

1  
00:00:05,759 --> 00:00:10,419  
welcome to the sort of exotic the hot

2  
00:00:08,798 --> 00:00:13,679  
cancer from Australia from a strange

3  
00:00:10,419 --> 00:00:13,679  
science and reason

4  
00:00:14,699 --> 00:00:19,589  
no damn those gravitational waves

5  
00:00:27,379 --> 00:00:34,960  
welcome to the skeptic zone the podcast

6  
00:00:30,379 --> 00:00:34,960  
from Australia for science and reason

7  
00:00:43,320 --> 00:00:48,730  
hello and welcome to the skeptic zone

8  
00:00:46,000 --> 00:00:52,359  
episode number 382 for the fourteenth of

9  
00:00:48,729 --> 00:00:54,479  
februari are happy Valentine's Day 2016

10  
00:00:52,359 --> 00:00:59,259  
Richard Saunders here with you from

11  
00:00:54,479 --> 00:01:01,929  
jambeeroo Jamberoo yes jamberoo was on

12  
00:00:59,259 --> 00:01:04,808  
the southern side of sydney near the

13  
00:01:01,929 --> 00:01:06,700  
city of Wollongong it's where my mother

14  
00:01:04,808 --> 00:01:09,219  
lives and I'm visiting mom at the moment

15  
00:01:06,700 --> 00:01:10,540  
and thanks to the wonders of the

16  
00:01:09,219 --> 00:01:13,750  
internet and YouTube we're enjoying

17  
00:01:10,540 --> 00:01:16,110  
watching lots of that wonderful shows

18  
00:01:13,750 --> 00:01:18,189  
that mum enjoys that is if those pesky

19  
00:01:16,109 --> 00:01:20,349  
gravitational waves don't get in our way

20  
00:01:18,189 --> 00:01:23,969  
now that was an interesting story that

21  
00:01:20,349 --> 00:01:29,728  
just happened this week two black holes

22  
00:01:23,969 --> 00:01:33,340  
colliding merging 1.3 billion years ago

23  
00:01:29,728 --> 00:01:38,250  
and the far reaches of space and only

24  
00:01:33,340 --> 00:01:41,700  
this week the the ripples in space-time

25  
00:01:38,250 --> 00:01:45,519  
were detected on earth using mirrors

26  
00:01:41,700 --> 00:01:47,590  
mirrors it's extraordinary suspended

27  
00:01:45,519 --> 00:01:50,340  
mirrors and multiple mirrors around the

28  
00:01:47,590 --> 00:01:54,549  
planet to make sure once again a wonder

29

00:01:50,340 --> 00:01:57,790  
a wonder brought to us by science not

30  
00:01:54,549 --> 00:02:01,380  
magic not pseudoscience not mysticism

31  
00:01:57,790 --> 00:02:05,290  
not the paranormal not the supernatural

32  
00:02:01,379 --> 00:02:07,390  
just plain good old-fashioned science

33  
00:02:05,290 --> 00:02:08,979  
but what's coming up on this week's

34  
00:02:07,390 --> 00:02:12,489  
episode of the skeptic zone Joe

35  
00:02:08,979 --> 00:02:14,950  
alabaster evidence please Joe a keen

36  
00:02:12,489 --> 00:02:19,860  
gardener a keen gardener herself looks

37  
00:02:14,949 --> 00:02:23,709  
at biodynamic gardening gardening with a

38  
00:02:19,860 --> 00:02:26,019  
touch of woo woo you can grow your

39  
00:02:23,709 --> 00:02:29,500  
vegetables by the light of the full moon

40  
00:02:26,019 --> 00:02:31,900  
or not find out more evidence please

41  
00:02:29,500 --> 00:02:33,009  
with Joe alabaster following that it's a

42  
00:02:31,900 --> 00:02:36,849  
week in science from the Royal

43  
00:02:33,009 --> 00:02:40,120

Institution of Australia w WR I a usaa

44

00:02:36,849 --> 00:02:41,979

you it's an older one it's a repeat you

45

00:02:40,120 --> 00:02:44,769

might have heard it before worth

46

00:02:41,979 --> 00:02:46,569

listening to again then following that a

47

00:02:44,769 --> 00:02:49,719

little investigation little report i

48

00:02:46,569 --> 00:02:54,069

should say about a certain psychic in

49

00:02:49,719 --> 00:02:55,000

the UK by the name of Lily Anne who was

50

00:02:54,069 --> 00:02:58,329

quarter

51

00:02:55,000 --> 00:03:01,629

red-handed sending out the identical

52

00:02:58,330 --> 00:03:04,570

reading letters from heaven to multiple

53

00:03:01,629 --> 00:03:07,479

clients oh dear dear so we're going to

54

00:03:04,569 --> 00:03:10,329

look at that we're going to hear what

55

00:03:07,479 --> 00:03:13,299

that reading was and we'll be discussing

56

00:03:10,330 --> 00:03:15,790

the Barnum effect and other cold reading

57

00:03:13,300 --> 00:03:18,340

type statements with the help with the

58  
00:03:15,789 --> 00:03:20,199  
help offer clip from james randi now

59  
00:03:18,340 --> 00:03:21,939  
before we get stuck into the show this

60  
00:03:20,199 --> 00:03:24,719  
has come to my attention just in the

61  
00:03:21,939 --> 00:03:29,500  
last few days thank you Joe alabaster an

62  
00:03:24,719 --> 00:03:32,319  
evening with Alan Alda holy moly getting

63  
00:03:29,500 --> 00:03:34,090  
beyond a blind date with science Alan

64  
00:03:32,319 --> 00:03:37,509  
Alda will be appearing at the Australian

65  
00:03:34,090 --> 00:03:40,569  
National University in Canberra on March

66  
00:03:37,509 --> 00:03:42,429  
the 8th Tuesday March the eighth now no

67  
00:03:40,569 --> 00:03:46,299  
kickbacks for me for this I'm simply

68  
00:03:42,430 --> 00:03:49,030  
announcing this because as a a fan of

69  
00:03:46,300 --> 00:03:50,709  
Alan Alda for many years and only

70  
00:03:49,030 --> 00:03:53,020  
partially because of his acting work

71  
00:03:50,709 --> 00:03:55,270  
which is great if you saw him in the

72  
00:03:53,020 --> 00:03:57,730  
West Wing for example my goodness me

73  
00:03:55,270 --> 00:04:00,489  
what a fine performance it was and not

74  
00:03:57,729 --> 00:04:04,179  
forgetting his a performances as Hawkeye

75  
00:04:00,489 --> 00:04:06,159  
Pierce in mash know what really really

76  
00:04:04,180 --> 00:04:08,530  
impressed me with the Alan Alda is his

77  
00:04:06,159 --> 00:04:11,560  
passion and his ability to communicate

78  
00:04:08,530 --> 00:04:14,169  
science including many years being the

79  
00:04:11,560 --> 00:04:15,909  
host of TV's the TV series Scientific

80  
00:04:14,169 --> 00:04:18,219  
American frontiers which I think he

81  
00:04:15,909 --> 00:04:22,418  
could probably find on youtube anyway I

82  
00:04:18,220 --> 00:04:24,729  
think I might just find myself in the

83  
00:04:22,418 --> 00:04:26,529  
audience on that evening if you want to

84  
00:04:24,728 --> 00:04:28,418  
find out more there i'll put a link on

85  
00:04:26,529 --> 00:04:31,809  
the show notes or just google an evening

86

00:04:28,418 --> 00:04:34,689  
with Alan Alda Australian National

87  
00:04:31,810 --> 00:04:38,110  
University and of course I sent my best

88  
00:04:34,689 --> 00:04:40,930  
wishes f to dr. Richard Dawkins who is

89  
00:04:38,110 --> 00:04:43,780  
recovering from a stroke he had a minor

90  
00:04:40,930 --> 00:04:47,769  
stroke it would appear the other day

91  
00:04:43,779 --> 00:04:51,179  
he's out of hospital and by all accounts

92  
00:04:47,769 --> 00:04:55,089  
he is recovering as a man who certainly

93  
00:04:51,180 --> 00:04:58,600  
caught controversy in many spheres as we

94  
00:04:55,089 --> 00:05:01,779  
all know but of course I wish him all

95  
00:04:58,600 --> 00:05:03,990  
the best for a speedy recovery but now

96  
00:05:01,779 --> 00:05:08,448  
it's time for me to get off this chair

97  
00:05:03,990 --> 00:05:13,340  
walk around the corner here into the

98  
00:05:08,449 --> 00:05:16,699  
kitchen open mums fridge whoo what do we

99  
00:05:13,339 --> 00:05:19,459  
have here some leftover chocolate cake

100  
00:05:16,699 --> 00:05:42,379

from mum's birthday while I munch that I

101

00:05:19,459 --> 00:05:45,638

hope you enjoy the skeptic zone what we

102

00:05:42,379 --> 00:05:49,499

want is some more evidence please

103

00:05:45,639 --> 00:05:49,499

is Joe alabaster

104

00:05:51,079 --> 00:05:55,418

hello this is Joe alabaster

105

00:05:57,360 --> 00:06:03,670

in the early 1920s farmers in Germany

106

00:06:01,569 --> 00:06:05,949

were noticing degraded soil conditions

107

00:06:03,670 --> 00:06:07,840

and a deterioration in the health and

108

00:06:05,949 --> 00:06:10,089

quality of their crops and livestock and

109

00:06:07,839 --> 00:06:12,909

this came to the attention of Rudolf

110

00:06:10,089 --> 00:06:15,189

Steiner an Austrian philosopher and

111

00:06:12,910 --> 00:06:17,710

esotericist Rudolf Steiner was the

112

00:06:15,189 --> 00:06:20,800

pioneer of ward off Steiner education

113

00:06:17,709 --> 00:06:23,289

anthroposophical medicine and biodynamic

114

00:06:20,800 --> 00:06:27,040

agriculture all of which are still

115  
00:06:23,290 --> 00:06:29,950  
practiced today biodynamic wines yogurts

116  
00:06:27,040 --> 00:06:33,250  
superfoods and cosmetics assorted a

117  
00:06:29,949 --> 00:06:35,769  
premium price why what is it that

118  
00:06:33,250 --> 00:06:38,350  
biodynamic certification assures us of

119  
00:06:35,769 --> 00:06:42,519  
