WEBVTT

NOTE duration: "00:45:30.0290000"

NOTE language:en-us

NOTE Confidence: 0.848655700683594

 $00:00:00.000 \longrightarrow 00:00:01.568$ Good evening my friends.

NOTE Confidence: 0.848655700683594

00:00:01.568 --> 00:00:03.501 My name is Mark Mercurio.

NOTE Confidence: 0.848655700683594

 $00{:}00{:}03.501 \dashrightarrow 00{:}00{:}05.967$ I'm the director of the Program

NOTE Confidence: 0.848655700683594

00:00:05.967 --> 00:00:07.988 for Biomedical Ethics at the Yale

NOTE Confidence: 0.848655700683594

 $00:00:07.990 \longrightarrow 00:00:10.131$ School of Medicine and Welcome to

NOTE Confidence: 0.848655700683594

 $00{:}00{:}10.131 \dashrightarrow 00{:}00{:}11.816$ our Evening Ethics Seminar series

NOTE Confidence: 0.848655700683594

00:00:11.816 --> 00:00:14.399 in a very special session tonight.

NOTE Confidence: 0.848655700683594

 $00:00:14.400 \longrightarrow 00:00:16.855$ Doctor Professor Peter Singer from

NOTE Confidence: 0.848655700683594

 $00{:}00{:}16.855 \dashrightarrow 00{:}00{:}19.310$ Princeton an from Australia and

NOTE Confidence: 0.848655700683594

 $00:00:19.389 \longrightarrow 00:00:22.065$ coming to us tonight from Australia.

NOTE Confidence: 0.848655700683594

00:00:22.070 --> 00:00:23.495 Tonight's session will be

NOTE Confidence: 0.848655700683594

 $00:00:23.495 \longrightarrow 00:00:25.270$ moderated by Doctor Sarah Hall.

NOTE Confidence: 0.848655700683594

 $00:00:25.270 \longrightarrow 00:00:27.664$ Dr Hall is associate director of our

NOTE Confidence: 0.848655700683594

 $00:00:27.664 \longrightarrow 00:00:30.238$ program and on behalf of Doctor Hull,

 $00:00:30.240 \longrightarrow 00:00:31.410$ another associate director,

NOTE Confidence: 0.848655700683594

 $00:00:31.410 \dashrightarrow 00:00:35.045$ Jack use an R manager turn cold by I welcome

NOTE Confidence: 0.848655700683594

00:00:35.045 --> 00:00:38.049 you and thank you so much for coming tonight.

NOTE Confidence: 0.848655700683594

 $00:00:38.050 \longrightarrow 00:00:40.885$ The way these sessions will work is is

NOTE Confidence: 0.848655700683594

 $00:00:40.885 \longrightarrow 00:00:43.015$ that Sarah will introduce doctor professor,

NOTE Confidence: 0.848655700683594 00:00:43.020 --> 00:00:43.730 singer Ann.

NOTE Confidence: 0.848655700683594

 $00:00:43.730 \longrightarrow 00:00:45.860$ Professor single will speak for about

NOTE Confidence: 0.848655700683594

 $00:00:45.860 \dashrightarrow 00:00:48.700$ 45 minutes, plus or minus a little bit,

NOTE Confidence: 0.848655700683594

 $00:00:48.700 \longrightarrow 00:00:52.260$ and then they'll be a chance for a Q&A and.

NOTE Confidence: 0.848655700683594

00:00:52.260 --> 00:00:55.525 Doctor Hall will moderate that session,

NOTE Confidence: 0.848655700683594

 $00:00:55.525 \longrightarrow 00:00:56.800$ so Sarah Hall.

NOTE Confidence: 0.848655700683594

 $00:00:56.800 \longrightarrow 00:00:59.350$ Receive their education at Harvard and

NOTE Confidence: 0.848655700683594

 $00:00:59.426 \longrightarrow 00:01:02.306$ then pen and while at Penn getting her MD,

NOTE Confidence: 0.848655700683594

 $00:01:02.310 \longrightarrow 00:01:04.934$ she also got a Masters degree in bioethics,

NOTE Confidence: 0.848655700683594

 $00:01:04.940 \longrightarrow 00:01:07.292$ and she came to us at Yale to

 $00:01:07.292 \longrightarrow 00:01:09.540$ learn how to be a cardiologist.

NOTE Confidence: 0.848655700683594

 $00:01:09.540 \longrightarrow 00:01:11.850$ And she's now in our cardiology faculty.

NOTE Confidence: 0.848655700683594

 $00:01:11.850 \longrightarrow 00:01:13.162$ Ann is also service.

NOTE Confidence: 0.848655700683594 00:01:13.162 --> 00:01:13.490 Thankfully, NOTE Confidence: 0.848655700683594

 $00:01:13.490 \longrightarrow 00:01:15.786$ as associate director of our program here,

NOTE Confidence: 0.848655700683594

00:01:15.790 --> 00:01:18.246 and is very well known within Yale for

NOTE Confidence: 0.848655700683594

 $00:01:18.246 \longrightarrow 00:01:20.729$ being one of our most prized teachers.

NOTE Confidence: 0.848655700683594

 $00:01:20.730 \longrightarrow 00:01:23.002$ And so I'm very happy to turn this

NOTE Confidence: 0.848655700683594

 $00{:}01{:}23.002 \dashrightarrow 00{:}01{:}25.128$ session over to night and the introduction

NOTE Confidence: 0.848655700683594

00:01:25.128 --> 00:01:27.372 of Professor Singer turn it over.

NOTE Confidence: 0.848655700683594

00:01:27.380 --> 00:01:30.425 Doctor Sarah Hall Sarah take it away.

NOTE Confidence: 0.848655700683594

 $00:01:30.430 \longrightarrow 00:01:32.578$ Thank you so much Doctor Mercurio

NOTE Confidence: 0.848655700683594

 $00:01:32.578 \longrightarrow 00:01:34.751$ and thank you professor Singer for

NOTE Confidence: 0.848655700683594

 $00{:}01{:}34.751 \dashrightarrow 00{:}01{:}36.773$ coming to speak with us to night.

NOTE Confidence: 0.848655700683594

00:01:36.780 --> 00:01:39.204 I know I'm not alone in saying that

NOTE Confidence: 0.848655700683594

 $00{:}01{:}39.204 \dashrightarrow 00{:}01{:}41.903$ the topic that you're going to speak

 $00:01:41.903 \longrightarrow 00:01:43.923$ about is of incredible importance

NOTE Confidence: 0.848655700683594

 $00:01:43.997 \longrightarrow 00:01:46.356$ and to have you really lead us

NOTE Confidence: 0.848655700683594

 $00{:}01{:}46.356 \dashrightarrow 00{:}01{:}48.132$ through this really important work.

NOTE Confidence: 0.848655700683594

00:01:48.132 --> 00:01:50.418 I think we're just really privileged

NOTE Confidence: 0.848655700683594

 $00:01:50.418 \longrightarrow 00:01:51.959$ and honored to have you.

NOTE Confidence: 0.848655700683594

 $00:01:51.960 \longrightarrow 00:01:54.025$ So just as a brief introduction for

NOTE Confidence: 0.848655700683594

 $00:01:54.025 \longrightarrow 00:01:56.093$ those of you who aren't familiar

NOTE Confidence: 0.848655700683594

 $00:01:56.093 \longrightarrow 00:01:58.337$ with Professor Singer and I assume

NOTE Confidence: 0.848655700683594

00:01:58.337 --> 00:02:00.437 that's a vanishingly small number,

NOTE Confidence: 0.848655700683594

 $00:02:00.440 \longrightarrow 00:02:00.730$ but.

NOTE Confidence: 0.848655700683594

 $00:02:00.730 \longrightarrow 00:02:02.760$ Peter Singer is sometimes called the world's

NOTE Confidence: 0.848655700683594

 $00:02:02.760 \longrightarrow 00:02:04.229$ most influential living philosopher.

NOTE Confidence: 0.848655700683594

 $00:02:04.230 \longrightarrow 00:02:06.670$ Although he thinks that if that is true,

NOTE Confidence: 0.848655700683594

 $00:02:06.670 \longrightarrow 00:02:09.014$ it doesn't say much for all the other

NOTE Confidence: 0.848655700683594

00:02:09.014 --> 00:02:10.330 living philosophers around today.

 $00:02:10.330 \longrightarrow 00:02:12.178$ He has also been called the father

NOTE Confidence: 0.848655700683594

00:02:12.178 --> 00:02:14.288 of the modern Animal Rights movement,

NOTE Confidence: 0.848655700683594

 $00:02:14.290 \longrightarrow 00:02:16.341$ even though he does not base his

NOTE Confidence: 0.848655700683594

00:02:16.341 --> 00:02:17.650 philosophical views on rights.

NOTE Confidence: 0.848655700683594

 $00:02:17.650 \longrightarrow 00:02:19.090$ Professor Singer is known especially

NOTE Confidence: 0.848655700683594

 $00:02:19.090 \longrightarrow 00:02:21.198$ for his work on the ethics of

NOTE Confidence: 0.848655700683594

 $00{:}02{:}21.198 \dashrightarrow 00{:}02{:}23.046$ our Treatment of Animals and for

NOTE Confidence: 0.848655700683594

 $00:02:23.046 \longrightarrow 00:02:24.336$ his controversial critique of

NOTE Confidence: 0.848655700683594

 $00:02:24.336 \longrightarrow 00:02:25.876$ the Sanctity of Life doctrine,

NOTE Confidence: 0.848655700683594 00:02:25.880 --> 00:02:26.229 bioethics, NOTE Confidence: 0.848655700683594

 $00:02:26.229 \longrightarrow 00:02:29.021$ as well As for his writings on the

NOTE Confidence: 0.848655700683594

00:02:29.021 --> 00:02:31.112 obligations of the affluent to aid

NOTE Confidence: 0.848655700683594

00:02:31.112 --> 00:02:32.792 those living in extreme poverty.

NOTE Confidence: 0.848655700683594

 $00:02:32.800 \longrightarrow 00:02:34.540$ He was born in Melbourne,

NOTE Confidence: 0.848655700683594

 $00:02:34.540 \longrightarrow 00:02:36.664$ an educated at the University of

NOTE Confidence: 0.848655700683594

 $00:02:36.664 \longrightarrow 00:02:38.719$ Melbourne and the University of Oxford.

00:02:38.720 --> 00:02:40.640 After teaching in England the USANA

NOTE Confidence: 0.848655700683594

 $00:02:40.640 \longrightarrow 00:02:43.061$ Australia in 1999 he paid he became

NOTE Confidence: 0.848655700683594

 $00{:}02{:}43.061 \dashrightarrow 00{:}02{:}44.861$ Iroda Camp Professor Bioethics in

NOTE Confidence: 0.848655700683594

00:02:44.861 --> 00:02:46.699 the University Center for Human

NOTE Confidence: 0.848655700683594

00:02:46.699 --> 00:02:47.755 Values at Princeton,

NOTE Confidence: 0.848655700683594

 $00:02:47.760 \longrightarrow 00:02:50.544$ where he spends part of the year teaching,

NOTE Confidence: 0.848655700683594

 $00:02:50.550 \longrightarrow 00:02:53.110$ and he spends the rest and the other

NOTE Confidence: 0.848655700683594

00:02:53.110 --> 00:02:55.428 part of the year in Australia.

NOTE Confidence: 0.848655700683594

 $00{:}02{:}55.430 \dashrightarrow 00{:}02{:}57.812$ He he first became well known

NOTE Confidence: 0.848655700683594

 $00:02:57.812 \longrightarrow 00:02:59.400$ internationally after the publication

NOTE Confidence: 0.865616261959076

00:02:59.461 --> 00:03:01.176 of Animal Liberation in 1975,

NOTE Confidence: 0.865616261959076

 $00{:}03{:}01.180 \dashrightarrow 00{:}03{:}03.854$ and in 2011 time included animal Liberation

NOTE Confidence: 0.865616261959076

 $00{:}03{:}03.854 \dashrightarrow 00{:}03{:}07.410$ on its all time list of the 100 Best

NOTE Confidence: 0.865616261959076

 $00:03:07.410 \longrightarrow 00:03:09.479$ Nonfiction Books published in English

NOTE Confidence: 0.865616261959076

 $00:03:09.479 \longrightarrow 00:03:12.089$ since their magazine began in 1923.

00:03:12.090 --> 00:03:13.710 Professor Singer has written Co,

NOTE Confidence: 0.865616261959076

 $00{:}03{:}13.710 \dashrightarrow 00{:}03{:}15.618$ authored, edited or coedited more than

NOTE Confidence: 0.865616261959076

00:03:15.618 --> 00:03:17.270 50 books including practical ethics,

NOTE Confidence: 0.865616261959076

 $00:03:17.270 \longrightarrow 00:03:18.245$ the expanding circle.

NOTE Confidence: 0.865616261959076

 $00:03:18.245 \longrightarrow 00:03:19.870$ How are we to live?

NOTE Confidence: 0.865616261959076

00:03:19.870 --> 00:03:21.166 Rethinking life and death?

NOTE Confidence: 0.865616261959076

 $00:03:21.166 \longrightarrow 00:03:23.110$ The ethics of what we eat?

NOTE Confidence: 0.865616261959076

 $00:03:23.110 \longrightarrow 00:03:25.364$ The point of view of the universe.

NOTE Confidence: 0.865616261959076

 $00:03:25.370 \longrightarrow 00:03:27.826$ The most good you can do ethics in

NOTE Confidence: 0.865616261959076

 $00:03:27.826 \longrightarrow 00:03:29.682$ the real world, and utilitarianism.

NOTE Confidence: 0.865616261959076

 $00{:}03{:}29.682 \dashrightarrow 00{:}03{:}32.279$ A very short introduction and his most

NOTE Confidence: 0.865616261959076

00:03:32.279 --> 00:03:34.561 recent book Why Vegan was just published

NOTE Confidence: 0.865616261959076

 $00:03:34.561 \longrightarrow 00:03:36.599$ in the Penguin Great Ideas series.

NOTE Confidence: 0.865616261959076

00:03:36.600 --> 00:03:38.196 And finally, his book,

NOTE Confidence: 0.865616261959076

00:03:38.196 --> 00:03:41.155 The Life You can Save First Publishing

NOTE Confidence: 0.865616261959076

 $00:03:41.155 \longrightarrow 00:03:44.508$ 2009 led him to found a nonprofit

00:03:44.508 --> 00:03:46.670 organization of the same name.

NOTE Confidence: 0.865616261959076

 $00:03:46.670 \longrightarrow 00:03:47.866$ So without further ado.

NOTE Confidence: 0.865616261959076

 $00:03:47.866 \longrightarrow 00:03:49.660$ Chester Singer take take it away

NOTE Confidence: 0.865616261959076

 $00:03:49.721 \longrightarrow 00:03:51.215$ and thank you so much again.

NOTE Confidence: 0.852734863758087

 $00:03:52.470 \longrightarrow 00:03:55.081$ Thank you very much darker Hal and

NOTE Confidence: 0.852734863758087

 $00{:}03{:}55.081 \dashrightarrow 00{:}03{:}57.627$ of course thank you Doctor Mercurio

NOTE Confidence: 0.852734863758087

 $00:03:57.627 \longrightarrow 00:04:00.315$ for the invitation for this event.

NOTE Confidence: 0.852734863758087

 $00:04:00.320 \longrightarrow 00:04:03.304$ Very happy to have the opportunity to speak

NOTE Confidence: 0.852734863758087

 $00:04:03.304 \longrightarrow 00:04:06.292$ to you on these important issues relating

NOTE Confidence: 0.852734863758087

 $00{:}04{:}06.292 \dashrightarrow 00{:}04{:}09.948$ to what we eat relating to questions about.

NOTE Confidence: 0.852734863758087

00:04:09.950 --> 00:04:13.569 The Treatment of Animals and the climate,

NOTE Confidence: 0.852734863758087

 $00:04:13.570 \longrightarrow 00:04:16.666$ and also now very relevant today.

NOTE Confidence: 0.852734863758087

 $00{:}04{:}16.670 \dashrightarrow 00{:}04{:}19.094$ The question questions about

NOTE Confidence: 0.852734863758087

 $00{:}04{:}19.094 \dashrightarrow 00{:}04{:}22.124$ the risks of further pandemics.

NOTE Confidence: 0.852734863758087

 $00:04:22.130 \longrightarrow 00:04:25.698$ So what I'm going to do is to

00:04:25.698 --> 00:04:29.526 share my screen with you now and.

NOTE Confidence: 0.852734863758087

 $00{:}04{:}29.530 \dashrightarrow 00{:}04{:}32.344$ To show you some slides as we

NOTE Confidence: 0.852734863758087

 $00:04:32.344 \longrightarrow 00:04:34.180$ go through this topic.

NOTE Confidence: 0.852734863758087

 $00:04:34.180 \longrightarrow 00:04:38.107$ And let me just. Bring that up.

NOTE Confidence: 0.85273486375808700:04:38.110 --> 00:04:40.918 I need to. NOTE Confidence: 0.852734863758087

 $00:04:40.920 \longrightarrow 00:04:43.700$ Change that just a minute.

NOTE Confidence: 0.818838775157928

 $00:04:46.800 \longrightarrow 00:04:50.010$ Trips that went too far.

NOTE Confidence: 0.818838775157928

 $00:04:50.010 \longrightarrow 00:04:54.490$ OK, there we are. So.

NOTE Confidence: 0.818838775157928

00:04:54.490 --> 00:04:56.961 As I say, we're going to talk

NOTE Confidence: 0.818838775157928

 $00:04:56.961 \longrightarrow 00:04:58.630$ about these three topics,

NOTE Confidence: 0.818838775157928

 $00{:}04{:}58.630 \dashrightarrow 00{:}05{:}00.754$ and I'm going to start with

NOTE Confidence: 0.818838775157928

 $00:05:00.754 \longrightarrow 00:05:02.760$ questions about ethics and animals.

NOTE Confidence: 0.818838775157928

 $00{:}05{:}02.760 \dashrightarrow 00{:}05{:}05.176$ I think this is the area in which

NOTE Confidence: 0.818838775157928

 $00:05:05.176 \longrightarrow 00:05:07.896$ perhaps I have the most to contribute

NOTE Confidence: 0.818838775157928

 $00:05:07.896 \longrightarrow 00:05:10.429$ specifically from the point of view

NOTE Confidence: 0.818838775157928

 $00:05:10.429 \longrightarrow 00:05:12.539$ of ethics and ethical argument,

 $00:05:12.540 \longrightarrow 00:05:14.420$ rather than questions about facts,

NOTE Confidence: 0.818838775157928

 $00:05:14.420 \longrightarrow 00:05:17.180$ which of course connect two questions

NOTE Confidence: 0.818838775157928

 $00:05:17.180 \longrightarrow 00:05:20.268$ about ethics and what we ought to do.

