00:47:31,030 --> 00:47:28,400

actually

1327

00:47:33,109 --> 00:47:31,040

aliens and maybe there are

1328

00:47:36,069 --> 00:47:33,119

driving little craft around and coming

1329

00:47:38,710 --> 00:47:36,079

into people's bedrooms at night right i

1330

00:47:39,829 --> 00:47:38,720

find that a hell of a lot harder to

1331

00:47:41,829 --> 00:47:39,839

believe

1332

00:47:42,710 --> 00:47:41,839

perhaps it's possible but harder to

1333

00:47:45,910 --> 00:47:42,720

believe

1334

00:47:47,349 --> 00:47:45,920

that there there might be uh microbial

1335

00:47:49,430 --> 00:47:47,359

and other

1336

00:47:52,150 --> 00:47:49,440

undeveloped fully developed fully

1337

00:47:55,270 --> 00:47:52,160

birthed etc life forms that are

1338

00:47:57,430 --> 00:47:55,280

transferring um out in the cosmos as a

1339

00:47:59,510 --> 00:47:57,440

general matter yeah and that's known as

1340

00:48:01,270 --> 00:47:59,520

panspermia it's easily looked up thank

1341

00:48:03,109 --> 00:48:01,280

you again to george howard thank you to

1342

00:48:04,870 --> 00:48:03,119

our producer michael parker thank you

1343

00:48:06,549 --> 00:48:04,880

all for listening we'll be back soon

1344

00:48:07,000 --> 00:48:06,559

with another episode of the hidden true

1345

00:48:11,670 --> 00:48:07,010

show

1346

00:48:14,870 --> 00:48:13,109

thank you for listening to the truth

1347

00:48:18,470 --> 00:48:14,880

show with jim

1348

00:48:20,630 --> 00:48:18,480

you can find us at hiddentruthshow.com

1349

00:48:23,430 --> 00:48:20,640

follow us on facebook twitter and

1350

00:48:25,190 --> 00:48:23,440

instagram that hit the truth show

1351

00:48:27,829 --> 00:48:25,200

join us again next week for another

1352

00:48:33,740 --> 00:48:27,839

episode of hidden truth show with jim