that isn't a part of regular organic

120  
00:06:38,350 --> 00:06:44,740  
agricultural practice well biodynamic

121  
00:06:42,519 --> 00:06:46,930  
farming methods are similar to organic

122  
00:06:44,740 --> 00:06:49,750  
farming methods in that they prohibit

123  
00:06:46,930 --> 00:06:52,930  
the use of GMOs synthetic chemicals

124  
00:06:49,750 --> 00:06:55,089  
fertilizers or pesticides but there's an

125  
00:06:52,930 --> 00:06:57,370  
added layer of philosophy and Steiner

126  
00:06:55,089 --> 00:07:00,189  
prescribed methods and practices on top

127  
00:06:57,370 --> 00:07:02,110  
of the standard no chemicals raw and I

128  
00:07:00,189 --> 00:07:05,589  
know all matter is composed of chemicals

129  
00:07:02,110 --> 00:07:10,840  
and razz me batty two from bio dynamics

130  
00:07:05,589 --> 00:07:13,000  
com quote bio dynamics is ultimately not

131  
00:07:10,839 --> 00:07:14,949  
just a set of alternative agricultural

132  
00:07:13,000 --> 00:07:18,310  
methods but a way of seeing and

133  
00:07:14,949 --> 00:07:20,949  
understanding the natural world Steiner

134  
00:07:18,310 --> 00:07:23,560  
called for and pioneered a new form of

135  
00:07:20,949 --> 00:07:26,379  
science which he called spiritual

136  
00:07:23,560 --> 00:07:29,228  
science that could grapple with both the

137  
00:07:26,379 --> 00:07:32,918  
material and non-material or spiritual

138  
00:07:29,228 --> 00:07:35,500  
aspects of reality biodynamic farmers

139  
00:07:32,918 --> 00:07:37,689  
work to develop their capacity to sense

140  
00:07:35,500 --> 00:07:40,120  
and observe the more subtle forces at

141  
00:07:37,689 --> 00:07:42,850  
work in nature and to use their own

142  
00:07:40,120 --> 00:07:46,120  
insights to further enhance the vitality

143

00:07:42,850 --> 00:07:48,100  
of their farms the biodynamic methods

144  
00:07:46,120 --> 00:07:52,240  
are thus in a continuous state of

145  
00:07:48,100 --> 00:07:54,120  
evolution and individualization as part

146  
00:07:52,240 --> 00:07:57,100  
of his work on a new approach to science

147  
00:07:54,120 --> 00:07:59,350  
Steiner also developed together with a

148  
00:07:57,100 --> 00:08:01,780  
number of colleagues asserted unique

149  
00:07:59,350 --> 00:08:04,360  
scientific methods for demonstrating the

150  
00:08:01,779 --> 00:08:06,728  
presence of life forces in nature and

151  
00:08:04,360 --> 00:08:10,300  
for evaluating the quality and vitality

152  
00:08:06,728 --> 00:08:12,128  
of food and soil these methods

153  
00:08:10,300 --> 00:08:14,500  
times called the picture forming methods

154  
00:08:12,129 --> 00:08:17,650  
are finding growing acceptance in

155  
00:08:14,500 --> 00:08:19,478  
scientific circles in Europe these and

156  
00:08:17,649 --> 00:08:21,788  
other traditional forms of scientific

157  
00:08:19,478 --> 00:08:25,478

research have consistently demonstrated

158

00:08:21,788 --> 00:08:30,788

the benefits of biodynamic methods and a

159

00:08:25,478 --> 00:08:33,129

quote well spiritual science spiritual

160

00:08:30,788 --> 00:08:35,979

science looks into that which is beyond

161

00:08:33,129 --> 00:08:38,349

science as we define it it deals with

162

00:08:35,979 --> 00:08:41,009

the supernatural concepts which are not

163

00:08:38,349 --> 00:08:44,410

empirically derived and are neither

164

00:08:41,009 --> 00:08:46,299

reproducible nor testable yet Steiner

165

00:08:44,409 --> 00:08:48,250

declared it to be scientific regardless

166

00:08:46,299 --> 00:08:49,689

and this mode of thinking is seen

167

00:08:48,250 --> 00:08:52,899

throughout all of the endeavors he

168

00:08:49,690 --> 00:08:54,670

established what are the scientifically

169

00:08:52,899 --> 00:08:56,860

proven benefits of biodynamic

170

00:08:54,669 --> 00:08:59,019

agriculture well they're

171

00:08:56,860 --> 00:09:01,200

indistinguishable from regular organic

172  
00:08:59,019 --> 00:09:03,850  
farming methods compared to conventional

173  
00:09:01,200 --> 00:09:06,579  
agricultural methods organic and

174  
00:09:03,850 --> 00:09:08,649  
biodynamic farms tend to have higher

175  
00:09:06,578 --> 00:09:12,729  
earthworm populations and increased

176  
00:09:08,649 --> 00:09:15,250  
biomass but lower yields or produce the

177  
00:09:12,730 --> 00:09:17,528  
extra work that biodynamic farmers put

178  
00:09:15,250 --> 00:09:20,679  
in to meet with stoners methods is quite

179  
00:09:17,528 --> 00:09:22,899  
astounding lower an example of the sort

180  
00:09:20,679 --> 00:09:25,599  
of practices that sonar prescribed for

181  
00:09:22,899 --> 00:09:30,519  
biodynamic farmers is the preparation

182  
00:09:25,600 --> 00:09:35,370  
and use of biodynamic preparation 500 BD

183  
00:09:30,519 --> 00:09:38,620  
500 a crop spray used to inoculate soil

184  
00:09:35,370 --> 00:09:42,730  
BD 500 must be prepared in very specific

185  
00:09:38,620 --> 00:09:45,159  
ways in early autumn a farmer is to take

186  
00:09:42,730 --> 00:09:47,740  
an empty horn from a cow which has had a

187  
00:09:45,159 --> 00:09:49,328  
calf and fill it with the fresh manure

188  
00:09:47,740 --> 00:09:53,049  
of a cow which is grazed on

189  
00:09:49,328 --> 00:09:55,239  
biodynamically worked pasture the horn

190  
00:09:53,049 --> 00:09:57,759  
is then to be buried underground in a

191  
00:09:55,240 --> 00:10:00,940  
fertile area of a field or garden until

192  
00:09:57,759 --> 00:10:03,189  
spring when it's dug up and the contents

193  
00:10:00,940 --> 00:10:05,529  
of the horn are removed and stored in a

194  
00:10:03,190 --> 00:10:10,930  
loose lidded glass or earthenware jar in

195  
00:10:05,528 --> 00:10:14,259  
peat or soil away from any chemicals BD

196  
00:10:10,929 --> 00:10:16,958  
500 is applied at a rate of 35 grams of

197  
00:10:14,259 --> 00:10:20,470  
preparation in 13 liters of water per

198  
00:10:16,958 --> 00:10:22,778  
acre it is to be mixed in a vessel made

199  
00:10:20,470 --> 00:10:23,750  
of water clay copper or stainless steel

200

00:10:22,778 --> 00:10:26,299  
and the vessel

201  
00:10:23,750 --> 00:10:29,509  
must not be over filled water must be

202  
00:10:26,299 --> 00:10:32,240  
clean from a dam or tank if using city

203  
00:10:29,509 --> 00:10:35,029  
water leave overnight to allow chemicals

204  
00:10:32,240 --> 00:10:38,149  
in the water to evaporate proper

205  
00:10:35,029 --> 00:10:40,909  
stirring technique is important begin by

206  
00:10:38,149 --> 00:10:43,490  
stirring in one direction until a vortex

207  
00:10:40,909 --> 00:10:45,769  
appears then reverse the direction until

208  
00:10:43,490 --> 00:10:48,879  
you create another one continue stirring

209  
00:10:45,769 --> 00:10:51,710  
and changing direction for one hour

210  
00:10:48,879 --> 00:10:54,759  
stirring small amounts of preparation in

211  
00:10:51,710 --> 00:10:57,500  
large amounts of water is referred to as

212  
00:10:54,759 --> 00:11:00,289  
dynamiting and is said to transfer

213  
00:10:57,500 --> 00:11:05,629  
forces and energy from the preparation

214  
00:11:00,289 --> 00:11:08,629

into the water BD 500 needs to reach the

215

00:11:05,629 --> 00:11:10,759

ground in the form of droplets to apply

216

00:11:08,629 --> 00:11:13,429

to large areas of land use a backpack

217

00:11:10,759 --> 00:11:15,409

sprayer smaller areas can be treated by

218

00:11:13,429 --> 00:11:17,719

dipping a hand brush made of horsehair

219

00:11:15,409 --> 00:11:20,179

or another natural material into a

220

00:11:17,720 --> 00:11:23,149

bucket of preparation and flicking it

221

00:11:20,179 --> 00:11:26,569

over the soil what's the point of it all

222

00:11:23,149 --> 00:11:29,088

it said that the sphere of activity of

223

00:11:26,570 --> 00:11:31,730

the warm in your preparation is the soil

224

00:11:29,089 --> 00:11:34,040

life and root zone of the plant that it

225

00:11:31,730 --> 00:11:35,629

improves soil humise that it affects the

226

00:11:34,039 --> 00:11:38,779

dynamics of plant growth from

227

00:11:35,629 --> 00:11:40,100

germination to harvest its best applied

228

00:11:38,779 --> 00:11:42,679

at the beginning of the growing season

229  
00:11:40,100 --> 00:11:44,600  
on a cloudy afternoon where soil is

230  
00:11:42,679 --> 00:11:48,319  
moist and on fields that are

231  
00:11:44,600 --> 00:11:51,290  
uncultivated or freshly turned there are

232  
00:11:48,320 --> 00:11:54,230  
several other preparations a similar cow

233  
00:11:51,289 --> 00:11:56,029  
horn one using powdered quartz several

234  
00:11:54,230 --> 00:12:00,769  
for improving compost involving various

235  
00:11:56,029 --> 00:12:03,529  