NOTE Confidence: 0.818838775157928

 $00:05:20.270 \longrightarrow 00:05:22.839$ But that's why I will begin with

NOTE Confidence: 0.818838775157928

 $00:05:22.839 \longrightarrow 00:05:24.859$ issues about ethics and animals.

NOTE Confidence: 0.818838775157928

00:05:24.860 --> 00:05:27.212 As was mentioned, I've put forward

NOTE Confidence: 0.818838775157928

00:05:27.212 --> 00:05:29.690 in my book Animal Liberation,

NOTE Confidence: 0.818838775157928

 $00:05:29.690 \longrightarrow 00:05:32.840$ which was first published in 1975 and

NOTE Confidence: 0.818838775157928

 $00{:}05{:}32.840 \dashrightarrow 00{:}05{:}36.267$ I'm happy to say is still in print.

NOTE Confidence: 0.818838775157928

 $00{:}05{:}36.270 \dashrightarrow 00{:}05{:}38.814$ A different approach to the Treatment

NOTE Confidence: 0.818838775157928

00:05:38.814 --> 00:05:41.492 of Animals different to what I'm

NOTE Confidence: 0.818838775157928

 $00:05:41.492 \longrightarrow 00:05:43.752$ here calling today's mainstream view

NOTE Confidence: 0.818838775157928

 $00{:}05{:}43.752 \dashrightarrow 00{:}05{:}45.950$ about the Treatment of Animals.

NOTE Confidence: 0.818838775157928

 $00:05:45.950 \longrightarrow 00:05:48.338$ This view is somewhat different from

NOTE Confidence: 0.818838775157928

 $00:05:48.338 \longrightarrow 00:05:50.929$ somewhat earlier views that have been held,

 $00:05:50.930 \longrightarrow 00:05:53.228$ which they denied that we had

NOTE Confidence: 0.818838775157928

 $00{:}05{:}53.228 \dashrightarrow 00{:}05{:}54.760$ any obligations to animals.

NOTE Confidence: 0.818838775157928

 $00:05:54.760 \longrightarrow 00:05:57.441$ We can certainly find those views in

NOTE Confidence: 0.818838775157928

 $00:05:57.441 \longrightarrow 00:05:59.354$ the Western tradition, Descartes's view.

NOTE Confidence: 0.818838775157928

 $00:05:59.354 \longrightarrow 00:06:01.264$ The animals don't feel anything.

NOTE Confidence: 0.818838775157928

 $00:06:01.270 \longrightarrow 00:06:03.783$ Thomas Aguinas is view that we have

NOTE Confidence: 0.818838775157928

 $00{:}06{:}03.783 \dashrightarrow 00{:}06{:}05.729$ no obligations to animals because

NOTE Confidence: 0.818838775157928

00:06:05.729 --> 00:06:08.921 Ascential E God gave us Dominion over them,

NOTE Confidence: 0.818838775157928

 $00{:}06{:}08.930 \dashrightarrow 00{:}06{:}11.588$ and Aquinas interpreted that to suggest

NOTE Confidence: 0.818838775157928

 $00:06:11.588 \longrightarrow 00:06:15.249$ that we can do what we like with him.

NOTE Confidence: 0.818838775157928

 $00:06:15.250 \longrightarrow 00:06:18.088$ But today we are, I think,

NOTE Confidence: 0.818838775157928

 $00:06:18.090 \longrightarrow 00:06:20.460$ somewhat better attitudes to animals,

NOTE Confidence: 0.818838775157928

 $00:06:20.460 \longrightarrow 00:06:22.636$ but still rather limited.

NOTE Confidence: 0.818838775157928

 $00:06:22.636 \longrightarrow 00:06:23.180 \text{ So}$

NOTE Confidence: 0.818838775157928 00:06:23.180 --> 00:06:23.903 as I say, NOTE Confidence: 0.818838775157928

 $00:06:23.903 \longrightarrow 00:06:25.349$ the mainstream view is that we

 $00:06:25.349 \longrightarrow 00:06:26.796$ ought to be kind to animals,

NOTE Confidence: 0.818838775157928

 $00:06:26.800 \longrightarrow 00:06:28.969$ and we ought to avoid being cruel to them.

NOTE Confidence: 0.817005515098572

 $00:06:31.120 \longrightarrow 00:06:33.060$ And as part of that,

NOTE Confidence: 0.817005515098572

 $00:06:33.060 \longrightarrow 00:06:35.755$ we think of wanton cruelty as bad.

NOTE Confidence: 0.817005515098572

 $00:06:35.760 \longrightarrow 00:06:38.483$ So the kinds of things that just

NOTE Confidence: 0.817005515098572

00:06:38.483 --> 00:06:41.178 people being cruel to animals for fun,

NOTE Confidence: 0.817005515098572

00:06:41.180 --> 00:06:45.050 setting fire to a cat to watch it in agony,

NOTE Confidence: 0.817005515098572

 $00{:}06{:}45.050 \dashrightarrow 00{:}06{:}47.878$ beating a dog with a heavy stick.

NOTE Confidence: 0.817005515098572

 $00:06:47.880 \longrightarrow 00:06:50.562$ Leaving a horse in a field where there's no

NOTE Confidence: 0.817005515098572

 $00{:}06{:}50.562 \dashrightarrow 00{:}06{:}53.170$ food and the horse is starting to starve.

NOTE Confidence: 0.817005515098572

 $00:06:53.170 \longrightarrow 00:06:55.432$ All of those things we have

NOTE Confidence: 0.817005515098572

 $00:06:55.432 \longrightarrow 00:06:57.330$ no doubt that they're bad.

NOTE Confidence: 0.817005515098572

 $00{:}06{:}57.330 \dashrightarrow 00{:}06{:}58.545$ So animals interests.

NOTE Confidence: 0.817005515098572

 $00:06:58.545 \longrightarrow 00:07:00.975$ Do cat on this mainstream view,

NOTE Confidence: 0.817005515098572

 $00:07:00.980 \longrightarrow 00:07:03.470$ but they don't count comparably

 $00:07:03.470 \longrightarrow 00:07:05.462$ to our own interests.

NOTE Confidence: 0.817005515098572

 $00:07:05.470 \longrightarrow 00:07:07.555$ And they may be overwritten

NOTE Confidence: 0.817005515098572

 $00:07:07.555 \longrightarrow 00:07:09.223$ by our own interests.

NOTE Confidence: 0.817005515098572

 $00:07:09.230 \longrightarrow 00:07:12.156$ For example, our interest in eating them.

NOTE Confidence: 0.817005515098572

 $00:07:12.160 \longrightarrow 00:07:14.876$ Or perhaps our interest in using them

NOTE Confidence: 0.817005515098572

 $00:07:14.876 \longrightarrow 00:07:17.589$ in research and other complex issue,

NOTE Confidence: 0.817005515098572

00:07:17.590 --> 00:07:21.384 which is not really my subject today.

NOTE Confidence: 0.817005515098572

 $00:07:21.390 \longrightarrow 00:07:25.773$ Now, so the mainstream view, at least in.

NOTE Confidence: 0.817005515098572

 $00:07:25.773 \longrightarrow 00:07:28.528$ Couch is like the United

NOTE Confidence: 0.817005515098572

00:07:28.528 --> 00:07:30.900 States and Australia.

NOTE Confidence: 0.817005515098572

 $00{:}07{:}30.900 \dashrightarrow 00{:}07{:}32.984$ English speaking cultures condemns.

NOTE Confidence: 0.817005515098572

 $00:07:32.984 \longrightarrow 00:07:36.696$ Sports like Bull fighting or or dog

NOTE Confidence: 0.817005515098572

 $00:07:36.696 \longrightarrow 00:07:39.696$ fighting would have been another example.

NOTE Confidence: 0.817005515098572

 $00:07:39.700 \longrightarrow 00:07:41.236$ Even more clearly,

NOTE Confidence: 0.817005515098572

00:07:41.236 --> 00:07:44.820 'cause we see that as wanton cruelty

NOTE Confidence: 0.817005515098572

 $00:07:44.917 \longrightarrow 00:07:48.270$ is making the bull suffer for sport.

 $00:07:48.270 \longrightarrow 00:07:49.800$ But in contrast.

NOTE Confidence: 0.817005515098572

 $00:07:49.800 \longrightarrow 00:07:52.350$ We don't condemn this now.

NOTE Confidence: 0.817005515098572

00:07:52.350 --> 00:07:53.364 You probably saying,

NOTE Confidence: 0.817005515098572

 $00:07:53.364 \longrightarrow 00:07:54.716$ well, what is this?

NOTE Confidence: 0.817005515098572

 $00:07:54.720 \longrightarrow 00:07:56.757$ So this is a procedure that is

NOTE Confidence: 0.817005515098572

00:07:56.757 --> 00:07:58.844 done to every virtually every egg

NOTE Confidence: 0.817005515098572

00:07:58.844 --> 00:08:01.136 laying hen in the United States,

NOTE Confidence: 0.817005515098572

 $00:08:01.140 \longrightarrow 00:08:03.168$ and pretty much every other country.

NOTE Confidence: 0.817005515098572 00:08:03.170 --> 00:08:03.778 It's called.

NOTE Confidence: 0.817005515098572

 $00:08:03.778 \longrightarrow 00:08:04.082$ Well,

NOTE Confidence: 0.817005515098572

 $00:08:04.082 \longrightarrow 00:08:06.210$ let me say it used to be

NOTE Confidence: 0.817005515098572

 $00:08:06.284 \longrightarrow 00:08:08.853$ called when I wrote about it in

NOTE Confidence: 0.817005515098572

 $00{:}08{:}08.853 \dashrightarrow 00{:}08{:}10.600$ animal liberation in the 70s.

NOTE Confidence: 0.817005515098572

 $00:08:10.600 \longrightarrow 00:08:12.610$ It was called Debeaking and when

NOTE Confidence: 0.817005515098572

 $00:08:12.610 \longrightarrow 00:08:15.000 I$ say that what it was called,

 $00:08:15.000 \longrightarrow 00:08:17.359$ you could pick up any farming Journal

NOTE Confidence: 0.817005515098572

 $00{:}08{:}17.359 \dashrightarrow 00{:}08{:}19.730$ and that was what it was called.

NOTE Confidence: 0.817005515098572

 $00:08:19.730 \longrightarrow 00:08:21.466$ Now because of the.

NOTE Confidence: 0.817005515098572

 $00:08:21.466 \longrightarrow 00:08:24.070$ Poor PR image of that word.

NOTE Confidence: 0.817005515098572

 $00:08:24.070 \longrightarrow 00:08:27.286$ The industry refers to it as big trimming.

NOTE Confidence: 0.817005515098572 00:08:27.290 --> 00:08:28.048 In fact, NOTE Confidence: 0.817005515098572

 $00:08:28.048 \longrightarrow 00:08:31.080$ what what you've got here is a newly

NOTE Confidence: 0.817005515098572

00:08:31.173 --> 00:08:34.549 hatched chick just a couple of days old,

NOTE Confidence: 0.817005515098572

 $00{:}08{:}34.550 \longrightarrow 00{:}08{:}37.766$ with the beak being stuck into a hot,

NOTE Confidence: 0.817005515098572

 $00:08:37.770 \longrightarrow 00:08:38.738$ knifer guillotine.

NOTE Confidence: 0.817005515098572

 $00{:}08{:}38.738 \dashrightarrow 00{:}08{:}42.610$ To cut off the point of the beak.

NOTE Confidence: 0.817005515098572

 $00:08:42.610 \longrightarrow 00:08:44.460$ This is a painful procedure.

NOTE Confidence: 0.817005515098572

00:08:44.460 --> 00:08:46.310 Because chickens have a lot

NOTE Confidence: 0.817005515098572

 $00:08:46.310 \longrightarrow 00:08:48.160$ of nerves in their beak.

NOTE Confidence: 0.817005515098572

 $00:08:48.160 \longrightarrow 00:08:50.392$ When you think how a chicken

NOTE Confidence: 0.817005515098572

 $00:08:50.392 \longrightarrow 00:08:51.880$ behaves in the farmyard.

 $00:08:51.880 \longrightarrow 00:08:54.484$ She's using her beak to pick up

NOTE Confidence: 0.817005515098572

 $00:08:54.484 \longrightarrow 00:08:56.900$ food to detect what is edible,

NOTE Confidence: 0.817005515098572 00:08:56.900 --> 00:08:57.272 grain, NOTE Confidence: 0.817005515098572

 $00:08:57.272 \longrightarrow 00:08:59.876$ say or what is a little Pebble

NOTE Confidence: 0.817005515098572

 $00:08:59.876 \longrightarrow 00:09:01.529$ that it can't eat.

NOTE Confidence: 0.817005515098572

00:09:01.530 --> 00:09:04.618 So it's clearly a lot of nerves there,

NOTE Confidence: 0.817005515098572

 $00:09:04.620 \longrightarrow 00:09:06.828$ and there's no doubt that this

NOTE Confidence: 0.817005515098572

 $00{:}09{:}06.828 \dashrightarrow 00{:}09{:}09.171$ is a painful procedure for chicks

NOTE Confidence: 0.817005515098572

 $00{:}09{:}09{:}171 \dashrightarrow 00{:}09{:}11.565$ without any pain relief being used.

NOTE Confidence: 0.817005515098572

00:09:11.570 --> 00:09:15.035 You might say, well, why is that being done?

NOTE Confidence: 0.817005515098572

 $00:09:15.040 \longrightarrow 00:09:17.608$ The reason that's being done is

NOTE Confidence: 0.817005515098572

 $00:09:17.608 \longrightarrow 00:09:19.769$ that combination of the breeding

NOTE Confidence: 0.817005515098572

 $00{:}09{:}19.769 \dashrightarrow 00{:}09{:}22.673$ of chickens to lay a lot of eggs.

NOTE Confidence: 0.817005515098572

 $00:09:22.680 \longrightarrow 00:09:26.730$ Crowding of the confinement of chickens.

NOTE Confidence: 0.817005515098572

 $00:09:26.730 \longrightarrow 00:09:29.082$ Because laying hands are.

00:09:29.082 --> 00:09:30.258 Invariably confined,

NOTE Confidence: 0.817005515098572

 $00:09:30.260 \longrightarrow 00:09:32.350$ usually in small wire cages,

NOTE Confidence: 0.817005515098572

 $00:09:32.350 \longrightarrow 00:09:35.269$ sometimes on the floors of large sheds,

NOTE Confidence: 0.817005515098572

 $00:09:35.270 \longrightarrow 00:09:37.736$ but always very crowded and the

NOTE Confidence: 0.817005515098572

 $00:09:37.736 \longrightarrow 00:09:39.872$ more aggressive birds will under

NOTE Confidence: 0.817005515098572

 $00:09:39.872 \longrightarrow 00:09:41.520$ the stress of crowding,

NOTE Confidence: 0.817005515098572

 $00:09:41.520 \longrightarrow 00:09:43.610$ will attack the weaker birds,

NOTE Confidence: 0.817005515098572

 $00:09:43.610 \longrightarrow 00:09:45.690$ and once they draw blood,

NOTE Confidence: 0.817005515098572

 $00:09:45.690 \longrightarrow 00:09:49.443$ they start to get a bit crazy for it,

NOTE Confidence: 0.817005515098572

 $00:09:49.450 \longrightarrow 00:09:50.785$ and cannibalism occurs.

NOTE Confidence: 0.817005515098572

 $00{:}09{:}50.785 \dashrightarrow 00{:}09{:}53.455$ So cutting off the point pointy

NOTE Confidence: 0.817005515098572

 $00:09:53.455 \longrightarrow 00:09:55.909$ part of the beak is standard

NOTE Confidence: 0.817005515098572

 $00:09:55.909 \longrightarrow 00:09:57.839$ procedure done to all hands.

NOTE Confidence: 0.860972881317139

 $00:09:57.840 \longrightarrow 00:09:59.720$ To prevent that happening,

NOTE Confidence: 0.860972881317139

 $00:09:59.720 \longrightarrow 00:10:01.130$ obviously in preference,

NOTE Confidence: 0.860972881317139

 $00:10:01.130 \longrightarrow 00:10:03.860$ economic preference to giving them

 $00:10:03.860 \longrightarrow 00:10:07.800$ more space and allowing them to sort

NOTE Confidence: 0.860972881317139

 $00{:}10{:}07.800 \dashrightarrow 00{:}10{:}10.590$ themselves into natural sized flocks.

NOTE Confidence: 0.860972881317139

 $00:10:10.590 \longrightarrow 00:10:12.977$ OK, so that's just one example that

NOTE Confidence: 0.860972881317139

 $00:10:12.977 \longrightarrow 00:10:16.129$ I just at this stage want to use to

NOTE Confidence: 0.860972881317139

 $00:10:16.129 \longrightarrow 00:10:19.125$ contrast the way in which we think that

NOTE Confidence: 0.860972881317139

 $00:10:19.125 \longrightarrow 00:10:22.174$ some things are cruel and wrong and other

NOTE Confidence: 0.860972881317139

 $00:10:22.174 \longrightarrow 00:10:25.070$ things press we don't know about at all.

NOTE Confidence: 0.860972881317139

00:10:25.070 --> 00:10:26.518 Perhaps you didn't know

NOTE Confidence: 0.860972881317139

00:10:26.518 --> 00:10:28.328 about this until right now,

NOTE Confidence: 0.860972881317139

 $00{:}10{:}28.330 \dashrightarrow 00{:}10{:}30.238$ but nevertheless it's happening.

NOTE Confidence: 0.860972881317139

00:10:30.238 --> 00:10:33.100 Everybody in the egg producing industry

NOTE Confidence: 0.860972881317139

 $00:10:33.172 \longrightarrow 00:10:35.587$ knows that it's happening and yet nothing

NOTE Confidence: 0.860972881317139

 $00{:}10{:}35.587 \dashrightarrow 00{:}10{:}38.280$ is done to find alternatives to it.

NOTE Confidence: 0.860972881317139

00:10:38.280 --> 00:10:40.228 Alright, in animal liberation

NOTE Confidence: 0.860972881317139

 $00:10:40.228 \longrightarrow 00:10:42.663$ I use the term speciesism,

 $00:10:42.670 \longrightarrow 00:10:45.598$ Tameka parallel with racism and sexism.