herbs and animal organs BD 502 is made

236  
00:12:00,769 --> 00:12:06,199  
from dried yellow flowers placed in a

237  
00:12:03,529 --> 00:12:08,299  
stags bladder in spring then hung from a

238  
00:12:06,200 --> 00:12:10,009  
tree until autumn buried in an

239  
00:12:08,299 --> 00:12:13,939  
earthenware container until the next

240  
00:12:10,009 --> 00:12:15,740  
spring then one tenth of a teaspoon is

241  
00:12:13,940 --> 00:12:19,580  
to be placed in the middle of a cubic

242  
00:12:15,740 --> 00:12:21,860  
meter of compost where it quote brings

243

00:12:19,580 --> 00:12:24,800

light forces into the soil via its

244

00:12:21,860 --> 00:12:26,990

connection with sulfur helping spirit to

245

00:12:24,799 --> 00:12:29,990

penetrate matter and enables it to

246

00:12:26,990 --> 00:12:32,629

attract trace elements important for

247

00:12:29,990 --> 00:12:37,490

reproduction and growth venus forces are

248

00:12:32,629 --> 00:12:40,909

said to manifest in yarrow end quote

249

00:12:37,490 --> 00:12:43,039

from a bio dynamics guide quote it's

250

00:12:40,909 --> 00:12:45,649

ideal to follow the application times

251

00:12:43,039 --> 00:12:50,329

from the biodynamic calendar to optimize

252

00:12:45,649 --> 00:12:52,700

cosmic influence end quote yes bio

253

00:12:50,330 --> 00:12:55,970

dynamics incorporates an astrological

254

00:12:52,700 --> 00:12:58,190

calendar using the phases of the Moon to

255

00:12:55,970 --> 00:13:00,379

organize when to plant fertilize and

256

00:12:58,190 --> 00:13:01,850

harvest kind of makes sense when you're

257

00:13:00,379 --> 00:13:04,610  
living in a society which is lacking

258  
00:13:01,850 --> 00:13:06,500  
calendars and I suppose it still serves

259  
00:13:04,610 --> 00:13:08,600  
as sensible enough way to track the

260  
00:13:06,500 --> 00:13:10,220  
passing of time and seasons but the

261  
00:13:08,600 --> 00:13:12,200  
magical thinking of astrology that's

262  
00:13:10,220 --> 00:13:17,089  
incorporated into these calendars

263  
00:13:12,200 --> 00:13:19,879  
strikes me as quite unnecessary during

264  
00:13:17,089 --> 00:13:21,680  
the 90s and early 2000s if there wasn't

265  
00:13:19,879 --> 00:13:23,480  
a poster of an independent cinemas

266  
00:13:21,679 --> 00:13:25,309  
yearly program stuck behind the toilet

267  
00:13:23,480 --> 00:13:27,620  
door of a share house I lived in or

268  
00:13:25,309 --> 00:13:30,528  
visited there was almost certainly a

269  
00:13:27,620 --> 00:13:32,929  
moon planting poster in its place it's a

270  
00:13:30,528 --> 00:13:34,580  
fairly pervasive belief by no means

271  
00:13:32,929 --> 00:13:36,559

limited to hardcore alternative

272

00:13:34,580 --> 00:13:38,600

gardeners with its pseudo scientific

273

00:13:36,559 --> 00:13:40,819

claims that the gravity wrought by the

274

00:13:38,600 --> 00:13:44,899

moon has a notable effect on the water

275

00:13:40,820 --> 00:13:46,610

with in plants and soil biodynamic makes

276

00:13:44,899 --> 00:13:48,649

the further assertion that the

277

00:13:46,610 --> 00:13:55,149

constellations impact growth and

278

00:13:48,649 --> 00:13:57,708

fertility from biodynamic org UK quote

279

00:13:55,149 --> 00:14:00,589

since ancient times the 12 zodiac

280

00:13:57,708 --> 00:14:03,500

constellations have been associated with

281

00:14:00,589 --> 00:14:05,750

each of the four elements three

282

00:14:03,500 --> 00:14:08,509

constellations are connected to H

283

00:14:05,750 --> 00:14:12,110

element and each element is related to a

284

00:14:08,509 --> 00:14:17,088

part of the plant earth root waterleaf

285

00:14:12,110 --> 00:14:19,669

air flower fire fruit the good carrots

286  
00:14:17,089 --> 00:14:22,640  
and Earth route day should be chosen for

287  
00:14:19,669 --> 00:14:27,559  
lettuce a waterleaf day beans and apples

288  
00:14:22,639 --> 00:14:29,509  
are fire fruit day etc end quote it all

289  
00:14:27,559 --> 00:14:31,819  
seems incredibly prescriptive to me

290  
00:14:29,509 --> 00:14:33,528  
there's no room for trailing different

291  
00:14:31,820 --> 00:14:36,410  
and potentially more efficient or

292  
00:14:33,528 --> 00:14:41,149  
economical methods everything is done by

293  
00:14:36,409 --> 00:14:43,159  
the now 90 year old Steiner book some of

294  
00:14:41,149 --> 00:14:46,519  
the principles found within bio dynamics

295  
00:14:43,159 --> 00:14:48,889  
a ones that I to value the responsible

296  
00:14:46,519 --> 00:14:50,490  
stewardship of land recognition of

297  
00:14:48,889 --> 00:14:53,730  
ecosystems and micro

298  
00:14:50,490 --> 00:14:55,649  
limits minimizing waste but we can be

299  
00:14:53,730 --> 00:14:57,959  
ethical ecologically aware and

300  
00:14:55,649 --> 00:15:00,419  
appreciative of agriculturalists or in

301  
00:14:57,958 --> 00:15:02,219  
my case home gardeners without the need

302  
00:15:00,419 --> 00:15:07,889  
for dated prescriptive methods or

303  
00:15:02,220 --> 00:15:10,620  
magical thinking as for life forces why

304  
00:15:07,889 --> 00:15:13,549  
do we need supernatural ones influenced

305  
00:15:10,620 --> 00:15:16,080  
by constellations to be an oral as a

306  
00:15:13,549 --> 00:15:18,528  
home gardener I feel a sense of

307  
00:15:16,080 --> 00:15:21,360  
amazement at what I see unfold around me

308  
00:15:18,528 --> 00:15:23,480  
seeds which contain dormant life being

309  
00:15:21,360 --> 00:15:26,509  
awakened by the right conditions

310  
00:15:23,480 --> 00:15:29,610  
microcosms of animals plants and fungi

311  
00:15:26,509 --> 00:15:32,519  
the shapes textures and colors of leaves

312  
00:15:29,610 --> 00:15:34,500  
fruit flowers embark learning how to

313  
00:15:32,519 --> 00:15:37,289  
adjust the properties of soil to help a

314

00:15:34,500 --> 00:15:39,480  
plant thrive witnessing photosynthesis

315  
00:15:37,289 --> 00:15:41,399  
and nutrient uptake and genetic

316  
00:15:39,480 --> 00:15:45,000  
manipulation by selective breeding of

317  
00:15:41,399 --> 00:15:47,129  
plants I'm fascinated by it all so when

318  
00:15:45,000 --> 00:15:49,409  
somebody tells me that their method of

319  
00:15:47,129 --> 00:15:52,259  
alternative gardening or agriculture is

320  
00:15:49,409 --> 00:15:54,000  
more holistic or considered because

321  
00:15:52,259 --> 00:15:56,250  
they're adopting supernatural beliefs

322  
00:15:54,000 --> 00:15:59,039  
into their practice I really want to ask

323  
00:15:56,250 --> 00:16:02,789  
them isn't what's actually there what's

324  
00:15:59,039 --> 00:16:04,828  
observable amazing enough there's a

325  
00:16:02,789 --> 00:16:07,379  
quote from Douglas Adams of which I'm

326  
00:16:04,828 --> 00:16:09,239  
particularly fond and in the context of

327  
00:16:07,379 --> 00:16:13,740  
this report it can be taken quite

328  
00:16:09,240 --> 00:16:15,870

literally quote isn't it enough to see

329

00:16:13,740 --> 00:16:17,730

that a garden is beautiful without

330

00:16:15,870 --> 00:16:22,950

having to believe that there are fairies

331

00:16:17,730 --> 00:16:24,899

at the bottom of it to end quote for

332

00:16:22,950 --> 00:16:27,778

more evidence please keep listening to

333

00:16:24,899 --> 00:16:29,850

the skeptic zone and as I tell you every

334

00:16:27,778 --> 00:16:33,720

week you can find evidence place at

335

00:16:29,850 --> 00:16:38,509

evidence please net on Facebook and I've

336

00:16:33,720 --> 00:16:38,509

on twitter at joe alabaster

337

00:16:47,679 --> 00:16:53,169

hi this is Heidi Robertson from the

338

00:16:51,230 --> 00:16:56,050

Northern Rivers vaccination supporters

339

00:16:53,169 --> 00:16:58,639

we are a group of concerned citizens

340

00:16:56,049 --> 00:17:01,250

dedicated to promoting good science and

341

00:16:58,639 --> 00:17:04,279

common sense in our region the far north

342

00:17:01,250 --> 00:17:06,109

coast of New South Wales this area are

343  
00:17:04,279 --> 00:17:09,109  
famous for its natural beauty and

344  
00:17:06,109 --> 00:17:12,708  
relaxed lifestyle also has the lowest

345  
00:17:09,109 --> 00:17:14,809  
rates of vaccination in Australia we are

346  
00:17:12,709 --> 00:17:17,240  
out to change that by challenging the

347  
00:17:14,809 --> 00:17:18,919  
myths and misinformation and by

348  
00:17:17,240 --> 00:17:22,220  
providing good evidence based

349  
00:17:18,920 --> 00:17:24,079  
information to the community we'd love

350  
00:17:22,220 --> 00:17:27,680  
for you no matter where you are in the

351  
00:17:24,078 --> 00:17:35,299  
world to join our fight please visit our

352  
00:17:27,680 --> 00:17:38,120  
webpage at [ww.nrvs.info](#) we also have a