NOTE Confidence: 0.860972881317139

 $00{:}10{:}45.600 \dashrightarrow 00{:}10{:}49.352$ I define species ism as a bias against other

NOTE Confidence: 0.860972881317139

 $00:10:49.352 \longrightarrow 00:10:52.429$ beings simply because of their species,

NOTE Confidence: 0.860972881317139

00:10:52.430 --> 00:10:56.134 just as we may see racism or sexism

NOTE Confidence: 0.860972881317139

00:10:56.134 --> 00:10:58.922 as biases against other beings

NOTE Confidence: 0.860972881317139

00:10:58.922 --> 00:11:03.024 simply because of their race or sex.

NOTE Confidence: 0.860972881317139

 $00:11:03.030 \longrightarrow 00:11:05.529$ And I argue that we should reject

NOTE Confidence: 0.860972881317139

 $00:11:05.529 \longrightarrow 00:11:07.290$ it as we reject.

NOTE Confidence: 0.860972881317139

 $00:11:07.290 \longrightarrow 00:11:09.831$ Hope I can take it for granted

NOTE Confidence: 0.860972881317139

00:11:09.831 --> 00:11:12.884 that you will reject the idea that

NOTE Confidence: 0.860972881317139

 $00:11:12.884 \longrightarrow 00:11:15.224$ being should be classified as.

NOTE Confidence: 0.860972881317139

 $00{:}11{:}15.230 \dashrightarrow 00{:}11{:}17.006$ Superior or inferior is more important,

NOTE Confidence: 0.860972881317139

00:11:17.010 --> 00:11:18.500 less important that they're interested,

NOTE Confidence: 0.860972881317139

 $00:11:18.500 \longrightarrow 00:11:20.929$ count or not count on the basis

NOTE Confidence: 0.860972881317139

 $00:11:20.929 \longrightarrow 00:11:22.590$ of their race or sex.

NOTE Confidence: 0.860972881317139 00:11:22.590 --> 00:11:23.757 Uh, an eye,

00:11:23.757 --> 00:11:26.091 although of course I don't say

NOTE Confidence: 0.860972881317139

 $00:11:26.091 \longrightarrow 00:11:28.880$ that in every respect these these

NOTE Confidence: 0.860972881317139

 $00{:}11{:}28.880 \dashrightarrow 00{:}11{:}31.700$ patterns of conduct are the same.

NOTE Confidence: 0.860972881317139

 $00:11:31.700 \longrightarrow 00:11:32.792$ They are not,

NOTE Confidence: 0.860972881317139

 $00:11:32.792 \longrightarrow 00:11:36.325$ but I do think that in all of these

NOTE Confidence: 0.860972881317139

 $00:11:36.325 \longrightarrow 00:11:39.447$ cases we have a dominant group of

NOTE Confidence: 0.860972881317139

00:11:39.447 --> 00:11:43.296 beings who want to use other beings or

NOTE Confidence: 0.860972881317139

 $00:11:43.296 \longrightarrow 00:11:46.376$ exploit other beings for their own benefit,

NOTE Confidence: 0.860972881317139

 $00:11:46.376 \longrightarrow 00:11:48.446$ and they develop an ideology

NOTE Confidence: 0.860972881317139

 $00:11:48.446 \longrightarrow 00:11:50.764$ according to which that exploitation

NOTE Confidence: 0.860972881317139

 $00:11:50.764 \longrightarrow 00:11:52.596$ or domination is justified.

NOTE Confidence: 0.860972881317139

00:11:52.600 --> 00:11:56.236 And we see that in the ideologies of racism,

NOTE Confidence: 0.860972881317139

 $00{:}11{:}56.240 \dashrightarrow 00{:}11{:}59.054$ especially when it's not so blatant nowadays.

NOTE Confidence: 0.860972881317139

 $00:11:59.060 \longrightarrow 00:12:02.180$ But if you go back to the ideologies

NOTE Confidence: 0.860972881317139

 $00:12:02.180 \longrightarrow 00:12:04.278$ that justified slavery in the

00:12:04.278 --> 00:12:06.333 18th and early 19th century,

NOTE Confidence: 0.860972881317139

 $00:12:06.340 \longrightarrow 00:12:09.154$ you find those that ideology with sexism.

NOTE Confidence: 0.860972881317139

00:12:09.160 --> 00:12:11.988 Of course, much more, much more recently,

NOTE Confidence: 0.860972881317139

 $00:12:11.990 \longrightarrow 00:12:13.554$ part of our tradition.

NOTE Confidence: 0.860972881317139

00:12:13.554 --> 00:12:15.509 And only partially rejected Preps,

NOTE Confidence: 0.860972881317139

00:12:15.510 --> 00:12:18.198 but with spaces in them it's almost

NOTE Confidence: 0.860972881317139

 $00:12:18.198 \longrightarrow 00:12:21.129$ universal and we do take it for granted.

NOTE Confidence: 0.860972881317139

 $00:12:21.130 \longrightarrow 00:12:23.810$ So the point of this comparison is to

NOTE Confidence: 0.860972881317139

 $00:12:23.810 \longrightarrow 00:12:26.234$ say think about people who did also

NOTE Confidence: 0.860972881317139

00:12:26.234 --> 00:12:28.897 grow up in racist and sexist societies

NOTE Confidence: 0.860972881317139

 $00{:}12{:}28.897 \dashrightarrow 00{:}12{:}31.627$ and took those biases for granted.

NOTE Confidence: 0.860972881317139

 $00:12:31.630 \longrightarrow 00:12:34.570$ And then think about your own assumptions

NOTE Confidence: 0.860972881317139

 $00:12:34.570 \longrightarrow 00:12:37.630$ that we are entitled to give more

NOTE Confidence: 0.860972881317139

00:12:37.630 --> 00:12:41.062 weight to our own interests than we do

NOTE Confidence: 0.860972881317139

 $00:12:41.062 \longrightarrow 00:12:43.778$ to the interests of non human animals.

NOTE Confidence: 0.860972881317139

00:12:43.780 --> 00:12:46.216 So what's the alternative to speciesism,

00:12:46.220 --> 00:12:48.255 I suggest it's equal consideration

NOTE Confidence: 0.860972881317139 00:12:48.255 --> 00:12:49.069 of interests. NOTE Confidence: 0.860972881317139 00:12:49.070 --> 00:12:49.906 That is,

NOTE Confidence: 0.860972881317139

 $00:12:49.906 \longrightarrow 00:12:52.832$ we should give equal weight to similar

NOTE Confidence: 0.860972881317139

 $00:12:52.832 \longrightarrow 00:12:55.123$ interests irrespective of the species

NOTE Confidence: 0.860972881317139

00:12:55.123 --> 00:12:58.180 of the being whose interests they are.

NOTE Confidence: 0.860972881317139

00:12:58.180 --> 00:13:00.420 Just as if you substitute race or sex,

NOTE Confidence: 0.860972881317139

 $00{:}13{:}00.420 \dashrightarrow 00{:}13{:}02.718$ I think you would also clearly

NOTE Confidence: 0.860972881317139

 $00:13:02.718 \longrightarrow 00:13:04.250$ agree with that statement.

NOTE Confidence: 0.860972881317139

 $00:13:04.250 \longrightarrow 00:13:06.585$ Now equal consideration of interests

NOTE Confidence: 0.860972881317139

 $00:13:06.585 \longrightarrow 00:13:08.920$ though doesn't mean that were

NOTE Confidence: 0.860972881317139

 $00{:}13{:}08.994 \dashrightarrow 00{:}13{:}11.258$ beings have different interests.

NOTE Confidence: 0.860972881317139

 $00{:}13{:}11.260 \dashrightarrow 00{:}13{:}15.103$ You should give them the same treatment

NOTE Confidence: 0.860972881317139

 $00:13:15.103 \longrightarrow 00:13:18.809$ or even necessarily give equal weight so.

NOTE Confidence: 0.860972881317139

00:13:18.810 --> 00:13:21.400 Here's a photo of some cows living

 $00:13:21.400 \longrightarrow 00:13:24.089$ in a organic on an organic farm.

NOTE Confidence: 0.860972881317139

 $00:13:24.090 \longrightarrow 00:13:26.346$ Reasonably good condition with their carves.

NOTE Confidence: 0.860972881317139

 $00:13:26.350 \longrightarrow 00:13:28.606$ Still with him, plenty to eat.

NOTE Confidence: 0.834765136241913

 $00:13:28.610 \longrightarrow 00:13:31.210$ As you can see, they do not share

NOTE Confidence: 0.834765136241913

 $00:13:31.210 \longrightarrow 00:13:33.490$ your interest in getting an education

NOTE Confidence: 0.834765136241913

 $00:13:33.490 \longrightarrow 00:13:35.818$ or in hearing discussions of the

NOTE Confidence: 0.834765136241913

00:13:35.891 --> 00:13:38.036 kind that we're having tonight,

NOTE Confidence: 0.834765136241913

 $00:13:38.040 \longrightarrow 00:13:41.048$ so clearly you have to look at the

NOTE Confidence: 0.834765136241913

 $00{:}13{:}41.048 \dashrightarrow 00{:}13{:}43.689$ interest at different beings have.

NOTE Confidence: 0.834765136241913

 $00:13:43.690 \longrightarrow 00:13:45.712$ And sometimes they are more closely

NOTE Confidence: 0.834765136241913

 $00{:}13{:}45.712 \dashrightarrow 00{:}13{:}47.060$ comparable with our interests,

NOTE Confidence: 0.834765136241913

 $00:13:47.060 \longrightarrow 00:13:51.290$ and sometimes they're not. Ah.

NOTE Confidence: 0.834765136241913

 $00:13:51.290 \longrightarrow 00:13:53.150$ And interest that is quite

NOTE Confidence: 0.834765136241913

 $00:13:53.150 \longrightarrow 00:13:54.638$ closely comparable with hours,

NOTE Confidence: 0.834765136241913

 $00:13:54.640 \longrightarrow 00:13:56.500$ I think is the interest

NOTE Confidence: 0.834765136241913

00:13:56.500 --> 00:13:57.988 in not experiencing pain,

00:13:57.990 --> 00:13:59.474 particularly severe pain, obviously,

NOTE Confidence: 0.834765136241913

 $00:13:59.474 \longrightarrow 00:14:00.958$ and generally not suffering,

NOTE Confidence: 0.834765136241913

 $00:14:00.960 \longrightarrow 00:14:04.592$ so those are the interest that I'll be

NOTE Confidence: 0.834765136241913

00:14:04.592 --> 00:14:07.731 referring to most in talking about the

NOTE Confidence: 0.834765136241913

00:14:07.731 --> 00:14:11.479 ethics of how we ought to treat animals.

NOTE Confidence: 0.834765136241913

00:14:11.480 --> 00:14:13.270 Now some people will say,

NOTE Confidence: 0.834765136241913

00:14:13.270 --> 00:14:14.503 but you know,

NOTE Confidence: 0.834765136241913

 $00:14:14.503 \longrightarrow 00:14:16.558$ whereas there aren't really any

NOTE Confidence: 0.834765136241913

 $00:14:16.558 \longrightarrow 00:14:18.343$ differences between people on the

NOTE Confidence: 0.834765136241913

 $00:14:18.343 \longrightarrow 00:14:20.422$ basis of their race or their sex,

NOTE Confidence: 0.834765136241913

 $00:14:20.430 \longrightarrow 00:14:22.585$ or at least know differences

NOTE Confidence: 0.834765136241913

 $00:14:22.585 \longrightarrow 00:14:23.878$ that matter morally.

NOTE Confidence: 0.834765136241913

 $00:14:23.880 \longrightarrow 00:14:25.805$ With humans there are these

NOTE Confidence: 0.834765136241913

 $00{:}14{:}25.805 \dashrightarrow 00{:}14{:}27.730$ differences because only humans are.

NOTE Confidence: 0.834765136241913

 $00:14:27.730 \longrightarrow 00:14:30.376$ And now then we get a whole

 $00:14:30.376 \longrightarrow 00:14:33.119$ lot of terms to fill this in.

NOTE Confidence: 0.834765136241913

00:14:33.120 --> 00:14:35.045 Only humans are rational and

NOTE Confidence: 0.834765136241913

 $00:14:35.045 \longrightarrow 00:14:36.970$ the humans are self aware.

NOTE Confidence: 0.834765136241913

00:14:36.970 --> 00:14:38.900 Only humans are autonomous beings,

NOTE Confidence: 0.834765136241913

00:14:38.900 --> 00:14:41.498 self directing only humans are moral

NOTE Confidence: 0.834765136241913

00:14:41.498 --> 00:14:43.960 agents only humans used language.

NOTE Confidence: 0.834765136241913

00:14:43.960 --> 00:14:47.740 So.

NOTE Confidence: 0.834765136241913

00:14:47.740 --> 00:14:50.092 Do these things make a important

NOTE Confidence: 0.834765136241913

 $00:14:50.092 \longrightarrow 00:14:50.876$ moral difference?

NOTE Confidence: 0.834765136241913 00:14:50.880 --> 00:14:51.215 Sorry, NOTE Confidence: 0.834765136241913

00:14:51.215 --> 00:14:53.560 I had another one there able to

NOTE Confidence: 0.834765136241913

 $00:14:53.560 \longrightarrow 00:14:56.436$ take part in a social contract that

NOTE Confidence: 0.834765136241913

00:14:56.436 --> 00:14:58.140 we're thinking of philosophers

NOTE Confidence: 0.834765136241913

 $00:14:58.140 \longrightarrow 00:15:00.318$ like John Rules for instance.

NOTE Confidence: 0.834765136241913

 $00:15:00.320 \longrightarrow 00:15:02.798$ Then that is an important part

NOTE Confidence: 0.834765136241913

00:15:02.798 --> 00:15:05.030 of moral status and so on.

 $00:15:05.030 \longrightarrow 00:15:07.774$ So what should we say about that?

 $\begin{aligned} & \text{NOTE Confidence: } 0.834765136241913 \\ & 00:15:07.780 --> 00:15:08.147 \text{ Well,} \end{aligned}$

NOTE Confidence: 0.834765136241913

 $00:15:08.147 \longrightarrow 00:15:10.349$ in fact that was discussed along

NOTE Confidence: 0.834765136241913

00:15:10.349 --> 00:15:13.287 time ago by this man Jeremy Bentham,

NOTE Confidence: 0.834765136241913

00:15:13.290 --> 00:15:16.034 who's the founder of the School of

NOTE Confidence: 0.834765136241913

 $00:15:16.034 \longrightarrow 00:15:18.161$ English Utilitarians, Bentham was writing.

NOTE Confidence: 0.834765136241913

 $00:15:18.161 \longrightarrow 00:15:20.396$ These lines towards the end

NOTE Confidence: 0.834765136241913

 $00:15:20.396 \longrightarrow 00:15:23.088$ of the 18th century in fact,

NOTE Confidence: 0.834765136241913

00:15:23.090 --> 00:15:25.380 just after the French Revolution

NOTE Confidence: 0.834765136241913

 $00:15:25.380 \longrightarrow 00:15:27.670$ had broken out in 1789.

NOTE Confidence: 0.834765136241913 00:15:27.670 --> 00:15:27.951 And. NOTE Confidence: 0.834765136241913

00:15:27.951 --> 00:15:30.199 In one of his works there he has

NOTE Confidence: 0.834765136241913

 $00{:}15{:}30.199 \dashrightarrow 00{:}15{:}32.464$ a kind of prophetic footnote in

NOTE Confidence: 0.834765136241913

 $00:15:32.464 \longrightarrow 00:15:34.907$ which he notes that the French

NOTE Confidence: 0.834765136241913

 $00:15:34.907 \longrightarrow 00:15:36.290$ revolutionaries have discovered

 $00:15:36.290 \longrightarrow 00:15:39.409$ that the color of a man's skin

NOTE Confidence: 0.834765136241913

 $00{:}15{:}39.409 \dashrightarrow 00{:}15{:}41.503$ is no reason for a bandoning him

NOTE Confidence: 0.834765136241913

 $00:15:41.503 \longrightarrow 00:15:43.648$ to the Caprice of a tormentor.

NOTE Confidence: 0.834765136241913

 $00:15:43.650 \longrightarrow 00:15:44.520$ In other words,

NOTE Confidence: 0.834765136241913

 $00:15:44.520 \longrightarrow 00:15:46.550$ he was pointing to the fact that

NOTE Confidence: 0.834765136241913

 $00{:}15{:}46.616 \dashrightarrow 00{:}15{:}48.188$ the French revolutionaries had

NOTE Confidence: 0.834765136241913

00:15:48.188 --> 00:15:50.153 declared that all human beings

NOTE Confidence: 0.834765136241913

00:15:50.153 --> 00:15:52.426 are free and had abolished slavery

NOTE Confidence: 0.834765136241913

 $00:15:52.426 \longrightarrow 00:15:53.878$ in the French colonies,

NOTE Confidence: 0.834765136241913

 $00:15:53.880 \longrightarrow 00:15:55.645$ was in fact later reintroduced

NOTE Confidence: 0.834765136241913

00:15:55.645 --> 00:15:56.704 after the revolution,

NOTE Confidence: 0.834765136241913

 $00:15:56.710 \longrightarrow 00:15:58.846$ but they did abolish it temporally.

NOTE Confidence: 0.834765136241913

00:15:58.850 --> 00:16:01.530 Anne Benton then goes on to make this,

NOTE Confidence: 0.834765136241913 00:16:01.530 --> 00:16:02.306 you know, NOTE Confidence: 0.834765136241913

00:16:02.306 --> 00:16:04.246 quite remarkable comment for the

NOTE Confidence: 0.834765136241913

 $00:16:04.246 \longrightarrow 00:16:06.635$ time that maybe one day the day

 $00:16:06.635 \longrightarrow 00:16:08.745$ will come when we will also realize

NOTE Confidence: 0.834765136241913

 $00:16:08.745 \longrightarrow 00:16:10.943$ that weather being has a tail or

NOTE Confidence: 0.834765136241913

 $00:16:10.943 \longrightarrow 00:16:13.150$ fur is not a reason for allowing

NOTE Confidence: 0.834765136241913

 $00:16:13.150 \longrightarrow 00:16:15.270$ it to be tortured by others.

NOTE Confidence: 0.834765136241913

00:16:15.270 --> 00:16:17.646 And this was at a time you have

NOTE Confidence: 0.834765136241913

 $00:16:17.646 \longrightarrow 00:16:19.938$ to remember when there was no

NOTE Confidence: 0.834765136241913

 $00:16:19.938 \longrightarrow 00:16:21.973$ legislation anywhere in the world

NOTE Confidence: 0.834765136241913

 $00{:}16{:}21.973 \dashrightarrow 00{:}16{:}23.955$ against cruelty to animals and

NOTE Confidence: 0.834765136241913

 $00:16:23.955 \longrightarrow 00:16:25.080$ not in England.