353  
00:17:35,299 --> 00:17:42,440  
link there to our facebook page tweet us

354  
00:17:38,119 --> 00:17:45,049  
at in our faqs supporters that's vix and

355  
00:17:42,440 --> 00:17:47,690  
check us out on Wikipedia by searching

356  
00:17:45,049 --> 00:17:51,399  
for Northern Rivers vaccination

357  
00:17:47,690 --> 00:17:51,400  
supporters thank you

358  
00:17:57,288 --> 00:18:03,750  
welcome to a week in science from RI oz

359  
00:18:00,298 --> 00:18:06,179  
this week regrowing nerves genes for

360  
00:18:03,750 --> 00:18:16,380  
migraines and monkeying around with

361  
00:18:06,179 --> 00:18:18,450  
social networks we used to think that

362  
00:18:16,380 --> 00:18:20,850  
nerves in the central nervous system

363  
00:18:18,450 --> 00:18:23,000  
couldn't regenerate after an injury but

364  
00:18:20,849 --> 00:18:25,500  
new research has not that on the head

365  
00:18:23,000 --> 00:18:27,329  
microscopic analysis of damaged nerves

366  
00:18:25,500 --> 00:18:29,490  
in the central nervous system of mice

367  
00:18:27,329 --> 00:18:31,980  
reveals that they not only regenerate

368  
00:18:29,490 --> 00:18:33,750  
but they do so it rates comparable to

369  
00:18:31,980 --> 00:18:35,970  
the regrowth of other parts of the

370  
00:18:33,750 --> 00:18:38,009  
nervous system the researchers are

371

00:18:35,970 --> 00:18:41,009  
unsure why or how this regeneration

372  
00:18:38,009 --> 00:18:43,528  
happens but the observation opens up new

373  
00:18:41,009 --> 00:18:47,908  
areas of research into regrowing damaged

374  
00:18:43,528 --> 00:18:50,460  
nerves in humans there's good news for

375  
00:18:47,909 --> 00:18:52,950  
sports fans this week humans have

376  
00:18:50,460 --> 00:18:54,870  
evolved for throwing a number of

377  
00:18:52,950 --> 00:18:56,730  
anatomical features in the human

378  
00:18:54,869 --> 00:18:59,369  
shoulder have been shown to boost

379  
00:18:56,730 --> 00:19:02,250  
throwing power and accuracy these

380  
00:18:59,369 --> 00:19:04,469  
shoulder features only appeared after we

381  
00:19:02,250 --> 00:19:07,079  
started walking upright when the hands

382  
00:19:04,470 --> 00:19:09,419  
and arms were free these features date

383  
00:19:07,079 --> 00:19:12,658  
back at least two million years to our

384  
00:19:09,419 --> 00:19:14,850  
ancestors Homo erectus suggesting their

385  
00:19:12,659 --> 00:19:20,880

anatomy developed to throw Spears and

386

00:19:14,849 --> 00:19:22,589

other objects when hunting 12 sites on

387

00:19:20,880 --> 00:19:26,159

the human genome have been linked to

388

00:19:22,589 --> 00:19:28,349

migraines and remember visual clues to

389

00:19:26,159 --> 00:19:30,389

help find their way home plants

390

00:19:28,349 --> 00:19:33,058

accurately measure their stored energy

391

00:19:30,388 --> 00:19:35,308

and then calculate how much to use to

392

00:19:33,058 --> 00:19:36,928

last them through the night and a strong

393

00:19:35,308 --> 00:19:39,089

correlation has been found between

394

00:19:36,929 --> 00:19:40,679

people's maths ability and the

395

00:19:39,089 --> 00:19:42,949

likelihood that they will default on

396

00:19:40,679 --> 00:19:46,460

their home mortgage

397

00:19:42,950 --> 00:19:49,430

and finally this week monkeys use social

398

00:19:46,460 --> 00:19:51,350

networks to spread ideas dominant

399

00:19:49,430 --> 00:19:53,690

monkeys were isolated from their troops

400  
00:19:51,349 --> 00:19:56,599  
and shown two different ways to open a

401  
00:19:53,690 --> 00:19:59,330  
box containing food either by lifting a

402  
00:19:56,599 --> 00:20:01,159  
flap or pivoting that flat from side to

403  
00:19:59,329 --> 00:20:03,649  
side when these monkeys were

404  
00:20:01,160 --> 00:20:05,810  
reintroduced to their troops researchers

405  
00:20:03,650 --> 00:20:08,360  
followed how quickly the new behaviors

406  
00:20:05,809 --> 00:20:10,609  
spread they found that groups organized

407  
00:20:08,359 --> 00:20:13,399  
around a strong central leader spread

408  
00:20:10,609 --> 00:20:16,759  
the new ideas more quickly get back to

409  
00:20:13,400 --> 00:20:20,840  
work more details can be found on our

410  
00:20:16,759 --> 00:20:22,789  
website Arya's org dot a you that's been

411  
00:20:20,839 --> 00:20:25,009  
the highlights of another big week in

412  
00:20:22,789 --> 00:20:27,649  
science for more information on these

413  
00:20:25,009 --> 00:20:31,220  
and other science news stories go to the

414  
00:20:27,650 --> 00:20:33,350  
our oils website our oils or geo where

415  
00:20:31,220 --> 00:20:36,230  
you can also sign up for notifications

416  
00:20:33,349 --> 00:20:38,119  
of future episodes you can join in the

417  
00:20:36,230 --> 00:20:41,329  
conversation on Twitter using the

418  
00:20:38,119 --> 00:20:43,969  
hashtag week inside I'm Paul Willis and

419  
00:20:41,329 --> 00:20:46,329  
on behalf of the rirs team I'll see you

420  
00:20:43,970 --> 00:20:46,329  
next week

421  
00:21:14,619 --> 00:21:20,659  
letters from heaven TV psychic Lily Anne

422  
00:21:18,079 --> 00:21:23,539  
sends almost identical readings to

423  
00:21:20,660 --> 00:21:26,120  
dozens of customers here's a story out

424  
00:21:23,539 --> 00:21:29,420  
of the UK as reported in The Daily

425  
00:21:26,119 --> 00:21:31,669  
Record coat UK and in other media

426  
00:21:29,420 --> 00:21:35,330  
outlets a well-known psychic has sent

427  
00:21:31,670 --> 00:21:37,519  
identical letters from heaven to dozens

428

00:21:35,329 --> 00:21:39,429  
of bereaved customers who paid her to

429  
00:21:37,519 --> 00:21:43,789  
connect with their lost loved ones

430  
00:21:39,430 --> 00:21:46,130  
costing around 38 pounds these letters

431  
00:21:43,789 --> 00:21:50,089  
are claimed to be from your dear

432  
00:21:46,130 --> 00:21:53,240  
departed residing in heaven television

433  
00:21:50,089 --> 00:21:55,759  
psychic Paula Bairstow better known as

434  
00:21:53,240 --> 00:21:59,960  
Lily Anne apparently set out many

435  
00:21:55,759 --> 00:22:02,960  
letters to people paying money but all

436  
00:21:59,960 --> 00:22:06,680  
these letters were the same Lily Anne

437  
00:22:02,960 --> 00:22:09,440  
has over 150 thousand followers on her

438  
00:22:06,680 --> 00:22:12,230  
Facebook page on our website it says a

439  
00:22:09,440 --> 00:22:15,140  
letter from Lily Anne is a mediumship

440  
00:22:12,230 --> 00:22:17,539  
reading she will connect with her guides

441  
00:22:15,140 --> 00:22:20,210  
and the people who are coming through to

442  
00:22:17,539 --> 00:22:23,210

you from spirit to pass on messages from

443

00:22:20,210 --> 00:22:25,579

them that only you will know here with

444

00:22:23,210 --> 00:22:30,110

the help of skeptic trish hannah in

445

00:22:25,579 --> 00:22:33,409

sydney is a transcript of one of the

446

00:22:30,109 --> 00:22:36,379

letters sent out by psychic Lily Anne to

447