NOTE Confidence: 0.834765136241913

 $00:16:25.080 \longrightarrow 00:16:27.348$ And bent the mastic addressed it.

NOTE Confidence: 0.834765136241913

00:16:27.350 --> 00:16:29.250 Just this point we're making,

NOTE Confidence: 0.834765136241913

 $00:16:29.250 \longrightarrow 00:16:31.410$ he says he considers the idea

NOTE Confidence: 0.834765136241913

00:16:31.410 --> 00:16:33.420 that maybe humans can reason,

NOTE Confidence: 0.834765136241913

 $00{:}16{:}33.420 \dashrightarrow 00{:}16{:}36.066$ or they can talk and animals can't.

NOTE Confidence: 0.834765136241913

 $00:16:36.070 \longrightarrow 00:16:38.723$ And he says the question is not

 $00:16:38.723 \longrightarrow 00:16:41.824$ can they reason? Or can they talk?

NOTE Confidence: 0.834765136241913

 $00:16:41.824 \longrightarrow 00:16:45.198$ But can they suffer? And then he asked.

NOTE Confidence: 0.834765136241913

 $00:16:45.198 \longrightarrow 00:16:47.310$ The question what else is it

NOTE Confidence: 0.850667685270309

00:16:47.390 --> 00:16:50.090 that you trace the insuperable line?

NOTE Confidence: 0.850667685270309

 $00:16:50.090 \longrightarrow 00:16:52.169$ In other words, what else is it

NOTE Confidence: 0.850667685270309

 $00:16:52.169 \longrightarrow 00:16:54.424$ that should mark this line between

NOTE Confidence: 0.850667685270309

 $00:16:54.424 \longrightarrow 00:16:56.156$ beings whose suffering matters?

NOTE Confidence: 0.850667685270309

00:16:56.160 --> 00:16:58.410 An beings who suffering doesn't

NOTE Confidence: 0.850667685270309

 $00:16:58.410 \longrightarrow 00:17:01.350$ matter and he went on to say.

NOTE Confidence: 0.850667685270309

 $00:17:01.350 \longrightarrow 00:17:03.420$ To show that it couldn't be

NOTE Confidence: 0.850667685270309

 $00:17:03.420 \longrightarrow 00:17:04.800$ simply reasoning or talk,

NOTE Confidence: 0.850667685270309

 $00{:}17{:}04.800 \dashrightarrow 00{:}17{:}08.250$ he said a dog or a horse can reason better,

NOTE Confidence: 0.850667685270309

 $00:17:08.250 \longrightarrow 00:17:09.630$ and for that matter,

NOTE Confidence: 0.850667685270309

 $00:17:09.630 \longrightarrow 00:17:11.355$ he said is more conversable.

NOTE Confidence: 0.850667685270309

 $00:17:11.360 \longrightarrow 00:17:14.120$ You can have a better conversation with them.

NOTE Confidence: 0.850667685270309

 $00:17:14.120 \longrightarrow 00:17:16.880$ I'm not sure if there was a joke,

 $00:17:16.880 \longrightarrow 00:17:18.260$ but perhaps you can.

NOTE Confidence: 0.850667685270309

 $00:17:18.260 \longrightarrow 00:17:20.330$ Then a human of a day,

NOTE Confidence: 0.850667685270309

 $00:17:20.330 \longrightarrow 00:17:23.389$ a week or even a month old.

NOTE Confidence: 0.850667685270309

00:17:23.390 --> 00:17:26.218 So essentially saying if you wanted to

NOTE Confidence: 0.850667685270309

00:17:26.218 --> 00:17:29.376 draw the line on the base of reasoning

NOTE Confidence: 0.850667685270309

 $00:17:29.376 \longrightarrow 00:17:32.020$ abilities or the use of language,

NOTE Confidence: 0.850667685270309

 $00:17:32.020 \longrightarrow 00:17:34.480$ you would have to exclude newborn

NOTE Confidence: 0.850667685270309

 $00{:}17{:}34.480 \dashrightarrow 00{:}17{:}36.949$ humans to that people might say.

NOTE Confidence: 0.850667685270309

 $00:17:36.950 \longrightarrow 00:17:38.594$ But humans newborn humans

NOTE Confidence: 0.850667685270309

 $00:17:38.594 \longrightarrow 00:17:40.649$ have the potential to reason,

NOTE Confidence: 0.850667685270309

 $00:17:40.650 \longrightarrow 00:17:42.710$ and that's certainly possible difference.

NOTE Confidence: 0.850667685270309

 $00:17:42.710 \longrightarrow 00:17:44.610$ Whether you can't potential is

NOTE Confidence: 0.850667685270309

 $00{:}17{:}44.610 \dashrightarrow 00{:}17{:}47.025$ another question you need to think

NOTE Confidence: 0.850667685270309

 $00{:}17{:}47.025 \dashrightarrow 00{:}17{:}49.275$ about the implications for abortion.

NOTE Confidence: 0.850667685270309

00:17:49.280 --> 00:17:52.979 If you're a liberal on abortion if you do,

 $00:17:52.980 \longrightarrow 00:17:53.351$ but.

NOTE Confidence: 0.850667685270309

 $00:17:53.351 \longrightarrow 00:17:55.577$ Bentham could have said that some

NOTE Confidence: 0.850667685270309

 $00:17:55.577 \longrightarrow 00:17:57.750$ humans don't have that potential.

NOTE Confidence: 0.850667685270309 00:17:57.750 --> 00:17:58.598 That is, NOTE Confidence: 0.850667685270309

 $00:17:58.598 \longrightarrow 00:18:01.142$ they are born with such irreparable

NOTE Confidence: 0.850667685270309

00:18:01.142 --> 00:18:03.709 brain damage or with a genetic

NOTE Confidence: 0.850667685270309

 $00:18:03.709 \longrightarrow 00:18:05.754$ abnormality that they never will

NOTE Confidence: 0.850667685270309

 $00{:}18{:}05.754 \dashrightarrow 00{:}18{:}08.256$ have the ability to reason or talk

NOTE Confidence: 0.850667685270309

 $00:18:08.256 \longrightarrow 00:18:11.040$ to a level that a human cannot.

NOTE Confidence: 0.850667685270309

 $00:18:11.040 \longrightarrow 00:18:14.400$ Sorry will ever let an animal cannot.

NOTE Confidence: 0.850667685270309

00:18:14.400 --> 00:18:16.374 And yet we certainly don't treat

NOTE Confidence: 0.850667685270309

 $00:18:16.374 \longrightarrow 00:18:18.730$ them the way we treat animals.

NOTE Confidence: 0.850667685270309

00:18:18.730 --> 00:18:22.340 We don't use them in the way we use animals,

NOTE Confidence: 0.850667685270309

 $00:18:22.340 \longrightarrow 00:18:25.788$ and we would be horrified if people did.

NOTE Confidence: 0.850667685270309

 $00:18:25.790 \longrightarrow 00:18:28.246$ So I think that is simply for evidence

NOTE Confidence: 0.850667685270309

 $00:18:28.246 \longrightarrow 00:18:31.135$ of our species bias that even when

00:18:31.135 --> 00:18:32.895 mental capacities are similar,

NOTE Confidence: 0.850667685270309

 $00{:}18{:}32.900 \dashrightarrow 00{:}18{:}35.301$ or for that matter to the advantage

NOTE Confidence: 0.850667685270309

 $00:18:35.301 \longrightarrow 00:18:37.379$ of the non human animal,

NOTE Confidence: 0.850667685270309

 $00:18:37.380 \longrightarrow 00:18:40.110$ we still give more weight and

NOTE Confidence: 0.850667685270309

00:18:40.110 --> 00:18:42.972 have much more concern for the

NOTE Confidence: 0.850667685270309

 $00:18:42.972 \longrightarrow 00:18:45.347$ interests of the human beings.

NOTE Confidence: 0.850667685270309

 $00:18:45.350 \longrightarrow 00:18:45.681$ OK,

NOTE Confidence: 0.850667685270309

 $00{:}18{:}45.681 \dashrightarrow 00{:}18{:}49.172$ so that's why I think the way we think about

NOTE Confidence: 0.850667685270309

 $00{:}18{:}49.172 \dashrightarrow 00{:}18{:}52.604$ animals needs to be rethought and is wrong.

NOTE Confidence: 0.850667685270309

 $00:18:52.610 \longrightarrow 00:18:55.658$ But I do now want to move to.

NOTE Confidence: 0.850667685270309

00:18:55.660 --> 00:18:58.313 What is the big implication of that

NOTE Confidence: 0.850667685270309

 $00:18:58.313 \longrightarrow 00:19:01.389$ and what is the point of this talk?

NOTE Confidence: 0.850667685270309

 $00:19:01.390 \longrightarrow 00:19:02.878$ We're talking about food,

NOTE Confidence: 0.850667685270309

 $00{:}19{:}02.878 \dashrightarrow 00{:}19{:}05.560$ and when we're concerned with cruelty to

NOTE Confidence: 0.850667685270309

 $00:19:05.560 \longrightarrow 00:19:07.888$ animals or inflicting suffering on animals,

 $00:19:07.890 \longrightarrow 00:19:08.906$ food is.

NOTE Confidence: 0.850667685270309

00:19:08.906 --> 00:19:10.430 The big issue,

NOTE Confidence: 0.850667685270309

 $00:19:10.430 \longrightarrow 00:19:12.830$ compare it for example with the

NOTE Confidence: 0.850667685270309

 $00:19:12.830 \longrightarrow 00:19:15.369$ number of animals killed in research.

NOTE Confidence: 0.850667685270309

 $00:19:15.370 \longrightarrow 00:19:18.240$ Let's say these are rather rough figures.

NOTE Confidence: 0.850667685270309

00:19:18.240 --> 00:19:21.117 We don't have any any good figures.

NOTE Confidence: 0.850667685270309

00:19:21.120 --> 00:19:24.130 But let's say we could say maybe

NOTE Confidence: 0.850667685270309

 $00:19:24.130 \longrightarrow 00:19:26.959$ 100 million animals are used in

NOTE Confidence: 0.850667685270309

 $00{:}19{:}26.959 \dashrightarrow 00{:}19{:}28.895$ research worldwide each year.

NOTE Confidence: 0.850667685270309

 $00:19:28.900 \longrightarrow 00:19:30.478$ Vertebrate land animals

NOTE Confidence: 0.850667685270309

 $00{:}19{:}30.478 \dashrightarrow 00{:}19{:}33.108$ only not talking about fish,

NOTE Confidence: 0.850667685270309

 $00{:}19{:}33.110 \dashrightarrow 00{:}19{:}35.178$ not talking about invertebrates.

NOTE Confidence: 0.850667685270309

 $00:19:35.178 \longrightarrow 00:19:37.246$ Vertebrate land animals according

NOTE Confidence: 0.850667685270309

 $00:19:37.246 \longrightarrow 00:19:39.419$ to the United Nations.

NOTE Confidence: 0.850667685270309

 $00:19:39.420 \longrightarrow 00:19:42.212$ Food and Agriculture organization.

NOTE Confidence: 0.850667685270309

 $00:19:42.212 \longrightarrow 00:19:46.400$ Is in excess of 74 billion.

00:19:46.400 --> 00:19:49.928 So if you do this comparison,

NOTE Confidence: 0.850667685270309

 $00:19:49.930 \longrightarrow 00:19:52.278$ food production uses 740

NOTE Confidence: 0.850667685270309

 $00{:}19{:}52.278 \dashrightarrow 00{:}19{:}55.213$ times more animals with ad,

NOTE Confidence: 0.850667685270309

 $00:19:55.220 \longrightarrow 00:19:57.292$ including fish than research.

NOTE Confidence: 0.850667685270309

 $00:19:57.292 \longrightarrow 00:20:00.400$ And if you added fish in,

NOTE Confidence: 0.850667685270309

 $00:20:00.400 \longrightarrow 00:20:02.566$ it would be far more still,

NOTE Confidence: 0.850667685270309

 $00:20:02.570 \longrightarrow 00:20:04.976$ some estimates of the number of

NOTE Confidence: 0.850667685270309

00:20:04.976 --> 00:20:07.453 fish killed for human and human

NOTE Confidence: 0.850667685270309

 $00:20:07.453 \longrightarrow 00:20:09.835$ consumption go up to a trillion.

NOTE Confidence: 0.850667685270309

 $00:20:09.840 \longrightarrow 00:20:10.227$ So.

NOTE Confidence: 0.850667685270309

00:20:10.227 --> 00:20:13.323 This is by far larger problem and I

NOTE Confidence: 0.850667685270309

 $00:20:13.323 \longrightarrow 00:20:16.642$ think it's quite possible that actually

NOTE Confidence: 0.850667685270309

 $00{:}20{:}16.642 \dashrightarrow 00{:}20{:}19.482$ the suffering of each individual

NOTE Confidence: 0.848674033085505

 $00:20:19.573 \longrightarrow 00:20:22.884$ animal in this group is greater in

NOTE Confidence: 0.848674033085505

 $00:20:22.884 \longrightarrow 00:20:25.076$ food production than in laboratories,

 $00:20:25.076 \longrightarrow 00:20:26.991$ although some some experiments may

NOTE Confidence: 0.848674033085505

 $00{:}20{:}26.991 \dashrightarrow 00{:}20{:}29.370$ cause more severe short-term suffering,

NOTE Confidence: 0.848674033085505

00:20:29.370 --> 00:20:31.896 the long term suffering of confinement,

NOTE Confidence: 0.848674033085505

 $00:20:31.900 \longrightarrow 00:20:33.588$ basically lifelong suffering of

NOTE Confidence: 0.848674033085505

 $00:20:33.588 \longrightarrow 00:20:35.276$ confinement for these animals,

NOTE Confidence: 0.848674033085505

 $00:20:35.280 \longrightarrow 00:20:38.290$ and the stress of that and the

NOTE Confidence: 0.848674033085505

00:20:38.290 --> 00:20:40.770 deprivation of other things to do,

NOTE Confidence: 0.848674033085505

 $00:20:40.770 \longrightarrow 00:20:43.558$ I think, is worse.

NOTE Confidence: 0.848674033085505

 $00:20:43.560 \longrightarrow 00:20:46.850$ Here's a way of looking at our.

NOTE Confidence: 0.848674033085505

00:20:46.850 --> 00:20:49.904 I would say misappropriation of concern

NOTE Confidence: 0.848674033085505

 $00:20:49.904 \longrightarrow 00:20:53.294$ for animals as reflected by the amount

NOTE Confidence: 0.848674033085505

 $00:20:53.294 \longrightarrow 00:20:56.248$ of money we donate to animal charities.

NOTE Confidence: 0.848674033085505

 $00:20:56.250 \longrightarrow 00:20:59.722$ On the left you have this large bluish

NOTE Confidence: 0.848674033085505

00:20:59.722 --> 00:21:02.383 box showing the number of animals

NOTE Confidence: 0.848674033085505

 $00:21:02.383 \longrightarrow 00:21:06.145$ killed or used each year in the United

NOTE Confidence: 0.848674033085505

00:21:06.145 --> 00:21:08.935 States alone for various purposes,

 $00:21:08.940 \longrightarrow 00:21:11.796$ and the box is basically blueish

NOTE Confidence: 0.848674033085505

00:21:11.796 --> 00:21:13.700 because that's farm animals.

NOTE Confidence: 0.848674033085505

00:21:13.700 --> 00:21:16.380 If you look down in the right hand

NOTE Confidence: 0.848674033085505

 $00:21:16.380 \longrightarrow 00:21:18.521$ bottom corner you see a little

NOTE Confidence: 0.848674033085505

 $00:21:18.521 \longrightarrow 00:21:20.266$ square of a different color,

NOTE Confidence: 0.848674033085505

 $00:21:20.270 \longrightarrow 00:21:22.000$ which is mostly laboratory animals.

NOTE Confidence: 0.848674033085505

00:21:22.000 --> 00:21:24.124 Those used in research and you

NOTE Confidence: 0.848674033085505

 $00:21:24.124 \longrightarrow 00:21:25.810$ probably can't even see it.

NOTE Confidence: 0.848674033085505

 $00{:}21{:}25.810 \dashrightarrow 00{:}21{:}27.540$ There are small green light.

NOTE Confidence: 0.848674033085505

 $00{:}21{:}27.540 \dashrightarrow 00{:}21{:}29.941$ There's a small green line for the

NOTE Confidence: 0.848674033085505

00:21:29.941 --> 00:21:32.283 number of animals in shelters that is

NOTE Confidence: 0.848674033085505

00:21:32.283 --> 00:21:34.810 dogs and cats in pounds and shelters,

NOTE Confidence: 0.848674033085505

 $00{:}21{:}34.810 \dashrightarrow 00{:}21{:}36.880$ and the number of animals killed

NOTE Confidence: 0.848674033085505

 $00:21:36.880 \longrightarrow 00:21:38.632$ for clothing, basically for fur,

NOTE Confidence: 0.848674033085505

00:21:38.632 --> 00:21:41.110 and it can hardly see those lines

 $00:21:41.184 \longrightarrow 00:21:42.069$ on this chat.

NOTE Confidence: 0.848674033085505

 $00:21:42.070 \longrightarrow 00:21:45.229$ Then you look at the box on the right.

NOTE Confidence: 0.848674033085505

 $00:21:45.230 \longrightarrow 00:21:47.491$ And you see that the green the

NOTE Confidence: 0.848674033085505

 $00:21:47.491 \longrightarrow 00:21:50.358$ this is now the amount of money

NOTE Confidence: 0.848674033085505

 $00:21:50.358 \longrightarrow 00:21:52.628$ donated to animal charities annually

NOTE Confidence: 0.848674033085505

00:21:52.628 --> 00:21:54.550 in the United States.

NOTE Confidence: 0.848674033085505

 $00:21:54.550 \longrightarrow 00:21:57.846$ The green is for money donated to shelters

NOTE Confidence: 0.848674033085505

 $00:21:57.846 \longrightarrow 00:22:00.896$ and it's what is at least 2/3 close

NOTE Confidence: 0.848674033085505

 $00{:}22{:}00.896 \to 00{:}22{:}03.858$ to 3/4 perhaps of the money donated.

NOTE Confidence: 0.848674033085505

 $00:22:03.860 \longrightarrow 00:22:07.100$ And then there comes this big category other,

NOTE Confidence: 0.848674033085505

 $00:22:07.100 \longrightarrow 00:22:09.530$ which is probably mostly wild animals,

NOTE Confidence: 0.848674033085505

 $00:22:09.530 \longrightarrow 00:22:11.600$ endangered animals and so on.

NOTE Confidence: 0.848674033085505

 $00:22:11.600 \longrightarrow 00:22:12.950$ And farm animals is just

NOTE Confidence: 0.848674033085505

 $00:22:12.950 \longrightarrow 00:22:14.300$ a small part down here,

NOTE Confidence: 0.848674033085505

 $00:22:14.300 \longrightarrow 00:22:16.803$ so I think we an if you want more on this

NOTE Confidence: 0.848674033085505

 $00:22:16.803 \longrightarrow 00:22:19.155$ have a look at Animal Charity evaluators,

 $00:22:19.160 \longrightarrow 00:22:19.955$ by the way,

NOTE Confidence: 0.848674033085505

00:22:19.955 --> 00:22:21.545 which is a really good website

NOTE Confidence: 0.848674033085505

 $00:22:21.545 \longrightarrow 00:22:23.735$ for looking at one of the most

NOTE Confidence: 0.848674033085505

 $00:22:23.735 \longrightarrow 00:22:25.500$ effective charities to help animals.

NOTE Confidence: 0.848674033085505

 $00{:}22{:}25.500 \dashrightarrow 00{:}22{:}27.999$ So we really have a complete false

NOTE Confidence: 0.848674033085505

 $00{:}22{:}27.999 \dashrightarrow 00{:}22{:}30.713$ sense of where animal suffering is

NOTE Confidence: 0.848674033085505

 $00:22:30.713 \longrightarrow 00:22:33.920$ and what we should be doing about it,

NOTE Confidence: 0.848674033085505

 $00:22:33.920 \longrightarrow 00:22:36.698$ because there's no reason to think

NOTE Confidence: 0.848674033085505

 $00{:}22{:}36.698 \dashrightarrow 00{:}22{:}40.641$ that pigs or cows or chickens for that

NOTE Confidence: 0.848674033085505

 $00:22:40.641 \longrightarrow 00:22:44.439$ matter either suffer less than dogs or cats.

NOTE Confidence: 0.848674033085505

 $00:22:44.440 \longrightarrow 00:22:46.490$ And getting to those animals.

NOTE Confidence: 0.848674033085505

 $00:22:46.490 \longrightarrow 00:22:50.162$ So let me show you some slides of this.

NOTE Confidence: 0.848674033085505

 $00{:}22{:}50.170 \dashrightarrow 00{:}22{:}52.210$ This is a standard chicken

NOTE Confidence: 0.848674033085505

00:22:52.210 --> 00:22:53.434 producing unit vast,

NOTE Confidence: 0.848674033085505

 $00:22:53.440 \longrightarrow 00:22:56.296$ shared with maybe 20,000 chickens in it.

 $00:22:56.300 \longrightarrow 00:22:57.530$ As you see,

NOTE Confidence: 0.848674033085505

 $00{:}22{:}57.530 --> 00{:}22{:}58.350 \ \mathrm{extremely \ crowded},$

NOTE Confidence: 0.848674033085505

 $00:22:58.350 \longrightarrow 00:23:00.798$ and that's where they will live.

NOTE Confidence: 0.848674033085505

00:23:00.800 --> 00:23:02.850 All all of their life,

NOTE Confidence: 0.848674033085505

 $00:23:02.850 \longrightarrow 00:23:05.671$ which is not that long because they

NOTE Confidence: 0.848674033085505

 $00{:}23{:}05.671 \dashrightarrow 00{:}23{:}08.126$ are bred to grow extremely fast

NOTE Confidence: 0.848674033085505

 $00:23:08.126 \longrightarrow 00:23:11.430$ and in about 6 to 7 weeks there.

NOTE Confidence: 0.848674033085505

00:23:11.430 --> 00:23:13.890 Market weight and ready for slaughter,

NOTE Confidence: 0.848674033085505

 $00:23:13.890 \longrightarrow 00:23:18.447$ and that in itself. Is a problem.

NOTE Confidence: 0.848674033085505

00:23:18.450 --> 00:23:20.300 It's why Professor John Webster,

NOTE Confidence: 0.848674033085505

 $00{:}23{:}20.300 \dashrightarrow 00{:}23{:}22.214$ who is a veterinary scientists and

NOTE Confidence: 0.848674033085505

 $00:23:22.214 \longrightarrow 00:23:24.788$ the founder of a major animal Welfare

NOTE Confidence: 0.848674033085505

 $00:23:24.788 \longrightarrow 00:23:27.672$ Research Center at the University of Bristol,

NOTE Confidence: 0.848674033085505

 $00{:}23{:}27.680 \dashrightarrow 00{:}23{:}29.786$ says that chicken farming is the

NOTE Confidence: 0.848674033085505

00:23:29.786 --> 00:23:31.190 single most severe systematic

NOTE Confidence: 0.848674033085505

00:23:31.252 --> 00:23:32.840 example of man's inhumanity.

00:23:32.840 --> 00:23:34.690 To another Santee, an animal.

NOTE Confidence: 0.848674033085505

 $00:23:34.690 \longrightarrow 00:23:36.162$ So why is that?

NOTE Confidence: 0.848674033085505

00:23:36.162 --> 00:23:37.638 You might say, well,

NOTE Confidence: 0.848674033085505

 $00{:}23{:}37.638 --> 00{:}23{:}38.006 \ look,$

NOTE Confidence: 0.848674033085505

00:23:38.006 --> 00:23:39.110 they get fed,

NOTE Confidence: 0.836502552032471

 $00{:}23{:}39.110 \dashrightarrow 00{:}23{:}41.330$ you know, yes, they're very crowded.

NOTE Confidence: 0.836502552032471

 $00:23:41.330 \longrightarrow 00:23:43.538$ But why is it so bad?

NOTE Confidence: 0.836502552032471

 $00:23:43.540 \longrightarrow 00:23:46.326$ Well, it is because of this question

NOTE Confidence: 0.836502552032471

 $00{:}23{:}46.326 \dashrightarrow 00{:}23{:}48.740$ about breeding them to grow so fast.

NOTE Confidence: 0.836502552032471

 $00{:}23{:}48.740 \dashrightarrow 00{:}23{:}51.252$ Here's a photo of a chicken in one

NOTE Confidence: 0.836502552032471

 $00:23:51.252 \longrightarrow 00:23:53.811$ of these factory farms whose legs

NOTE Confidence: 0.836502552032471

 $00:23:53.811 \longrightarrow 00:23:56.126$ have collapsed under her weight.

NOTE Confidence: 0.836502552032471

 $00{:}23{:}56.130 \dashrightarrow 00{:}23{:}58.825$ This is not a position in which

NOTE Confidence: 0.836502552032471

 $00{:}23{:}58.825 \dashrightarrow 00{:}24{:}00.410$ chickens would normally rest.

NOTE Confidence: 0.836502552032471

 $00:24:00.410 \longrightarrow 00:24:02.360$ Why did the lakes collapse?

 $00:24:02.360 \longrightarrow 00:24:04.300$ Because she's nearly ready for

NOTE Confidence: 0.836502552032471

00:24:04.300 --> 00:24:05.852 market nearly fully grown.

NOTE Confidence: 0.836502552032471

 $00:24:05.860 \longrightarrow 00:24:07.800$ She's about six weeks old,

NOTE Confidence: 0.836502552032471

 $00:24:07.800 \longrightarrow 00:24:10.516$ but she weighs what market chickens do.

NOTE Confidence: 0.836502552032471

 $00:24:10.520 \longrightarrow 00:24:12.860$ Whatever that is maybe 4 pounds,

NOTE Confidence: 0.836502552032471

00:24:12.860 --> 00:24:16.244 4 to 5 pounds, which is a completely

NOTE Confidence: 0.836502552032471

 $00:24:16.244 \longrightarrow 00:24:18.749$ unnatural wait for a bird of that.

NOTE Confidence: 0.836502552032471

00:24:18.750 --> 00:24:21.694 Age and her leg bones are still immature,

NOTE Confidence: 0.836502552032471

 $00:24:21.700 \longrightarrow 00:24:24.220$ so this is something that is known

NOTE Confidence: 0.836502552032471

00:24:24.220 --> 00:24:26.498 to happen regularly in chicken farms,

NOTE Confidence: 0.836502552032471

 $00{:}24{:}26.500 \dashrightarrow 00{:}24{:}28.873$ and no body is going to pick up

NOTE Confidence: 0.836502552032471

 $00:24:28.873 \longrightarrow 00:24:30.930$ this chicken an euthanize it.

NOTE Confidence: 0.836502552032471

 $00:24:30.930 \longrightarrow 00:24:33.478$ The chicken is going to die because

NOTE Confidence: 0.836502552032471

 $00{:}24{:}33.478 \dashrightarrow 00{:}24{:}35.719$ the chicken can no longer walk,

NOTE Confidence: 0.836502552032471

 $00:24:35.720 \longrightarrow 00:24:37.934$ and this chicken is not anywhere

NOTE Confidence: 0.836502552032471

 $00:24:37.934 \longrightarrow 00:24:39.410$ near food or water.

 $00:24:39.410 \longrightarrow 00:24:41.468$ So this chicken is going to

NOTE Confidence: 0.836502552032471

00:24:41.468 --> 00:24:43.470 likely to die of thirst,

NOTE Confidence: 0.836502552032471

 $00:24:43.470 \longrightarrow 00:24:44.950$ or dehydration or starvation,

NOTE Confidence: 0.836502552032471

 $00:24:44.950 \longrightarrow 00:24:47.149$ because there are, as you saw,

NOTE Confidence: 0.836502552032471

 $00:24:47.149 \longrightarrow 00:24:50.160$ all of those 20,000 chickens in the shed.

NOTE Confidence: 0.836502552032471

 $00:24:50.160 \longrightarrow 00:24:51.966$ Nobody pays individual attention to the

NOTE Confidence: 0.836502552032471

 $00:24:51.966 \longrightarrow 00:24:53.600$ veterinary needs of individual chickens.

NOTE Confidence: 0.836502552032471

 $00:24:53.600 \longrightarrow 00:24:55.170$ It's just not worth it.

NOTE Confidence: 0.836502552032471

00:24:55.170 --> 00:24:56.418 Just doesn't pay their.

NOTE Confidence: 0.836502552032471

00:24:56.418 --> 00:24:57.666 They're not worth enough.

NOTE Confidence: 0.836502552032471

00:24:57.670 --> 00:25:00.222 So every maybe once a day someone will

NOTE Confidence: 0.836502552032471

 $00:25:00.222 \longrightarrow 00:25:02.760$ walk through the shed and pick up the

NOTE Confidence: 0.836502552032471

 $00{:}25{:}02.760 \dashrightarrow 00{:}25{:}05.178$ corpses and collect them and take them out.

NOTE Confidence: 0.836502552032471

00:25:05.180 --> 00:25:08.477 But that's all it's going to happen.

NOTE Confidence: 0.836502552032471

 $00:25:08.480 \longrightarrow 00:25:08.856$ OK,

00:25:08.856 --> 00:25:11.488 here's a chart from a website called

NOTE Confidence: 0.836502552032471

 $00:25:11.488 \longrightarrow 00:25:13.736$ counting animals that shows the number

NOTE Confidence: 0.836502552032471

 $00:25:13.736 \longrightarrow 00:25:15.872$ of chickens who suffer to death.

NOTE Confidence: 0.836502552032471 00:25:15.880 --> 00:25:16.620 That is, NOTE Confidence: 0.836502552032471

 $00:25:16.620 \longrightarrow 00:25:19.210$ who don't even make it to slaughter.

NOTE Confidence: 0.836502552032471 00:25:19.210 --> 00:25:19.581 Although, NOTE Confidence: 0.836502552032471

 $00:25:19.581 \longrightarrow 00:25:22.549$ as I say there slaughtered at a very

NOTE Confidence: 0.836502552032471

00:25:22.549 --> 00:25:25.497 young age each year in the United States,

NOTE Confidence: 0.836502552032471

00:25:25.500 --> 00:25:29.200 so they die in the way that I just described,

NOTE Confidence: 0.836502552032471

 $00:25:29.200 \longrightarrow 00:25:31.888$ or they die from the stress of

NOTE Confidence: 0.836502552032471

 $00:25:31.888 \longrightarrow 00:25:34.008$ overcrowding or something of that sort.

NOTE Confidence: 0.836502552032471

 $00:25:34.010 \longrightarrow 00:25:36.170$ It's 100, nearly 140 million chickens

NOTE Confidence: 0.836502552032471

 $00:25:36.170 \longrightarrow 00:25:38.839$ every year or 380,000 chickens every day.

NOTE Confidence: 0.836502552032471

 $00{:}25{:}38.840 \dashrightarrow 00{:}25{:}41.059$ Feel like you can count how many

NOTE Confidence: 0.836502552032471

00:25:41.059 --> 00:25:43.144 died wise while I've been talking

NOTE Confidence: 0.836502552032471

 $00:25:43.144 \longrightarrow 00:25:45.280$ that just dwarfs again the number

 $00:25:45.280 \longrightarrow 00:25:47.292$ of animals killed in shelters

NOTE Confidence: 0.836502552032471

 $00:25:47.292 \longrightarrow 00:25:49.668$ for an in laboratories each year,

NOTE Confidence: 0.836502552032471

 $00:25:49.670 \longrightarrow 00:25:51.650$ adding altogether.

NOTE Confidence: 0.836502552032471

 $00:25:51.650 \longrightarrow 00:25:54.114$ So those were meat chickens that I

NOTE Confidence: 0.836502552032471

 $00:25:54.114 \longrightarrow 00:25:56.529$ was talking about so called broilers.

NOTE Confidence: 0.836502552032471

 $00:25:56.530 \longrightarrow 00:25:59.092$ The chickens that I showed you earlier

NOTE Confidence: 0.836502552032471

 $00:25:59.092 \longrightarrow 00:26:01.029$ being debeaked the laying hens.

NOTE Confidence: 0.836502552032471

00:26:01.030 --> 00:26:03.459 You can see one in Frontier with

NOTE Confidence: 0.836502552032471

 $00{:}26{:}03.459 \dashrightarrow 00{:}26{:}05.686$ a shortened off speak and that's

NOTE Confidence: 0.836502552032471

00:26:05.686 --> 00:26:07.900 the degree of crowding that we

NOTE Confidence: 0.836502552032471

 $00:26:07.900 \longrightarrow 00:26:09.648$ get in standard caged.

NOTE Confidence: 0.836502552032471

 $00:26:09.650 \longrightarrow 00:26:11.895$ Hence which is still predominantly

NOTE Confidence: 0.836502552032471

 $00{:}26{:}11.895 \dashrightarrow 00{:}26{:}14.649$ the way of keeping hens laying

NOTE Confidence: 0.836502552032471

00:26:14.649 --> 00:26:16.779 eggs in the United States.

NOTE Confidence: 0.836502552032471

 $00:26:16.780 \longrightarrow 00:26:19.220$ Here you can see how the crowding leads

 $00:26:19.220 \longrightarrow 00:26:21.386$ to the birds feathers being rubbed

NOTE Confidence: 0.836502552032471

 $00{:}26{:}21.386 \to 00{:}26{:}24.336$ off on her chest against the wire or

NOTE Confidence: 0.836502552032471

 $00:26:24.336 \longrightarrow 00:26:26.604$ against the other birds in the cage.

NOTE Confidence: 0.836502552032471

 $00:26:26.610 \longrightarrow 00:26:28.786$ And here you can see what one of

NOTE Confidence: 0.836502552032471

 $00:26:28.786 \longrightarrow 00:26:30.837$ these hands looks like if there's

NOTE Confidence: 0.836502552032471

 $00:26:30.837 \longrightarrow 00:26:32.991$ no extraordinary lucky hand and it's

NOTE Confidence: 0.836502552032471

 $00:26:33.059 \longrightarrow 00:26:34.919$ rescued by an animal organization

NOTE Confidence: 0.836502552032471

00:26:34.919 --> 00:26:37.442 rather than being taken to slaughter at

NOTE Confidence: 0.836502552032471

 $00{:}26{:}37.442 \dashrightarrow 00{:}26{:}40.850$ the end of Leigh Ann is let out on grass,

NOTE Confidence: 0.836502552032471

 $00:26:40.850 \longrightarrow 00:26:42.584$ you can see how the feathers

NOTE Confidence: 0.836502552032471

 $00:26:42.584 \longrightarrow 00:26:43.740$ have been worn off

NOTE Confidence: 0.825570285320282

 $00{:}26{:}43.810 \dashrightarrow 00{:}26{:}45.596$ almost everywhere, although this

NOTE Confidence: 0.825570285320282

 $00:26:45.596 \longrightarrow 00:26:47.624$ is still a relatively young bird,

NOTE Confidence: 0.825570285320282

 $00:26:47.630 \longrightarrow 00:26:49.330$ maybe 18 months old. Uh,

NOTE Confidence: 0.825570285320282

00:26:49.330 --> 00:26:51.850 and chickens can live seven or eight years,

NOTE Confidence: 0.825570285320282

00:26:51.850 --> 00:26:54.676 but because the right of way is dropping off,

 $00{:}26{:}54.680 \dashrightarrow 00{:}26{:}56.570$ it's not economic to keep them.

NOTE Confidence: 0.825570285320282

 $00:26:56.570 \longrightarrow 00:26:58.145$ So that's why she would

NOTE Confidence: 0.825570285320282

00:26:58.145 --> 00:26:59.090 have been slaughtered.

NOTE Confidence: 0.825570285320282

 $00:26:59.090 \longrightarrow 00:27:00.980$ And now she's out on grass.

NOTE Confidence: 0.825570285320282

 $00:27:00.980 \longrightarrow 00:27:01.925$ An interesting Lee.

NOTE Confidence: 0.825570285320282

 $00:27:01.925 \longrightarrow 00:27:04.130$ As soon as she's out on grass,

NOTE Confidence: 0.825570285320282

 $00:27:04.130 \longrightarrow 00:27:05.454$ she starts chasing insects.

NOTE Confidence: 0.825570285320282

 $00:27:05.454 \longrightarrow 00:27:08.677$ She tries to build a nest from grass or straw

NOTE Confidence: 0.825570285320282

 $00:27:08.677 \longrightarrow 00:27:11.378$ before she lays her egg and she dust both.

NOTE Confidence: 0.825570285320282

 $00:27:11.380 \longrightarrow 00:27:13.424$ She gets to a dusty Patch and

NOTE Confidence: 0.825570285320282

 $00:27:13.424 \longrightarrow 00:27:15.470$ fluffs the dirt around her wings.

NOTE Confidence: 0.825570285320282

 $00:27:15.470 \longrightarrow 00:27:17.045$ These are all instincts that

NOTE Confidence: 0.825570285320282

 $00{:}27{:}17.045 \dashrightarrow 00{:}27{:}19.259$ this bird has had all her life.