00:22:33,410 --> 00:22:38,090

a certain bereaved daughter have a

448

00:22:36,380 --> 00:22:42,010

listen to this and then we'll discuss

449

00:22:38,089 --> 00:22:46,730

some of the aspects of cold reading and

450

00:22:42,009 --> 00:22:49,190

Barnum effect or the floor effect ok so

451

00:22:46,730 --> 00:22:51,259

as you're very beautiful mum better

452

00:22:49,190 --> 00:22:53,360

connect with me the very first thing

453

00:22:51,259 --> 00:22:55,190

that she wants you to know is that she

454

00:22:53,359 --> 00:22:57,889

loves you with all her heart and that

455

00:22:55,190 --> 00:22:59,320

she is with her mum and not to worry she

456

00:22:57,890 --> 00:23:01,970

got home safe

457  
00:22:59,319 --> 00:23:03,559  
she adores you love she says she'll

458  
00:23:01,970 --> 00:23:05,809  
always be with you on the path of life

459  
00:23:03,559 --> 00:23:07,909  
right at your side to help comfort and

460  
00:23:05,809 --> 00:23:10,730  
guide you should you ever need it she'll

461  
00:23:07,910 --> 00:23:12,890  
be there she wants you to know to love

462  
00:23:10,730 --> 00:23:14,240  
that she is very proud of you as she

463  
00:23:12,890 --> 00:23:16,759  
tells me that you've had a very hard

464  
00:23:14,240 --> 00:23:19,750  
time of late but she says keep smiling

465  
00:23:16,759 --> 00:23:22,940  
that lovely smile aren't by your side

466  
00:23:19,750 --> 00:23:24,740  
she mentions the yellow flowers too and

467  
00:23:22,940 --> 00:23:26,870  
she says how very beautiful they are and

468  
00:23:24,740 --> 00:23:30,380  
the new decorating in a house looks

469  
00:23:26,869 --> 00:23:31,759  
lovely too she loves the colors she says

470  
00:23:30,380 --> 00:23:34,280  
when you dream of her love she's

471  
00:23:31,759 --> 00:23:36,259  
visiting you in a sleep state it's her

472  
00:23:34,279 --> 00:23:38,680  
spirit and when you see the feathers as

473  
00:23:36,259 --> 00:23:41,690  
well it's mum that's been leaving them

474  
00:23:38,680 --> 00:23:44,210  
she hears you talk to her you were sat

475  
00:23:41,690 --> 00:23:46,490  
on your bed love not so long ago he was

476  
00:23:44,210 --> 00:23:48,950  
crying you have pine in this bedroom and

477  
00:23:46,490 --> 00:23:51,859  
a light carpet mum was SAT there with

478  
00:23:48,950 --> 00:23:53,600  
you putting her arms around you she

479  
00:23:51,859 --> 00:23:55,539  
mentions a baby to come in the family

480  
00:23:53,599 --> 00:23:58,189  
and looks very forward to that as well

481  
00:23:55,539 --> 00:24:00,379  
she loves your hair and tells me you're

482  
00:23:58,190 --> 00:24:01,850  
always messing with it mentioned

483  
00:24:00,380 --> 00:24:04,910  
someone's getting their teeth whitened

484  
00:24:01,849 --> 00:24:06,529  
and a tattoo she sees too she'll be with

485

00:24:04,910 --> 00:24:08,930  
you at the church shortly as well and

486  
00:24:06,529 --> 00:24:12,980  
tells me September is significant as

487  
00:24:08,930 --> 00:24:14,900  
well as December she's in no pain I feel

488  
00:24:12,980 --> 00:24:16,970  
pants are all very similar took your

489  
00:24:14,900 --> 00:24:19,910  
beautiful mum she's fine with the rest

490  
00:24:16,970 --> 00:24:22,009  
of your spirit family she hands you a

491  
00:24:19,910 --> 00:24:24,800  
red rose love as now she goes back to

492  
00:24:22,009 --> 00:24:28,700  
spirit saying I will never leave you I

493  
00:24:24,799 --> 00:24:31,879  
adore you all of you many blessings to

494  
00:24:28,700 --> 00:24:36,230  
you so there you go I think you can see

495  
00:24:31,880 --> 00:24:40,820  
how that could apply to possibly

496  
00:24:36,230 --> 00:24:42,980  
thousands of bereaved our sons and

497  
00:24:40,819 --> 00:24:45,710  
daughters thinking about their mother

498  
00:24:42,980 --> 00:24:49,190  
the message that keeps on really being

499  
00:24:45,710 --> 00:24:52,670

repeated here is Mother's okay and she's

500

00:24:49,190 --> 00:24:54,830

sending you love now this is almost

501

00:24:52,670 --> 00:24:56,630

universal certainly with the

502

00:24:54,829 --> 00:24:58,879

investigations I've done over many years

503

00:24:56,630 --> 00:25:01,040

this comes through again and again and

504

00:24:58,880 --> 00:25:02,720

again when so-called psychics contact

505

00:25:01,039 --> 00:25:05,720

the dear departed the dear departed

506

00:25:02,720 --> 00:25:08,029

always pretty well they're happy and

507

00:25:05,720 --> 00:25:09,769

then sending you lots of love and

508

00:25:08,029 --> 00:25:12,259

they're wanting you to know that they're

509

00:25:09,769 --> 00:25:12,650

just fine and never seeing their old

510

00:25:12,259 --> 00:25:14,720

friend

511

00:25:12,650 --> 00:25:16,660

and family you really don't get the

512

00:25:14,720 --> 00:25:20,600

situation where the dear departed says

513

00:25:16,660 --> 00:25:22,580

got me out of here it's horrible or I

514  
00:25:20,599 --> 00:25:24,049  
really hate you and I'm glad I'm not

515  
00:25:22,579 --> 00:25:26,929  
seeing you anymore or things like that

516  
00:25:24,049 --> 00:25:31,819  
the point is of course that if this Lily

517  
00:25:26,930 --> 00:25:34,820  
Anne is providing a service here surely

518  
00:25:31,819 --> 00:25:38,149  
this is a matter for the Consumer

519  
00:25:34,819 --> 00:25:40,549  
Affairs the fair trading in the UK to

520  
00:25:38,150 --> 00:25:42,680  
investigate but these statements that

521  
00:25:40,549 --> 00:25:44,930  
Lily analysts coming up with she

522  
00:25:42,680 --> 00:25:47,299  
mentions the yellow flowers too and she

523  
00:25:44,930 --> 00:25:49,310  
says how beautiful they were and the new

524  
00:25:47,299 --> 00:25:51,379  
decoration the house looks lovely too

525  
00:25:49,309 --> 00:25:54,019  
she loves the colors she says that when

526  
00:25:51,380 --> 00:25:55,820  
you dream of her love all this sort of

527  
00:25:54,019 --> 00:25:58,009  
stuff she's visiting you in a sleep

528  
00:25:55,819 --> 00:26:00,289  
state it's her spirit she mentioned

529  
00:25:58,009 --> 00:26:03,470  
someone getting their teeth whitened and

530  
00:26:00,289 --> 00:26:07,700  
a tattoo now by the way there is spelled

531  
00:26:03,470 --> 00:26:09,470  
th ER e their teeth whitened all these

532  
00:26:07,700 --> 00:26:11,569  
are what we call Barnum statements or

533  
00:26:09,470 --> 00:26:14,750  
for all statements for effect Barnum

534  
00:26:11,569 --> 00:26:16,339  
effect it's all part of fur cold reading

535  
00:26:14,750 --> 00:26:19,460  
this is the sort of cold reading you can

536  
00:26:16,339 --> 00:26:22,569  
do without actually being present with a

537  
00:26:19,460 --> 00:26:25,490  
person to interact with their feedback

538  
00:26:22,569 --> 00:26:27,319  
which most so-called psychics do when

539  
00:26:25,490 --> 00:26:30,259  
they're sitting with somebody I'll

540  
00:26:27,319 --> 00:26:33,200  
basically ask them questions and feed

541  