NOTE Confidence: 0.825570285320282

 $00:27:19.260 \longrightarrow 00:27:22.578$ And never been able to satisfy because

NOTE Confidence: 0.825570285320282

 $00:27:22.578 \longrightarrow 00:27:26.688$ she was on why are not on grass? OK,

00:27:26.688 --> 00:27:30.594 let's move quickly through to pig farming.

NOTE Confidence: 0.825570285320282

 $00{:}27{:}30.600 \dashrightarrow 00{:}27{:}32.515$ See the confinement of pigs

NOTE Confidence: 0.825570285320282

 $00:27:32.515 \longrightarrow 00:27:34.430$ in a standard factory farm.

NOTE Confidence: 0.825570285320282

 $00:27:34.430 \longrightarrow 00:27:36.350$ Here crowded in small pens,

NOTE Confidence: 0.825570285320282

 $00:27:36.350 \longrightarrow 00:27:38.260$ again with nothing to do.

NOTE Confidence: 0.825570285320282

 $00:27:38.260 \longrightarrow 00:27:40.180$ Pigs a sensitive intelligent animals.

NOTE Confidence: 0.825570285320282

00:27:40.180 --> 00:27:42.854 If you read George Orwell's Animal Farm,

NOTE Confidence: 0.825570285320282

 $00:27:42.860 \longrightarrow 00:27:44.972$ you will know that he made

NOTE Confidence: 0.825570285320282

 $00:27:44.972 \longrightarrow 00:27:47.450$ them the boss of Animal Farm,

NOTE Confidence: 0.825570285320282

 $00:27:47.450 \longrightarrow 00:27:49.365$ perhaps because they are the

NOTE Confidence: 0.825570285320282

 $00{:}27{:}49.365 \dashrightarrow 00{:}27{:}51.280$ smartest of the farm animals,

NOTE Confidence: 0.825570285320282

 $00:27:51.280 \longrightarrow 00:27:53.200$ and essentially they're bored there.

NOTE Confidence: 0.825570285320282

 $00:27:53.200 \longrightarrow 00:27:55.755$ They have nothing to do all day

NOTE Confidence: 0.825570285320282

 $00:27:55.755 \longrightarrow 00:27:57.780$ except eat and sleep, basically.

NOTE Confidence: 0.825570285320282

 $00:27:57.780 \longrightarrow 00:27:58.890$ And their mothers.

NOTE Confidence: 0.825570285320282

 $00:27:58.890 \longrightarrow 00:28:01.110$ The breeding size tend to get

00:28:01.176 --> 00:28:02.868 confined much more closely,

NOTE Confidence: 0.825570285320282

 $00:28:02.870 \longrightarrow 00:28:04.976$ often in narrow stores like this,

NOTE Confidence: 0.825570285320282

 $00:28:04.980 \longrightarrow 00:28:07.304$ where they can't even turn around there

NOTE Confidence: 0.825570285320282

 $00:28:07.304 \longrightarrow 00:28:10.236$ too big to turn around in these stalls.

NOTE Confidence: 0.825570285320282

 $00:28:10.240 \longrightarrow 00:28:11.910$ They can't walk more than

NOTE Confidence: 0.825570285320282

00:28:11.910 --> 00:28:14.110 maybe one Step 2 or throe,

NOTE Confidence: 0.825570285320282

 $00:28:14.110 \longrightarrow 00:28:15.860$ and even to lie down.

NOTE Confidence: 0.825570285320282

 $00:28:15.860 \longrightarrow 00:28:17.816$ They have to put their legs

NOTE Confidence: 0.825570285320282

 $00:28:17.816 \longrightarrow 00:28:20.069$ into the into the next animal.

NOTE Confidence: 0.825570285320282

 $00:28:20.070 \longrightarrow 00:28:21.830$ That's just all basically labor,

NOTE Confidence: 0.825570285320282

 $00:28:21.830 \longrightarrow 00:28:23.768$ saving there on metal slats so

NOTE Confidence: 0.825570285320282

 $00:28:23.768 \longrightarrow 00:28:26.039$ their manure can be hosed through.

NOTE Confidence: 0.825570285320282

 $00{:}28{:}26.040 \dashrightarrow 00{:}28{:}28.812$ It's all to save costs and produce

NOTE Confidence: 0.825570285320282

00:28:28.812 --> 00:28:31.710 the product as cheaply as possible.

NOTE Confidence: 0.825570285320282

 $00:28:31.710 \longrightarrow 00:28:34.430$ His she is when she gives birth she's

00:28:34.430 --> 00:28:36.428 again confined in a different way.

NOTE Confidence: 0.825570285320282

 $00{:}28{:}36.430 \dashrightarrow 00{:}28{:}38.368$ Faring crate and she becomes a

NOTE Confidence: 0.825570285320282

00:28:38.368 --> 00:28:40.366 kind of milking machine for her

NOTE Confidence: 0.825570285320282

00:28:40.366 --> 00:28:41.981 piglets until they're taken from

NOTE Confidence: 0.825570285320282

 $00:28:41.981 \longrightarrow 00:28:43.716$ her and she's given artificially

NOTE Confidence: 0.825570285320282

00:28:43.716 --> 00:28:46.187 given hormones to be going on heat

NOTE Confidence: 0.825570285320282

 $00{:}28{:}46.187 \dashrightarrow 00{:}28{:}48.055$ again so she can be inseminated

NOTE Confidence: 0.825570285320282

 $00:28:48.055 \longrightarrow 00:28:50.749$ or put with a bore and the whole

NOTE Confidence: 0.825570285320282

 $00{:}28{:}50.749 \dashrightarrow 00{:}28{:}52.599$ cycle goes around once again.

NOTE Confidence: 0.801204681396484

 $00:28:54.680 \longrightarrow 00:28:55.922$ Moving to cattle.

NOTE Confidence: 0.801204681396484

 $00{:}28{:}55.922 \dashrightarrow 00{:}28{:}58.820$ This is a beef feed lot somewhere

NOTE Confidence: 0.801204681396484

00:28:58.908 --> 00:29:00.940 out in America's Midwest.

NOTE Confidence: 0.801204681396484

 $00:29:00.940 \longrightarrow 00:29:03.616$ It's a vast number of animals.

NOTE Confidence: 0.801204681396484

 $00:29:03.620 \longrightarrow 00:29:05.855$ Obviously, they're not as crowded

NOTE Confidence: 0.801204681396484

 $00:29:05.855 \longrightarrow 00:29:08.090$ as the animals you've seen,

NOTE Confidence: 0.801204681396484

 $00:29:08.090 \longrightarrow 00:29:11.114$ but it is unnatural conditions for them

 $00:29:11.114 \longrightarrow 00:29:14.799$ to be fed on corn rather than grass.

NOTE Confidence: 0.801204681396484

 $00:29:14.800 \longrightarrow 00:29:18.968$ It's also as I come to an immense

NOTE Confidence: 0.801204681396484

 $00:29:18.968 \longrightarrow 00:29:20.930$ methane producing factory.

NOTE Confidence: 0.801204681396484

00:29:20.930 --> 00:29:22.510 And it's a highly inefficient

NOTE Confidence: 0.801204681396484

 $00:29:22.510 \longrightarrow 00:29:24.450$ way of producing food as well,

NOTE Confidence: 0.801204681396484

 $00:29:24.450 \longrightarrow 00:29:27.070$ but we'll come to that.

NOTE Confidence: 0.801204681396484

00:29:27.070 --> 00:29:29.160 Now is Thanksgiving is approaching.

NOTE Confidence: 0.801204681396484

 $00{:}29{:}29.160 \dashrightarrow 00{:}29{:}32.488$ I thought I would show you some turkeys,

NOTE Confidence: 0.801204681396484

 $00:29:32.490 \longrightarrow 00:29:34.580$ basically rather like chicken production.

NOTE Confidence: 0.801204681396484

 $00{:}29{:}34.580 \longrightarrow 00{:}29{:}36.660$ Again, maybe thousands of birds

NOTE Confidence: 0.801204681396484

00:29:36.660 --> 00:29:40.480 in a single shared, very crowded.

NOTE Confidence: 0.801204681396484

 $00:29:40.480 \longrightarrow 00:29:42.290$ But there is one difference,

NOTE Confidence: 0.801204681396484

 $00{:}29{:}42.290 \dashrightarrow 00{:}29{:}44.915$ and that is that because Turkey turkeys

NOTE Confidence: 0.801204681396484

00:29:44.915 --> 00:29:48.057 have been bred to have a very large breast,

NOTE Confidence: 0.801204681396484

 $00:29:48.060 \longrightarrow 00:29:49.504$ they cannot mate naturally.

 $00:29:49.504 \longrightarrow 00:29:50.948$ So essentially every Turkey.

NOTE Confidence: 0.801204681396484

 $00{:}29{:}50.950 \dashrightarrow 00{:}29{:}52.394$ There are some exceptions.

NOTE Confidence: 0.801204681396484

 $00:29:52.394 \longrightarrow 00:29:54.560$ The heritage breeds that are outside.

NOTE Confidence: 0.801204681396484 00:29:54.560 --> 00:29:55.198 It's tiny, NOTE Confidence: 0.801204681396484

00:29:55.198 --> 00:29:56.793 tiny percentage of the turkeys

NOTE Confidence: 0.801204681396484

00:29:56.793 --> 00:29:58.530 Americans eat at Thanksgiving,

NOTE Confidence: 0.801204681396484

 $00:29:58.530 \longrightarrow 00:30:00.492$ but essentially every American Turkey has

NOTE Confidence: 0.801204681396484

 $00:30:00.492 \longrightarrow 00:30:02.500$ the result of artificial insemination,

NOTE Confidence: 0.801204681396484

 $00{:}30{:}02.500 \dashrightarrow 00{:}30{:}04.468$ which means that there is some body

NOTE Confidence: 0.801204681396484

 $00:30:04.468 \longrightarrow 00:30:07.030$ whose job it is to masturbate the

NOTE Confidence: 0.801204681396484

 $00{:}30{:}07.030 \dashrightarrow 00{:}30{:}09.000$ male turkeys to collect sperm,

NOTE Confidence: 0.801204681396484

 $00:30:09.000 \longrightarrow 00:30:11.569$ and someone else whose job it is.

NOTE Confidence: 0.801204681396484

00:30:11.570 --> 00:30:14.506 To inject that sperm into the female Turkey,

NOTE Confidence: 0.801204681396484

 $00:30:14.510 \longrightarrow 00:30:16.330$ which is certainly a procedure

NOTE Confidence: 0.801204681396484

 $00:30:16.330 \longrightarrow 00:30:18.150$ that she's been through many

NOTE Confidence: 0.801204681396484

 $00:30:18.218 \dashrightarrow 00:30:20.376$ times because he's a breeder, Ann.

 $00:30:20.376 \longrightarrow 00:30:23.304$ She hates, she struggles and tries to resist.

NOTE Confidence: 0.801204681396484

00:30:23.310 --> 00:30:25.879 While that is being done to her,

NOTE Confidence: 0.801204681396484

 $00:30:25.880 \longrightarrow 00:30:26.252$ understandably.

NOTE Confidence: 0.801204681396484

00:30:26.252 --> 00:30:29.228 So if you want a new topic of

NOTE Confidence: 0.801204681396484

 $00:30:29.228 \longrightarrow 00:30:30.775$ conversation around the Thanksgiving

NOTE Confidence: 0.801204681396484

 $00:30:30.775 \longrightarrow 00:30:32.995$ table and a couple of weeks,

NOTE Confidence: 0.801204681396484

 $00:30:33.000 \longrightarrow 00:30:35.317$ and if a Turkey is being served,

NOTE Confidence: 0.801204681396484

 $00{:}30{:}35{.}320 \dashrightarrow 00{:}30{:}37.132$ you might ask if people know

NOTE Confidence: 0.801204681396484

 $00:30:37.132 \longrightarrow 00:30:38.970$ how that Turkey was produced.

NOTE Confidence: 0.847936868667603

 $00:30:41.330 \longrightarrow 00:30:43.898$ OK, I said a moment ago that that

NOTE Confidence: 0.847936868667603

 $00:30:43.898 \longrightarrow 00:30:46.972$ beef feed lot that you saw is a very

NOTE Confidence: 0.847936868667603

 $00:30:46.972 \longrightarrow 00:30:49.179$ inefficient way of producing food.

NOTE Confidence: 0.847936868667603

 $00{:}30{:}49.180 \dashrightarrow 00{:}30{:}51.732$ Alot of people say when you raise the

NOTE Confidence: 0.847936868667603

 $00:30:51.732 \longrightarrow 00:30:54.537$ issue of factory farming they say, well,

NOTE Confidence: 0.847936868667603

00:30:54.537 --> 00:30:56.679 the world has a growing population.

 $00:30:56.680 \longrightarrow 00:30:59.884$ We need to do this to feed the world.

NOTE Confidence: 0.847936868667603

 $00{:}30{:}59.890 \dashrightarrow 00{:}31{:}01.675$ But feeding grain to animals

NOTE Confidence: 0.847936868667603

 $00:31:01.675 \longrightarrow 00:31:03.460$ is a waste of food.

NOTE Confidence: 0.847936868667603

00:31:03.460 --> 00:31:05.250 It doesn't produce more food,

NOTE Confidence: 0.847936868667603

 $00:31:05.250 \longrightarrow 00:31:08.454$ it produces less food as you can see here.

NOTE Confidence: 0.847936868667603

00:31:08.460 --> 00:31:10.602 So the vast US grain crop

NOTE Confidence: 0.847936868667603

 $00:31:10.602 \longrightarrow 00:31:12.814$ we're feeding about 70% of it.

NOTE Confidence: 0.847936868667603

 $00:31:12.814 \longrightarrow 00:31:15.558$ 2 animals I either in this country

NOTE Confidence: 0.847936868667603

 $00{:}31{:}15.558 \dashrightarrow 00{:}31{:}18.809$ or it's exported for that purpose.

NOTE Confidence: 0.847936868667603

 $00:31:18.810 \longrightarrow 00:31:22.310$ And on average it takes 6 pounds

NOTE Confidence: 0.847936868667603

00:31:22.310 --> 00:31:25.751 of feed protein to produce £1 of

NOTE Confidence: 0.847936868667603

 $00{:}31{:}25.751 \dashrightarrow 00{:}31{:}29.121$ meat protein that can go as high

NOTE Confidence: 0.847936868667603

 $00:31:29.121 \longrightarrow 00:31:32.691$ as 12:50 ratio for some beef cattle

NOTE Confidence: 0.847936868667603

 $00:31:32.691 \longrightarrow 00:31:35.965$ and goes lower 4 bit lower for

NOTE Confidence: 0.847936868667603

 $00:31:35.965 \longrightarrow 00:31:39.190$ pigs and lower still for chickens.

NOTE Confidence: 0.847936868667603

 $00:31:39.190 \longrightarrow 00:31:42.710$ But in all of these cases we are

 $00:31:42.710 \longrightarrow 00:31:45.659$ producing more food and essentially.

NOTE Confidence: 0.847936868667603 00:31:45.660 --> 00:31:46.760 Putting it, NOTE Confidence: 0.847936868667603

 $00:31:46.760 \longrightarrow 00:31:49.510$ feeding it into animals and

NOTE Confidence: 0.847936868667603

 $00:31:49.510 \longrightarrow 00:31:52.320$ getting less food at the end.

NOTE Confidence: 0.847936868667603

00:31:52.320 --> 00:31:54.240 And here's another way of showing

NOTE Confidence: 0.847936868667603

 $00:31:54.240 \longrightarrow 00:31:55.970$ this from AUS government source.

NOTE Confidence: 0.847936868667603

00:31:55.970 --> 00:31:57.951 How many pans of usable protein can

NOTE Confidence: 0.847936868667603

 $00{:}31{:}57.951 \dashrightarrow 00{:}32{:}00.363$ you get per acre from different crops

NOTE Confidence: 0.847936868667603

 $00:32:00.363 \longrightarrow 00:32:02.607$ or different ways of producing food?

NOTE Confidence: 0.847936868667603

 $00:32:02.610 \longrightarrow 00:32:04.644$ And you see that the soybeans

NOTE Confidence: 0.847936868667603

 $00:32:04.644 \longrightarrow 00:32:07.259$ are right up the top on the left,

NOTE Confidence: 0.847936868667603

 $00:32:07.260 \longrightarrow 00:32:09.916$ then you get a lot of other grains.

NOTE Confidence: 0.847936868667603

 $00{:}32{:}09.920 \dashrightarrow 00{:}32{:}11.575$ And the remarkable thing about

NOTE Confidence: 0.847936868667603

00:32:11.575 --> 00:32:13.564 this is it's protein, not calories,

NOTE Confidence: 0.847936868667603

 $00:32:13.564 \longrightarrow 00:32:15.556$ and you still even from corn.

 $00:32:15.560 \longrightarrow 00:32:17.779$ You get a lot more protein than

NOTE Confidence: 0.847936868667603

 $00{:}32{:}17.779 \dashrightarrow 00{:}32{:}20.208$ you do from down in the bottom.

NOTE Confidence: 0.847936868667603

 $00:32:20.210 \longrightarrow 00:32:21.870$ The animal product, the milk,

NOTE Confidence: 0.847936868667603

 $00:32:21.870 \longrightarrow 00:32:23.098$ the eggs, the meat.

NOTE Confidence: 0.847936868667603

 $00:32:23.098 \longrightarrow 00:32:25.629$ For cones and West of all the beef.

NOTE Confidence: 0.883512198925018

 $00:32:27.680 \longrightarrow 00:32:31.180$ I now want to briefly move to

NOTE Confidence: 0.883512198925018

00:32:31.180 --> 00:32:33.440 questions about climate change,

NOTE Confidence: 0.883512198925018

 $00:32:33.440 \longrightarrow 00:32:37.640$ the saving the planet part of this equation,

NOTE Confidence: 0.883512198925018

 $00:32:37.640 \longrightarrow 00:32:41.161$ which is also really important. So.

NOTE Confidence: 0.883512198925018

 $00:32:41.161 \longrightarrow 00:32:45.368$ How do we reduce greenhouse gas emissions?

NOTE Confidence: 0.883512198925018

 $00{:}32{:}45.370 \dashrightarrow 00{:}32{:}48.070$ I'm not going to make the case for why we

NOTE Confidence: 0.883512198925018

 $00:32:48.144 \longrightarrow 00:32:51.049$ need to reduce our greenhouse gas emissions.

NOTE Confidence: 0.883512198925018

00:32:51.050 --> 00:32:53.374 I hope that you or understand that,

NOTE Confidence: 0.883512198925018

 $00:32:53.380 \longrightarrow 00:32:54.704$ and if not going,

NOTE Confidence: 0.883512198925018

00:32:54.704 --> 00:32:57.420 read one of the basic websites and I

NOTE Confidence: 0.883512198925018

 $00:32:57.420 \longrightarrow 00:32:59.723$ think that case is made very clearly.

00:32:59.730 --> 00:33:02.166 So one way of reducing your greenhouse

NOTE Confidence: 0.883512198925018

 $00{:}33{:}02.166 \dashrightarrow 00{:}33{:}05.024$ gas emissions if you drive a car is to

NOTE Confidence: 0.883512198925018

 $00:33:05.024 \longrightarrow 00:33:07.080$ switch from your typical American car.

NOTE Confidence: 0.883512198925018

 $00:33:07.080 \longrightarrow 00:33:09.078$ Shown here is a Toyota Camry,

NOTE Confidence: 0.883512198925018

 $00:33:09.080 \longrightarrow 00:33:11.243$ sort of middle of the range American

NOTE Confidence: 0.883512198925018

 $00:33:11.243 \longrightarrow 00:33:13.439$ car in terms of fuel efficiency.

NOTE Confidence: 0.883512198925018

00:33:13.440 --> 00:33:15.636 To a hybrid, like a Prius,

NOTE Confidence: 0.883512198925018

 $00:33:15.640 \longrightarrow 00:33:18.656$ and if the average US driver doing that

NOTE Confidence: 0.883512198925018

 $00:33:18.656 \longrightarrow 00:33:21.879$ will save about a ton of carbon per year,

NOTE Confidence: 0.883512198925018

 $00:33:21.880 \longrightarrow 00:33:24.076$ truly a good thing to do.

NOTE Confidence: 0.883512198925018

00:33:24.080 --> 00:33:25.860 Significant part of your

NOTE Confidence: 0.883512198925018

 $00:33:25.860 \longrightarrow 00:33:27.195$ greenhouse gas emissions.

NOTE Confidence: 0.883512198925018

 $00{:}33{:}27.200 \dashrightarrow 00{:}33{:}29.108$ But suppose that you the average

NOTE Confidence: 0.883512198925018

00:33:29.108 --> 00:33:30.380 euros consumer switches from

NOTE Confidence: 0.883512198925018

 $00:33:30.434 \longrightarrow 00:33:31.790$ the typical American diet,

00:33:31.790 --> 00:33:34.974 which is a diet pretty heavy and beef.

NOTE Confidence: 0.883512198925018

 $00{:}33{:}34.980 \dashrightarrow 00{:}33{:}38.229$ To a vegan diet with the same number of

NOTE Confidence: 0.883512198925018

 $00:33:38.229 \longrightarrow 00:33:40.848$ calories you'll save even more carbon.

NOTE Confidence: 0.883512198925018

 $00:33:40.850 \longrightarrow 00:33:43.580 \ 1 \ 1/2 \ tons of carbon per year.$

NOTE Confidence: 0.883512198925018

 $00:33:43.580 \longrightarrow 00:33:45.878$ So whether or not you become

NOTE Confidence: 0.883512198925018

00:33:45.878 --> 00:33:48.268 strictly vegan or you simply reduce

NOTE Confidence: 0.883512198925018

 $00:33:48.268 \longrightarrow 00:33:51.005$ the amount of beef in your diet,

NOTE Confidence: 0.883512198925018

00:33:51.010 --> 00:33:52.965 these are important steps towards

NOTE Confidence: 0.883512198925018

 $00:33:52.965 \longrightarrow 00:33:54.920$ reducing your greenhouse gas footprint.

NOTE Confidence: 0.875425636768341

00:33:57.450 --> 00:33:59.916 And how important is that agricultural

NOTE Confidence: 0.875425636768341

 $00{:}33{:}59.916 \dashrightarrow 00{:}34{:}01.560$ footprint of greenhouse gases?

NOTE Confidence: 0.875425636768341

 $00{:}34{:}01.560 \dashrightarrow 00{:}34{:}03.620$ The livestock footprint in particular.

NOTE Confidence: 0.875425636768341

 $00:34:03.620 \longrightarrow 00:34:05.016$ So here's a statement.

NOTE Confidence: 0.875425636768341

 $00{:}34{:}05.016 \dashrightarrow 00{:}34{:}08.402$ A few years ago from the United Nations

NOTE Confidence: 0.875425636768341

 $00:34:08.402 \longrightarrow 00:34:10.830$ Food and Agriculture Organization.

NOTE Confidence: 0.875425636768341

 $00:34:10.830 \longrightarrow 00:34:14.388$ Which says the livestock sector generates

 $00:34:14.388 \longrightarrow 00:34:17.283$ more greenhouse gas emissions than

NOTE Confidence: 0.875425636768341

 $00:34:17.283 \longrightarrow 00:34:19.887$ the whole transport sector than all

NOTE Confidence: 0.875425636768341

 $00:34:19.887 \longrightarrow 00:34:23.494$ of the cars and planes and trains and

NOTE Confidence: 0.875425636768341

 $00:34:23.494 \longrightarrow 00:34:26.079$ ships and trucks around the world.

NOTE Confidence: 0.875425636768341

 $00:34:26.079 \longrightarrow 00:34:27.924$ I think that statement has

NOTE Confidence: 0.875425636768341

 $00:34:27.924 \longrightarrow 00:34:29.400$ stood out fairly well.

NOTE Confidence: 0.875425636768341

 $00:34:29.400 \longrightarrow 00:34:31.518$ It's being contested in both directions.

NOTE Confidence: 0.875425636768341

00:34:31.520 --> 00:34:34.689 Some people have said it's no, it's only 14%.

NOTE Confidence: 0.875425636768341

00:34:34.689 --> 00:34:36.454 I've seen that figure quoted.

NOTE Confidence: 0.875425636768341

 $00:34:36.460 \longrightarrow 00:34:38.338$ Some people have said it's a

NOTE Confidence: 0.875425636768341

00:34:38.338 --> 00:34:40.029 significant under estimate of the

NOTE Confidence: 0.875425636768341

 $00:34:40.029 \longrightarrow 00:34:41.919$ amount of greenhouse gas emissions

NOTE Confidence: 0.875425636768341

 $00{:}34{:}41.919 \dashrightarrow 00{:}34{:}43.870$ generated through the livestock sector,

NOTE Confidence: 0.875425636768341

00:34:43.870 --> 00:34:45.635 but it's it's certainly quite

NOTE Confidence: 0.875425636768341

00:34:45.635 --> 00:34:47.804 a significant part of it, and.

 $00:34:47.804 \longrightarrow 00:34:50.228$ It's also a part that's easier

NOTE Confidence: 0.875425636768341

 $00{:}34{:}50.228 \dashrightarrow 00{:}34{:}52.544$ to change really than changing

NOTE Confidence: 0.875425636768341

 $00:34:52.544 \longrightarrow 00:34:55.099$ the way we generate electricity.

NOTE Confidence: 0.875425636768341

 $00{:}34{:}55.100 \dashrightarrow 00{:}34{:}55.954$ For example.

NOTE Confidence: 0.875425636768341

 $00:34:55.954 \longrightarrow 00:34:58.089$ Certainly something that we as

NOTE Confidence: 0.875425636768341

 $00:34:58.089 \longrightarrow 00:35:00.619$ individuals have much more control over.

NOTE Confidence: 0.875425636768341

00:35:00.620 --> 00:35:03.086 We can choose what we're going

NOTE Confidence: 0.875425636768341

 $00:35:03.086 \longrightarrow 00:35:05.700$ to eat from your next meal.

NOTE Confidence: 0.875425636768341

00:35:05.700 --> 00:35:06.915 If you like,

NOTE Confidence: 0.875425636768341

00:35:06.915 --> 00:35:09.345 you can't choose how you're going

NOTE Confidence: 0.875425636768341

 $00{:}35{:}09.345 \dashrightarrow 00{:}35{:}12.486$ to power your house or your office,

NOTE Confidence: 0.875425636768341

 $00:35:12.490 \longrightarrow 00:35:15.507$ nor perhaps how you're going to travel.

NOTE Confidence: 0.875425636768341

 $00:35:15.510 \longrightarrow 00:35:16.404$ Quite as easily,

NOTE Confidence: 0.875425636768341

 $00{:}35{:}16.404 \dashrightarrow 00{:}35{:}18.192$ unless you live in walking or

NOTE Confidence: 0.875425636768341

00:35:18.192 --> 00:35:19.740 biking range of your office.

NOTE Confidence: 0.875425636768341

 $00:35:19.740 \longrightarrow 00:35:20.340$ For example,

 $00:35:20.340 \longrightarrow 00:35:22.440$ it may be difficult to get there

NOTE Confidence: 0.875425636768341

 $00:35:22.440 \longrightarrow 00:35:24.267$ without using some fossil fuel may

NOTE Confidence: 0.875425636768341

 $00:35:24.267 \longrightarrow 00:35:26.080$ be difficult to heat your home.

NOTE Confidence: 0.875425636768341

00:35:26.080 --> 00:35:28.496 You may not have control over those things,

NOTE Confidence: 0.875425636768341

 $00:35:28.500 \longrightarrow 00:35:31.209$ but you do have control over what you eat.

NOTE Confidence: 0.840570390224457

 $00:35:33.280 \longrightarrow 00:35:34.868$ And here's another chart

NOTE Confidence: 0.840570390224457

 $00:35:34.868 \longrightarrow 00:35:36.456$ showing the different things.

NOTE Confidence: 0.840570390224457

 $00:35:36.460 \longrightarrow 00:35:38.848$ This is a little bit small.

NOTE Confidence: 0.840570390224457

 $00{:}35{:}38.850 \to 00{:}35{:}42.830$ I'm not sure if we can make a little larger,

NOTE Confidence: 0.840570390224457

 $00:35:42.830 \longrightarrow 00:35:46.151$ but what you what we're looking at is the

NOTE Confidence: 0.840570390224457

 $00:35:46.151 \longrightarrow 00:35:48.797$ greenhouse gas emissions of various foods,

NOTE Confidence: 0.840570390224457

 $00:35:48.800 \longrightarrow 00:35:51.906$ and as you see here, the top line.

NOTE Confidence: 0.840570390224457

 $00{:}35{:}51.906 \dashrightarrow 00{:}35{:}55.012$ If you can read that is beef so

NOTE Confidence: 0.840570390224457

 $00{:}35{:}55.012 \dashrightarrow 00{:}35{:}57.868$ you can see how far that extends

NOTE Confidence: 0.840570390224457

 $00:35:57.868 \longrightarrow 00:36:00.369$ beyond any of the other bars.

 $00:36:00.370 \longrightarrow 00:36:03.178$ The green is what happens through

NOTE Confidence: 0.840570390224457

 $00{:}36{:}03.178 \dashrightarrow 00{:}36{:}06.570$ land use change and the Brown is

NOTE Confidence: 0.840570390224457

 $00:36:06.570 \longrightarrow 00:36:08.955$ the methane production which is

NOTE Confidence: 0.840570390224457

 $00:36:08.955 \longrightarrow 00:36:12.292$ the major reason why beef is so

NOTE Confidence: 0.840570390224457

 $00:36:12.292 \longrightarrow 00:36:14.587$ carbon intensive or methane as

NOTE Confidence: 0.840570390224457

 $00:36:14.590 \longrightarrow 00:36:16.960$ carbon equivalent because of them.

NOTE Confidence: 0.840570390224457

00:36:16.960 --> 00:36:19.300 The methane they produce through

NOTE Confidence: 0.840570390224457

 $00:36:19.300 \longrightarrow 00:36:21.640$ their digestive process and lamb

NOTE Confidence: 0.840570390224457

00:36:21.717 --> 00:36:24.077 and mutton come next because

NOTE Confidence: 0.840570390224457

 $00:36:24.077 \longrightarrow 00:36:25.965$ they're also ruminant animals.

NOTE Confidence: 0.840570390224457 00:36:25.970 --> 00:36:26.904 They also. NOTE Confidence: 0.840570390224457

 $00{:}36{:}26.904 {\:{\circ}{\circ}{\circ}}>00{:}36{:}29.239$ Produce methane during their digestion,

NOTE Confidence: 0.840570390224457

 $00:36:29.240 \longrightarrow 00:36:33.398$ so their next and cheese is the third rank,

NOTE Confidence: 0.840570390224457

 $00:36:33.400 \longrightarrow 00:36:36.879$ because that comes from cars who produce

NOTE Confidence: 0.840570390224457

 $00:36:36.879 \longrightarrow 00:36:40.513$ methane and beef taken from a dairy herd

NOTE Confidence: 0.840570390224457

 $00:36:40.513 \longrightarrow 00:36:44.048$ that is the male calves reared for beef.

 $00:36:44.050 \longrightarrow 00:36:48.280$ Is there, then you get a couple of things

NOTE Confidence: 0.840570390224457

 $00:36:48.280 \longrightarrow 00:36:51.920$ that are not a major part of Dyett.

NOTE Confidence: 0.840570390224457

 $00:36:51.920 \longrightarrow 00:36:53.960$ Really chocolate and coffee.

NOTE Confidence: 0.840570390224457

 $00:36:53.960 \longrightarrow 00:36:57.989$ And then you get other prawns and so on.

NOTE Confidence: 0.840570390224457

 $00:36:57.990 \longrightarrow 00:36:59.810$ Pig meat is down there.

NOTE Confidence: 0.840570390224457

 $00:36:59.810 \longrightarrow 00:37:02.344$ Poultry meat is a little bit lower.

NOTE Confidence: 0.840570390224457

 $00:37:02.350 \longrightarrow 00:37:03.622$ Eggs there an.

NOTE Confidence: 0.840570390224457

 $00{:}37{:}03.622 \dashrightarrow 00{:}37{:}06.590$ Write down the very bottom line on

NOTE Confidence: 0.840570390224457

 $00:37:06.683 \dashrightarrow 00:37:09.889$ this chart is ground nuts or peanuts,

NOTE Confidence: 0.840570390224457

 $00:37:09.890 \longrightarrow 00:37:10.692$ so certainly.

NOTE Confidence: 0.840570390224457

 $00{:}37{:}10.692 \dashrightarrow 00{:}37{:}12.697$ Plants, plant foods and legumes

NOTE Confidence: 0.840570390224457

 $00:37:12.697 \dashrightarrow 00:37:15.238$ far lower than the animal product.

NOTE Confidence: 0.840570390224457

 $00:37:15.240 \longrightarrow 00:37:17.352$ As this chart shows,

NOTE Confidence: 0.840570390224457

 $00:37:17.352 \longrightarrow 00:37:21.190$ this is taken from world in data.

NOTE Confidence: 0.840570390224457

00:37:21.190 --> 00:37:22.729 And sorry OK,

 $00:37:22.729 \longrightarrow 00:37:24.268$ one more slide.

NOTE Confidence: 0.840570390224457

 $00:37:24.270 \longrightarrow 00:37:26.830$ Also maybe a little small.

NOTE Confidence: 0.840570390224457

 $00:37:26.830 \longrightarrow 00:37:29.400$ Let me show you this.

NOTE Confidence: 0.840570390224457

 $00:37:29.400 \longrightarrow 00:37:33.150$ Is this really two chats so?

NOTE Confidence: 0.840570390224457

 $00:37:33.150 \longrightarrow 00:37:35.430$ As you're interested in medical issues,

NOTE Confidence: 0.840570390224457

00:37:35.430 --> 00:37:38.265 I thought I would show you that the chat

NOTE Confidence: 0.840570390224457

 $00:37:38.265 \longrightarrow 00:37:41.509$ on the left compares two different things.

NOTE Confidence: 0.840570390224457

 $00:37:41.510 \longrightarrow 00:37:43.832$ The horizontal axis is the relative

NOTE Confidence: 0.840570390224457

 $00{:}37{:}43.832 \dashrightarrow 00{:}37{:}46.148$ risk of dying that comes from

NOTE Confidence: 0.840570390224457

00:37:46.148 --> 00:37:48.212 one extra serving per day of

NOTE Confidence: 0.840570390224457

 $00{:}37{:}48.212 \dashrightarrow 00{:}37{:}50.630$ the food that you're looking at,

NOTE Confidence: 0.840570390224457

 $00:37:50.630 \longrightarrow 00:37:52.910$ and the vertical axis is the

NOTE Confidence: 0.840570390224457

 $00:37:52.910 \longrightarrow 00:37:54.050$ relative environmental impact.

NOTE Confidence: 0.840570390224457

 $00:37:54.050 \longrightarrow 00:37:56.900$ So the interesting thing is that.

NOTE Confidence: 0.840570390224457

 $00:37:56.900 \longrightarrow 00:38:01.156$ Red meat basically well along with eggs.

NOTE Confidence: 0.840570390224457

00:38:01.160 --> 00:38:04.130 The major things that increase

00:38:04.130 --> 00:38:07.100 your relative risk of dying

NOTE Confidence: 0.840570390224457

 $00:38:07.209 \longrightarrow 00:38:09.669$ with processed red meat,

NOTE Confidence: 0.840570390224457

 $00{:}38{:}09.670 \dashrightarrow 00{:}38{:}13.330$ things like sausage being the worst.

NOTE Confidence: 0.840570390224457

 $00:38:13.330 \longrightarrow 00:38:16.034$ And unprocessed red meat

NOTE Confidence: 0.840570390224457

 $00:38:16.034 \longrightarrow 00:38:19.414$ and eggs being the next.

NOTE Confidence: 0.840570390224457

 $00:38:19.420 \longrightarrow 00:38:21.418$ And of course, unprocessed red meat.

NOTE Confidence: 0.840570390224457

00:38:21.420 --> 00:38:22.464 As I've already said,

NOTE Confidence: 0.840570390224457

 $00:38:22.464 \longrightarrow 00:38:24.030$ is the worst in terms of

NOTE Confidence: 0.840570390224457

00:38:24.091 --> 00:38:26.079 environmental impact and processed.

NOTE Confidence: 0.840570390224457

 $00:38:26.080 \longrightarrow 00:38:28.404$ Red meat is pretty bad as well,

NOTE Confidence: 0.840570390224457

 $00:38:28.410 \longrightarrow 00:38:30.492$ and then other animal products and

NOTE Confidence: 0.840570390224457

 $00:38:30.492 \dashrightarrow 00:38:32.633$ you see that vegetables and nuts

NOTE Confidence: 0.840570390224457

 $00{:}38{:}32.633 \dashrightarrow 00{:}38{:}34.368$ down the bottom for environmental

NOTE Confidence: 0.840570390224457

 $00:38:34.368 \longrightarrow 00:38:36.641$ impact and also very much to the

NOTE Confidence: 0.840570390224457

00:38:36.641 --> 00:38:38.399 left for relative risk of dying.