00:26:30,259 --> 00:26:35,029  
off the feedback and on it goes these

542

00:26:33,200 --> 00:26:37,880  
statements of Lily Anne reminded me very

543  
00:26:35,029 --> 00:26:40,730  
much of an experiment James Randi did

544  
00:26:37,880 --> 00:26:44,690  
way back in the early 90s as part of the

545  
00:26:40,730 --> 00:26:48,230  
TV show secrets of the psychics which

546  
00:26:44,690 --> 00:26:51,140  
was produced by PBS the Nova program now

547  
00:26:48,230 --> 00:26:52,730  
if you google secrets of the psychics

548  
00:26:51,140 --> 00:26:54,890  
James Randi you'll see the whole video

549  
00:26:52,730 --> 00:26:58,009  
it's quite good it's a it's actually

550  
00:26:54,890 --> 00:27:00,850  
really really worth watching but here's

551  
00:26:58,009 --> 00:27:04,670  
a clip here's a clip from that

552  
00:27:00,849 --> 00:27:06,639  
documentary with James Randi with a

553  
00:27:04,670 --> 00:27:09,830  
group of university students

554  
00:27:06,640 --> 00:27:12,440  
demonstrating to them the the power of

555  
00:27:09,829 --> 00:27:14,869  
these barnum type statements he's in a

556  
00:27:12,440 --> 00:27:20,960

room a classroom and he hands out lots

557

00:27:14,869 --> 00:27:23,509

of astrology charts to the students the

558

00:27:20,960 --> 00:27:25,460

trickster never works alone rick it did

559

00:27:23,509 --> 00:27:27,319

have his audience assists on what

560

00:27:25,460 --> 00:27:32,149

but I did it if he does his job well

561

00:27:27,319 --> 00:27:36,109

they want to be fooled Schurrle Japan

562

00:27:32,148 --> 00:27:38,058

sapphic eating Wendy for the astrology

563

00:27:36,109 --> 00:27:43,219

test each student was given a detailed

564

00:27:38,058 --> 00:27:45,288

horoscope Robin they were told it was

565

00:27:43,220 --> 00:27:47,298

drawn up by a professional based on

566

00:27:45,288 --> 00:27:50,119

information they had supplied about when

567

00:27:47,298 --> 00:27:52,339

and where they were born actually these

568

00:27:50,119 --> 00:27:54,918

horoscopes were not quite what they

569

00:27:52,339 --> 00:27:56,178

appeared to be I'd like you to share

570

00:27:54,919 --> 00:27:58,009

something with me if you'd be so kind

571  
00:27:56,179 --> 00:28:00,019  
just with the show I asked the students

572  
00:27:58,009 --> 00:28:02,869  
to grade them for accuracy on a scale of

573  
00:28:00,019 --> 00:28:05,119  
one to five five being the most accurate

574  
00:28:02,869 --> 00:28:16,308  
how many he gave it a one let's see a

575  
00:28:05,119 --> 00:28:19,028  
show of hands two three four and five ok

576  
00:28:16,308 --> 00:28:21,259  
so we scored pretty highly with this set

577  
00:28:19,028 --> 00:28:22,640  
let's do a little experiment you've got

578  
00:28:21,259 --> 00:28:24,140  
your horoscopes right in front of you

579  
00:28:22,640 --> 00:28:26,240  
take them in your hand like this and

580  
00:28:24,140 --> 00:28:28,669  
hand them over your shoulder to the

581  
00:28:26,240 --> 00:28:30,048  
person behind you ok everybody and the

582  
00:28:28,669 --> 00:28:31,460  
guy at the end two down there you'll

583  
00:28:30,048 --> 00:28:32,929  
have to come up to the front because

584  
00:28:31,460 --> 00:28:36,620  
these people in the front don't have one

585  
00:28:32,929 --> 00:28:38,538  
now ok everybody changed him around

586  
00:28:36,619 --> 00:28:40,308  
everybody's got to open up somebody

587  
00:28:38,538 --> 00:28:50,720  
else's horoscope and read it carefully

588  
00:28:40,308 --> 00:28:53,379  
please they had all received the same

589  
00:28:50,720 --> 00:28:53,380  
horoscope

590  
00:28:54,750 --> 00:28:59,759  
the personality descriptions were

591  
00:28:56,700 --> 00:29:01,049  
generally true of everyone like recently

592  
00:28:59,759 --> 00:29:04,230  
you have had to recover from a

593  
00:29:01,049 --> 00:29:06,569  
disappointment some of them seem

594  
00:29:04,230 --> 00:29:09,120  
specific because they were so personal

595  
00:29:06,569 --> 00:29:12,720  
your sexual adjustment has presented

596  
00:29:09,119 --> 00:29:14,729  
some problems for you and there were

597  
00:29:12,720 --> 00:29:17,970  
others that anyone might hope would be

598  
00:29:14,730 --> 00:29:22,049  
true you have a great deal of unused

599

00:29:17,970 --> 00:29:25,289  
capacity people like to believe certain

600  
00:29:22,049 --> 00:29:28,889  
things are true they like to fall for

601  
00:29:25,289 --> 00:29:31,799  
very specific absolutely enormously

602  
00:29:28,890 --> 00:29:34,500  
accurate horoscopes right of course they

603  
00:29:31,799 --> 00:29:37,769  
are your the question is a question so

604  
00:29:34,500 --> 00:29:40,890  
why do people persist in ascribing to

605  
00:29:37,769 --> 00:29:43,619  
these systems that's the big question of

606  
00:29:40,890 --> 00:29:45,780  
course and psychologically that is the

607  
00:29:43,619 --> 00:29:47,129  
most interesting question i think that

608  
00:29:45,779 --> 00:29:48,930  
people are trying to get some control

609  
00:29:47,130 --> 00:29:51,150  
over their lives by knowing more about

610  
00:29:48,930 --> 00:29:53,070  
themselves of course they get control

611  
00:29:51,150 --> 00:29:55,830  
over their lives but that's what we're

612  
00:29:53,069 --> 00:29:58,109  
doing all of us each and every day of

613  
00:29:55,829 --> 00:29:59,970

our lives whether its financial whether

614

00:29:58,109 --> 00:30:01,619  
it's emotional whether it's a love

615

00:29:59,970 --> 00:30:03,450  
interest whether it's health we're

616

00:30:01,619 --> 00:30:06,629  
trying to get control of our lives we're

617

00:30:03,450 --> 00:30:08,640  
looking for power and astrology offers

618

00:30:06,630 --> 00:30:11,010  
you apparently a very old and a very

619

00:30:08,640 --> 00:30:13,650  
easy formula whereby you can do that

620

00:30:11,009 --> 00:30:16,259  
sort of thing so all the papers randy

621

00:30:13,650 --> 00:30:19,410  
was passing out to the students were all

622

00:30:16,259 --> 00:30:24,420  
the same many years ago I wrote to Randy

623

00:30:19,410 --> 00:30:26,519  
and asked him if I could use that series

624

00:30:24,420 --> 00:30:29,029  
of statements myself in the mystery

625

00:30:26,519 --> 00:30:31,559  
investigators show the show I do with a

626

00:30:29,029 --> 00:30:33,690  
maenad and dr. Rachel my friend Ian

627

00:30:31,559 --> 00:30:35,519  
Bryce from time to time and for many

628  
00:30:33,690 --> 00:30:38,850  
years now we've been using those very

629  
00:30:35,519 --> 00:30:40,889  
statements in our live show here is the

630  
00:30:38,849 --> 00:30:45,419  
full transcript of what Randy sent me

631  
00:30:40,890 --> 00:30:46,830  
slightly modified for use in the in the

632  
00:30:45,420 --> 00:30:50,100  
high schools and bring the primary

633  
00:30:46,829 --> 00:30:54,679  
schools it works very well we normally

634  
00:30:50,099 --> 00:30:54,679  
get scores in the 80s to 90 percent

635  
00:30:58,460 --> 00:31:06,058  
astrological sign Aquarius January 22

636  
00:31:02,849 --> 00:31:08,369  
februari 18 please do not discuss with

637  
00:31:06,058 --> 00:31:13,170  
other students any of the contents of

638  
00:31:08,369 --> 00:31:15,419  
this private personal analysis the

639  
00:31:13,170 --> 00:31:17,970  
following is an analysis based on your

640  
00:31:15,420 --> 00:31:19,769  
star sign all of the information has

641  
00:31:17,970 --> 00:31:22,860  
been and will be kept strictly

642  
00:31:19,769 --> 00:31:25,529  
confidential your personal analysis

643  
00:31:22,859 --> 00:31:27,149  
while at times you have serious doubts

644  
00:31:25,529 --> 00:31:29,849  
as to whether you'd made the right

645  
00:31:27,150 --> 00:31:31,710  
decision or done the right thing you are

646  
00:31:29,849 --> 00:31:34,379  
disciplined and controlled on the

647  
00:31:31,710 --> 00:31:37,350  
outside you tend to be worrisome and

648  
00:31:34,380 --> 00:31:40,410  
insecure on the inside your basic

649  
00:31:37,349 --> 00:31:42,869  
intuitions usually prove right and you

650  
00:31:40,410 --> 00:31:45,690  
are an excellent judge of character your

651  
00:31:42,869 --> 00:31:47,039  
sense of humor is notable you believe

652  
00:31:45,690 --> 00:31:49,230  
that everyone should look out for

653  
00:31:47,039 --> 00:31:52,678  
themselves you are willing to help

654  
00:31:49,230 --> 00:31:54,509  
others when they have difficulties you

655  
00:31:52,679 --> 00:31:57,540  
obtain great satisfaction from doing

656

00:31:54,509 --> 00:32:00,119  
small kindnesses even when your action

657  
00:31:57,539 --> 00:32:01,859  
may not be recognized by others though

658  
00:32:00,119 --> 00:32:04,259  
you are a person who tends to be

659  
00:32:01,859 --> 00:32:06,449  
forgiving of other people's faults and

660  
00:32:04,259 --> 00:32:08,220  
you try to trust them once an

661  
00:32:06,450 --> 00:32:11,250  
acquaintance has proved to be dishonest

662  
00:32:08,220 --> 00:32:13,799  
or unworthy of your confidence you watch

663  
00:32:11,250 --> 00:32:16,829  
them carefully your chart shows a great

664  
00:32:13,799 --> 00:32:19,558  
interest you may be thinking of a human

665  
00:32:16,829 --> 00:32:21,990  
services career if not you certainly

666  
00:32:19,558 --> 00:32:25,769  
should you would be very successful in

667  
00:32:21,990 --> 00:32:28,970  
such a profession your sign of Aquarius

668  
00:32:25,769 --> 00:32:31,379  
also shows the love of animals

669  
00:32:28,970 --> 00:32:35,039  
occasionally your aspirations tend to be

670  
00:32:31,380 --> 00:32:38,100

pretty unrealistic at times extroverted

671

00:32:35,039 --> 00:32:41,759

affable sociable while other times you

672

00:32:38,099 --> 00:32:44,189

are introverted wary and reserved you

673

00:32:41,759 --> 00:32:46,859

have found it unwise to be too Frank in

674

00:32:44,190 --> 00:32:49,049

revealing yourself to others you pride

675

00:32:46,859 --> 00:32:52,229

yourself on being an independent thinker

676

00:32:49,049 --> 00:32:55,259

and do not accept others opinions

677

00:32:52,230 --> 00:32:57,569

without satisfactory proof you prefer a

678

00:32:55,259 --> 00:33:00,058

certain amount of change in variety and

679

00:32:57,569 --> 00:33:03,269

become dissatisfied when hemmed in by

680

00:33:00,058 --> 00:33:05,369

restrictions and limitations your family

681

00:33:03,269 --> 00:33:07,200

at time has presented some problems for

682

00:33:05,369 --> 00:33:08,649

you while you have some personal

683

00:33:07,200 --> 00:33:10,809

weaknesses you are

684

00:33:08,650 --> 00:33:14,400

generally able to compensate for them

685  
00:33:10,809 --> 00:33:17,319  
you have a great deal of unused capacity

686  
00:33:14,400 --> 00:33:19,900  
which you have not turned to your

687  
00:33:17,319 --> 00:33:22,299  
advantage you have a tendency to be

688  
00:33:19,900 --> 00:33:24,190  
critical of yourself you have a strong

689  
00:33:22,299 --> 00:33:27,279  
need for other people to like you and

690  
00:33:24,190 --> 00:33:29,470  
for them to admire you you have had to

691  
00:33:27,279 --> 00:33:32,109  
recover from a disappointment and you

692  
00:33:29,470 --> 00:33:34,329  
have determined to overcome it you can

693  
00:33:32,109 --> 00:33:36,099  
expect a new person to enter your life a

694  
00:33:34,329 --> 00:33:39,279  
person who may have come to your

695  
00:33:36,099 --> 00:33:40,779  
attention during the last 12 days travel

696  
00:33:39,279 --> 00:33:42,970  
is showing up in your plans an

697  
00:33:40,779 --> 00:33:45,399  
unexpected trip that is brought about by

698  
00:33:42,970 --> 00:33:48,279  
a new element in your day-to-day routine

699  
00:33:45,400 --> 00:33:50,500  
because of this change do not enter into

700  
00:33:48,279 --> 00:33:54,609  
money matters no matter how minor

701  
00:33:50,500 --> 00:33:57,910  
without very serious consideration this

702  
00:33:54,609 --> 00:34:01,209  
is a critical moon saturn period for you

703  
00:33:57,910 --> 00:34:03,490  
and your health circumstances can be

704  
00:34:01,210 --> 00:34:06,730  
important be determined to whether this

705  
00:34:03,490 --> 00:34:08,760  
situation and depend on your good common

706  
00:34:06,730 --> 00:34:08,760  
sense

707  
00:34:16,628 --> 00:34:22,909  
now maybe you can see the similarities

708  
00:34:19,128 --> 00:34:26,929  
between that and the statements given

709  
00:34:22,909 --> 00:34:29,809  
out by so-called psychic Lily Anne these

710  
00:34:26,929 --> 00:34:35,059  
statements are designed to apply to many

711  
00:34:29,809 --> 00:34:38,030  
people and I'm sure you yourself could

712  
00:34:35,059 --> 00:34:42,379  
relate to a lot of what I just read out

713

00:34:38,030 --> 00:34:45,889  
there in that astrology chart now of

714  
00:34:42,378 --> 00:34:47,598  
course it's possible that Lily Anne sent

715  
00:34:45,889 --> 00:34:51,588  
out the same message to lots of people

716  
00:34:47,599 --> 00:34:55,280  
by error we can't rule that out at the

717  
00:34:51,588 --> 00:34:58,909  
moment but even if this one was intended

718  
00:34:55,280 --> 00:35:02,920  
for one person even if the statement she

719  
00:34:58,909 --> 00:35:06,739  
sent was intended for one person it's

720  
00:35:02,920 --> 00:35:12,289  
absolutely textbook 101 Barnum

721  
00:35:06,739 --> 00:35:14,649  
statements and a very poor message from

722  
00:35:12,289 --> 00:35:14,650  
heaven

723  
00:35:24,469 --> 00:35:28,039  
helping shawn so

724  
00:35:28,530 --> 00:35:33,970  
but guests yours is an award-winning

725  
00:35:30,969 --> 00:35:36,849  
weekly science show in French hosted by

726  
00:35:33,969 --> 00:35:39,129  
a bunch of crazy enthusiasts we are

727  
00:35:36,849 --> 00:35:41,500

convinced that the greatest ideas in

728

00:35:39,130 --> 00:35:43,720

science are quite easy to grasp as long

729

00:35:41,500 --> 00:35:46,150

as they are presented with passion using

730

00:35:43,719 --> 00:35:48,429

a vocabulary common to all curious minds

731

00:35:46,150 --> 00:35:51,250

whatever their academic background if

732

00:35:48,429 --> 00:35:54,250

any you don't understand French yet I

733

00:35:51,250 --> 00:35:56,139

it's never too late all our stories have

734

00:35:54,250 --> 00:35:57,880

a written transcript on the website and

735

00:35:56,139 --> 00:36:00,069

people from all around the world are

736

00:35:57,880 --> 00:36:03,130

using our content to learn Muriel's

737

00:36:00,070 --> 00:36:05,410

language our topics range from 0 to

738

00:36:03,130 --> 00:36:07,930

infinity from evolution to artificial

739

00:36:05,409 --> 00:36:10,569

life from electromagnetism to the

740

00:36:07,929 --> 00:36:13,779

science of introverts we just love

741

00:36:10,570 --> 00:36:16,600

mathematics science critical thinking so

742  
00:36:13,780 --> 00:36:18,280  
do you want to join you can subscribe to

743  
00:36:16,599 --> 00:36:20,980  
the podcast for free from our website

744  
00:36:18,280 --> 00:36:23,650  
podcast science tops FM that's in one

745  
00:36:20,980 --> 00:36:26,199  
word you also find us on itunes and

746  
00:36:23,650 --> 00:36:28,030  
soundcloud see you soon hopefully at

747  
00:36:26,199 --> 00:36:30,569  
lose like a year at the other words our

748  
00:36:28,030 --> 00:36:30,570  
guests yours

749  
00:36:49,710 --> 00:36:54,670  
now here's a special announcement for

750  
00:36:52,510 --> 00:36:57,460  
people in the wedding area of the UK

751  
00:36:54,670 --> 00:37:01,119  
this Monday the fifteenth of february

752  
00:36:57,460 --> 00:37:03,849  
see Michael Marshall live in the flesh

753  
00:37:01,119 --> 00:37:05,549  
giving a talk lifting the lid on going

754  
00:37:03,849 --> 00:37:08,170  
adventures in the world of pseudoscience

755  
00:37:05,550 --> 00:37:10,930  
the event is hosted by the reading

756

00:37:08,170 --> 00:37:15,309  
skeptics now this kicks off at seven

757

00:37:10,929 --> 00:37:18,339  
thirty at the ry ND restaurant at eleven

758

00:37:15,309 --> 00:37:20,860  
Castle Street in reading now the blurb

759

00:37:18,340 --> 00:37:23,380  
says it's easy to think of pseudoscience

760

00:37:20,860 --> 00:37:25,690  
existing in a glass case of the museum

761

00:37:23,380 --> 00:37:28,869  
something to be examined and critiqued

762

00:37:25,690 --> 00:37:31,480  
from a safe distance but not something

763

00:37:28,869 --> 00:37:33,699  
to touch and play with using examples

764

00:37:31,480 --> 00:37:36,099  
taken from his own personal experiences

765

00:37:33,699 --> 00:37:37,719  
and skepticism Michael Marshall will

766

00:37:36,099 --> 00:37:40,449  
show you what happens when you begin to

767

00:37:37,719 --> 00:37:43,659  
crack the surface of the pseudo-sciences

768

00:37:40,449 --> 00:37:46,000  
and surround us revealing the surprising

769

00:37:43,659 --> 00:37:48,789  
sometimes shocking and often comic

770

00:37:46,000 --> 00:37:50,889  
adventures that lie beneath Michael

771  
00:37:48,789 --> 00:37:52,989  
Marshall is the project director of the

772  
00:37:50,889 --> 00:37:55,150  
good thinking society and the vice

773  
00:37:52,989 --> 00:37:57,189  
president of the Merseyside skeptics

774  
00:37:55,150 --> 00:37:59,769  
Society he regularly speaks with

775  
00:37:57,190 --> 00:38:03,010  
proponents of pseudoscience for the be

776  
00:37:59,769 --> 00:38:04,929  
reasonable podcast his work has seen him

777  
00:38:03,010 --> 00:38:08,470  
organizing international homeopathy

778  
00:38:04,929 --> 00:38:10,419  
protests and co-founding the popular QED

779  
00:38:08,469 --> 00:38:12,849  
conference he was written for The

780  
00:38:10,420 --> 00:38:14,619  
Guardian The Times new statement is a

781  
00:38:12,849 --> 00:38:17,529  
regular guest on the skeptics own

782  
00:38:14,619 --> 00:38:20,199  
podcast and spoke in Sydney Australia at

783  
00:38:17,530 --> 00:38:22,510  
the Australian skeptics convention what

784  
00:38:20,199 --> 00:38:23,949

a guy so there's your clue there's your

785

00:38:22,510 --> 00:38:26,410

hint there's your motivation those

786

00:38:23,949 --> 00:38:28,689

people in the Reading area or anywhere

787

00:38:26,409 --> 00:38:31,769

in the UK or europe or north america or

788

00:38:28,690 --> 00:38:35,940

China or wherever get to reading

789

00:38:31,769 --> 00:38:38,099

monday the 15th 732 here Michael

790

00:38:35,940 --> 00:38:43,880

Marshall for more information visit

791

00:38:38,099 --> 00:38:43,880

ready.gov all

792

00:39:00,690 --> 00:39:07,000

thank you for listening to the skeptic

793

00:39:03,159 --> 00:39:11,259

zone now don't forget to visit the

794

00:39:07,000 --> 00:39:14,019

website of our reporter Maynard ww mau

795

00:39:11,260 --> 00:39:15,640

mau for his podcast bunga bunga he does

796

00:39:14,019 --> 00:39:17,679

with Tim Ferguson from the dog Anthony

797

00:39:15,639 --> 00:39:20,019

All Stars and lots of other Maynard

798

00:39:17,679 --> 00:39:22,449

madness and we look forward to some more

799  
00:39:20,019 --> 00:39:23,889  
reports from Maynard soon as we look

800  
00:39:22,449 --> 00:39:26,559  
forward to more reports from either

801  
00:39:23,889 --> 00:39:28,210  
reporter Heidi Robertson right up there

802  
00:39:26,559 --> 00:39:31,539  
on the north coast of New South Wales

803  
00:39:28,210 --> 00:39:34,150  
and dr. HC when she has time she is so

804  
00:39:31,539 --> 00:39:37,599  
busy doing very important scientific

805  
00:39:34,150 --> 00:39:41,410  
work but for this week from the lovely

806  
00:39:37,599 --> 00:39:48,159  
little township of jamberoo this is

807  
00:39:41,409 --> 00:39:49,989  
Richard Saunders signing off you've been

808  
00:39:48,159 --> 00:39:53,319  
listening to the skeptic zone podcast

809  
00:39:49,989 --> 00:39:56,409  
visit our website at wwc a petting zoo

810  
00:39:53,320 --> 00:40:00,250  
TV for contacts an archive of all

811  
00:39:56,409 --> 00:40:02,559  
episodes since 2008 and our online store

812  
00:40:00,250 --> 00:40:05,280  
please support the skeptic zone by

813  
00:40:02,559 --> 00:40:08,289  
following us on twitter at skeptic zone

814  
00:40:05,280 --> 00:40:11,350  
liking us on facebook and leaving a

815  
00:40:08,289 --> 00:40:14,199  
review on iTunes you can also show your

816  
00:40:11,349 --> 00:40:17,679  
support by subscribing via paypal for as

817  
00:40:14,199 --> 00:40:20,019  
little as 99 cents a week the skeptic

818  
00:40:17,679 --> 00:40:21,730  
zone is an independent production the

819  
00:40:20,019 --> 00:40:23,800  
views and opinions expressed on the

820  
00:40:21,730 --> 00:40:26,490  
skeptic zone and not necessarily those

821  
00:40:23,800 --> 00:40:30,300  
of Australian skeptically or any other

822  
00:40:26,489 --> 00:40:30,299  
skeptical organization

823  
00:40:30,730 --> 00:40:32,760  
Oh