00:38:38.400 --> 00:38:41.417 In fact, eating more servings of them.

NOTE Confidence: 0.840570390224457

00:38:41.420 --> 00:38:43.688 Reduces your relative risk of dying,

NOTE Confidence: 0.840570390224457

 $00:38:43.690 \longrightarrow 00:38:46.091$ in contrast to the things to the

NOTE Confidence: 0.840570390224457

00:38:46.091 --> 00:38:48.240 right of that vertical line,

NOTE Confidence: 0.840570390224457

 $00:38:48.240 \longrightarrow 00:38:50.508$ which will increase your relative risk

NOTE Confidence: 0.840570390224457

 $00{:}38{:}50.508 \dashrightarrow 00{:}38{:}54.430$ of dying. And are all animal product.

NOTE Confidence: 0.840570390224457

 $00:38:54.430 \longrightarrow 00:38:56.796$ And on the left hand side what

NOTE Confidence: 0.840570390224457

00:38:56.796 --> 00:39:00.041 you get is the US greenhouse gas

NOTE Confidence: 0.840570390224457

 $00:39:00.041 \longrightarrow 00:39:02.185$ footprints of different diets.

NOTE Confidence: 0.840570390224457

 $00:39:02.190 \longrightarrow 00:39:06.500$ So the average diet at the top is the worst.

NOTE Confidence: 0.840570390224457

 $00{:}39{:}06.500 \dashrightarrow 00{:}39{:}08.655$ A diet with reduced quantities

NOTE Confidence: 0.840570390224457

 $00:39:08.655 \longrightarrow 00:39:10.379$ of meat is better.

NOTE Confidence: 0.840570390224457

 $00:39:10.380 \longrightarrow 00:39:12.480$ A diet with reduced quantities

NOTE Confidence: 0.840570390224457

 $00:39:12.480 \longrightarrow 00:39:14.580$ of meat and no dairy

NOTE Confidence: 0.831040263175964

 $00:39:14.662 \longrightarrow 00:39:15.979$ is better still.

NOTE Confidence: 0.831040263175964

 $00:39:15.980 \longrightarrow 00:39:17.970$ A vegetarian diet is better

 $00:39:17.970 \longrightarrow 00:39:20.515$ still a kind of flexible vegan

NOTE Confidence: 0.831040263175964

 $00{:}39{:}20.515 \dashrightarrow 00{:}39{:}22.875$ diet where you're mostly vegan.

NOTE Confidence: 0.831040263175964

 $00:39:22.880 \longrightarrow 00:39:25.120 2/3$ vegan is better still.

NOTE Confidence: 0.831040263175964

 $00:39:25.120 \longrightarrow 00:39:28.560$ And they can die comes out best of

NOTE Confidence: 0.831040263175964

 $00:39:28.560 \longrightarrow 00:39:32.258$ all in terms of greenhouse gases,

NOTE Confidence: 0.831040263175964

 $00:39:32.260 \longrightarrow 00:39:35.837$ so that's another powerful reason why we.

NOTE Confidence: 0.831040263175964

 $00:39:35.840 \longrightarrow 00:39:38.087$ Or to be shifting in that direction

NOTE Confidence: 0.831040263175964

00:39:38.087 --> 00:39:40.100 in the direction of a vegan diet.

NOTE Confidence: 0.831040263175964

 $00:39:40.100 \longrightarrow 00:39:42.228$ Whether or not you manage to be

NOTE Confidence: 0.831040263175964

00:39:42.228 --> 00:39:44.048 completely vegan or not, I think,

NOTE Confidence: 0.831040263175964

 $00:39:44.048 \longrightarrow 00:39:46.176$ is not really the critical ethical point.

NOTE Confidence: 0.831040263175964

 $00:39:46.180 \dashrightarrow 00:39:48.084$ I think it's moving in that direction

NOTE Confidence: 0.831040263175964

 $00{:}39{:}48.084 \dashrightarrow 00{:}39{:}50.129$ to reduce our greenhouse gas impact.

NOTE Confidence: 0.831040263175964

00:39:50.130 --> 00:39:52.895 And of course your complicity in the

NOTE Confidence: 0.831040263175964

 $00:39:52.895 \longrightarrow 00:39:54.900$ animal suffering that I've shown.

00:39:54.900 --> 00:39:55.752 Now very briefly,

NOTE Confidence: 0.831040263175964

00:39:55.752 --> 00:39:58.092 'cause I do want to make sure that

NOTE Confidence: 0.831040263175964

 $00:39:58.092 \longrightarrow 00:40:00.080$ I have time for questions just a

NOTE Confidence: 0.831040263175964

 $00:40:00.080 \longrightarrow 00:40:02.049$ minute so he's gone wrong there.

NOTE Confidence: 0.831040263175964

00:40:02.050 --> 00:40:03.073 OK, very briefly,

NOTE Confidence: 0.831040263175964

00:40:03.073 --> 00:40:06.779 I want to say a little bit about pandemics.

NOTE Confidence: 0.831040263175964

 $00:40:06.780 \longrightarrow 00:40:09.924$ Since we're in the middle of that situation.

NOTE Confidence: 0.831040263175964

 $00:40:09.930 \longrightarrow 00:40:16.716$ We we know that the present pandemic has

NOTE Confidence: 0.831040263175964

 $00:40:16.716 \longrightarrow 00:40:22.142$ arisen from the transmission of viruses

NOTE Confidence: 0.831040263175964

 $00:40:22.142 \longrightarrow 00:40:28.330$ from non human wild animals to humans.

NOTE Confidence: 0.831040263175964

 $00{:}40{:}28.330 \longrightarrow 00{:}40{:}31.298$ It's believed that the Corona of the

NOTE Confidence: 0.831040263175964

 $00:40:31.298 \longrightarrow 00:40:33.749$ novel coronavirus has come from bats.

NOTE Confidence: 0.831040263175964

00:40:33.750 --> 00:40:36.204 That's the most likely and probably

NOTE Confidence: 0.831040263175964

 $00{:}40{:}36.204 \dashrightarrow 00{:}40{:}38.760$ transmitted from bats preps to pangolins,

NOTE Confidence: 0.831040263175964

 $00:40:38.760 \longrightarrow 00:40:42.930$ which is a an animal that is eaten in China.

NOTE Confidence: 0.831040263175964

 $00{:}40{:}42.930 \dashrightarrow 00{:}40{:}45.835$ Prize is a delicacy and it's thought,

00:40:45.840 --> 00:40:47.636 although it's not completely

NOTE Confidence: 0.831040263175964

 $00{:}40{:}47.636 \dashrightarrow 00{:}40{:}49.881$ certain that the transmission came

NOTE Confidence: 0.831040263175964

 $00:40:49.881 \longrightarrow 00:40:51.728$ through the Wuhan wet market.

NOTE Confidence: 0.831040263175964

00:40:51.730 --> 00:40:54.313 If you're not familiar with water wet

NOTE Confidence: 0.831040263175964

00:40:54.313 --> 00:40:57.236 market is it's a market at which live

NOTE Confidence: 0.831040263175964

 $00:40:57.236 \longrightarrow 00:40:59.759$ animals are caged and held by stalls.

NOTE Confidence: 0.831040263175964

00:40:59.760 --> 00:41:01.585 The customer comes along points

NOTE Confidence: 0.831040263175964

 $00:41:01.585 \longrightarrow 00:41:03.045$ to an animal says,

NOTE Confidence: 0.831040263175964

 $00:41:03.050 \longrightarrow 00:41:06.098$ I'll have that one and the animals then

NOTE Confidence: 0.831040263175964

 $00:41:06.098 \longrightarrow 00:41:08.927$ slaughtered on the spot and the corpse of

NOTE Confidence: 0.831040263175964

00:41:08.927 --> 00:41:11.810 the animal is handed over to the customer,

NOTE Confidence: 0.831040263175964

 $00:41:11.810 \longrightarrow 00:41:15.086$ who is then going to eat it.

NOTE Confidence: 0.831040263175964 00:41:15.090 --> 00:41:15.502 Obviously, NOTE Confidence: 0.831040263175964

00:41:15.502 --> 00:41:17.974 if you have many different species

NOTE Confidence: 0.831040263175964

 $00:41:17.974 \longrightarrow 00:41:20.900$ of animals as the Wuhan market has

 $00:41:20.900 \longrightarrow 00:41:23.330$ wild animals being caught because for

NOTE Confidence: 0.831040263175964

 $00{:}41{:}23.399 \dashrightarrow 00{:}41{:}25.703$ one reason or another there regarded

NOTE Confidence: 0.831040263175964

 $00:41:25.703 \longrightarrow 00:41:28.497$ as something to be eaten in China,

NOTE Confidence: 0.831040263175964

00:41:28.497 --> 00:41:31.430 then you get different species mixing and

NOTE Confidence: 0.831040263175964

 $00:41:31.511 \longrightarrow 00:41:34.527$ you get you have humans around there too.

NOTE Confidence: 0.831040263175964

 $00:41:34.530 \longrightarrow 00:41:36.555$ So viruses can be transmitted

NOTE Confidence: 0.831040263175964

 $00:41:36.555 \longrightarrow 00:41:38.580$ from one to the other.

NOTE Confidence: 0.831040263175964

00:41:38.580 --> 00:41:41.562 You have a sensually the animals shitting

NOTE Confidence: 0.831040263175964

 $00{:}41{:}41.562 \dashrightarrow 00{:}41{:}45.056$ all over the place on top of each other,

NOTE Confidence: 0.831040263175964

 $00:41:45.060 \longrightarrow 00:41:47.140$ and that's another source of.

NOTE Confidence: 0.831040263175964

 $00:41:47.140 \longrightarrow 00:41:48.216$ Poor hygiene,

NOTE Confidence: 0.831040263175964 00:41:48.216 --> 00:41:48.754 clearly.

NOTE Confidence: 0.831040263175964

 $00:41:48.754 \longrightarrow 00:41:52.520$ And then you have the animals being

NOTE Confidence: 0.831040263175964

 $00{:}41{:}52.619 \dashrightarrow 00{:}41{:}55.847$ slaughtered on the same table and

NOTE Confidence: 0.831040263175964

 $00:41:55.847 \longrightarrow 00:41:59.118$ the blood running around it as well.

NOTE Confidence: 0.831040263175964

 $00:41:59.120 \longrightarrow 00:42:01.495$ So they're very unhygienic places

 $00:42:01.495 \longrightarrow 00:42:04.483$ and it's very likely that that's

NOTE Confidence: 0.831040263175964

 $00:42:04.483 \longrightarrow 00:42:07.627$ why we are suffering through the

NOTE Confidence: 0.831040263175964

 $00:42:07.627 \longrightarrow 00:42:10.411$ coronavirus pandemic with all of

NOTE Confidence: 0.831040263175964

00:42:10.411 --> 00:42:12.667 its enormous economic implications,

NOTE Confidence: 0.831040263175964

 $00:42:12.670 \longrightarrow 00:42:15.508$ as well as having killed well

NOTE Confidence: 0.831040263175964

 $00:42:15.508 \longrightarrow 00:42:18.430$ over a million people worldwide.

NOTE Confidence: 0.831040263175964

00:42:18.430 --> 00:42:20.560 238 thousand Americans, I think,

NOTE Confidence: 0.831040263175964

 $00{:}42{:}20.560 \dashrightarrow 00{:}42{:}24.200$ was the last figure that I saw.

NOTE Confidence: 0.831040263175964

00:42:24.200 --> 00:42:26.342 So certainly we want to reduce

NOTE Confidence: 0.831040263175964

 $00{:}42{:}26.342 \dashrightarrow 00{:}42{:}28.503$ the risks of pandemics and trying

NOTE Confidence: 0.831040263175964

 $00:42:28.503 \longrightarrow 00:42:30.483$ to get wet markets closed would

NOTE Confidence: 0.831040263175964

 $00:42:30.483 \longrightarrow 00:42:32.428$ be one way of doing that.

NOTE Confidence: 0.831040263175964

 $00{:}42{:}32.430 \dashrightarrow 00{:}42{:}35.538$ But there is another risk as well.

NOTE Confidence: 0.831040263175964

 $00:42:35.540 \longrightarrow 00:42:38.284$ Which is closer to home and more within

NOTE Confidence: 0.831040263175964

 $00:42:38.284 \longrightarrow 00:42:41.278$ our power and that is factory farms again,

 $00:42:41.280 \longrightarrow 00:42:43.566$ so the previous pandemic to this

NOTE Confidence: 0.831040263175964

 $00{:}42{:}43.566 \dashrightarrow 00{:}42{:}45.090$ novel coronavirus pandemic was

NOTE Confidence: 0.831040263175964

 $00:42:45.154 \longrightarrow 00:42:47.026$ the swine flu pandemic of 2009.

NOTE Confidence: 0.864011406898499

 $00:42:47.030 \longrightarrow 00:42:49.136$ You might say, how come I

NOTE Confidence: 0.864011406898499

 $00:42:49.136 \longrightarrow 00:42:50.980$ didn't hear much about that?

NOTE Confidence: 0.864011406898499

00:42:50.980 --> 00:42:53.128 Certainly, compared to the present pandemic,

NOTE Confidence: 0.864011406898499

 $00:42:53.130 \longrightarrow 00:42:56.352$ you didn't hear very much about it at all.

NOTE Confidence: 0.864011406898499

 $00:42:56.360 \longrightarrow 00:42:59.186$ The reason for that is that most of the

NOTE Confidence: 0.864011406898499

00:42:59.186 --> 00:43:01.860 people who killed were in low income

NOTE Confidence: 0.864011406898499

00:43:01.860 --> 00:43:04.618 countries didn't kill many Americans at all,

NOTE Confidence: 0.864011406898499

 $00:43:04.620 \longrightarrow 00:43:06.470$ but it did kill the.

NOTE Confidence: 0.864011406898499

 $00:43:06.470 \longrightarrow 00:43:07.511$ The estimates vary,

NOTE Confidence: 0.864011406898499

00:43:07.511 --> 00:43:09.246 but it certainly killed hundreds

NOTE Confidence: 0.864011406898499

 $00:43:09.246 \longrightarrow 00:43:10.530$ of thousands of people,

NOTE Confidence: 0.864011406898499

 $00:43:10.530 \longrightarrow 00:43:13.167$ and I think that you an estimate went up

NOTE Confidence: 0.864011406898499

 $00:43:13.167 \longrightarrow 00:43:16.032$ to over half a million or the movie was

 $00:43:16.032 \longrightarrow 00:43:18.976$ the CDC's or the World Health Organization.

NOTE Confidence: 0.864011406898499

 $00{:}43{:}18.980 \dashrightarrow 00{:}43{:}20.555$ Can't remember there was an

NOTE Confidence: 0.864011406898499

00:43:20.555 --> 00:43:22.690 estimate of over half a million,

NOTE Confidence: 0.864011406898499

 $00:43:22.690 \longrightarrow 00:43:25.394$ so it killed quite a lot of people,

NOTE Confidence: 0.864011406898499

 $00:43:25.400 \longrightarrow 00:43:27.626$ and it appears to have begun an

NOTE Confidence: 0.864011406898499

00:43:27.626 --> 00:43:29.788 intensive pig farm in North Carolina,

NOTE Confidence: 0.864011406898499

 $00:43:29.790 \longrightarrow 00:43:31.722$ so it's possible that it began

NOTE Confidence: 0.864011406898499

 $00{:}43{:}31.722 \dashrightarrow 00{:}43{:}33.510$ intensive pig farm in Mexico.

NOTE Confidence: 0.864011406898499

 $00:43:33.510 \longrightarrow 00:43:36.278$ I think there's was detected in both places.

NOTE Confidence: 0.864011406898499

 $00:43:36.280 \longrightarrow 00:43:38.740$ But scientists looking at factory farms

NOTE Confidence: 0.864011406898499

 $00:43:38.740 \longrightarrow 00:43:42.337$ have said if you wanted to create an

NOTE Confidence: 0.864011406898499

 $00:43:42.337 \longrightarrow 00:43:44.692$ environment for breathing new viruses.

NOTE Confidence: 0.864011406898499

00:43:44.700 --> 00:43:46.092 What would you do?

NOTE Confidence: 0.864011406898499

00:43:46.092 --> 00:43:48.180 You would take thousands of animals,

NOTE Confidence: 0.864011406898499

 $00:43:48.180 \longrightarrow 00:43:49.920$ you would crowd them together.

00:43:49.920 --> 00:43:50.964 Indoors you would.

NOTE Confidence: 0.864011406898499

 $00:43:50.964 \longrightarrow 00:43:53.400$ There would be stressed from the crowding.

NOTE Confidence: 0.864011406898499

 $00:43:53.400 \longrightarrow 00:43:55.512$ So their immune systems would be

NOTE Confidence: 0.864011406898499

 $00:43:55.512 \longrightarrow 00:43:57.654$ weakened and viruses would be able

NOTE Confidence: 0.864011406898499

00:43:57.654 --> 00:43:59.319 to spread rapidly through them.

NOTE Confidence: 0.864011406898499

00:43:59.320 --> 00:44:01.686 And then you would have humans who

NOTE Confidence: 0.864011406898499

 $00:44:01.686 \longrightarrow 00:44:04.173$ handle these animals in various ways to

NOTE Confidence: 0.864011406898499

 $00:44:04.173 \longrightarrow 00:44:06.279$ whom the viruses could be transferred.

NOTE Confidence: 0.864011406898499

 $00:44:06.280 \longrightarrow 00:44:08.380$ And that's exactly what we've done.

NOTE Confidence: 0.864011406898499

 $00:44:08.380 \longrightarrow 00:44:10.732$ Said we have already had the

NOTE Confidence: 0.864011406898499

 $00{:}44{:}10.732 \dashrightarrow 00{:}44{:}11.908$ swine flu pandemic.

NOTE Confidence: 0.864011406898499

 $00:44:11.910 \longrightarrow 00:44:14.064$ They were also avian flu that

NOTE Confidence: 0.864011406898499

 $00{:}44{:}14.064 \dashrightarrow 00{:}44{:}16.610$ came out of chicken factory farms.

NOTE Confidence: 0.864011406898499

 $00:44:16.610 \longrightarrow 00:44:19.298$ So if we're serious now that we've

NOTE Confidence: 0.864011406898499

00:44:19.298 --> 00:44:21.710 seen how devastating pandemics can be,

NOTE Confidence: 0.864011406898499

 $00:44:21.710 \longrightarrow 00:44:24.838$ both in terms of loss of human life,

00:44:24.840 --> 00:44:27.198 illness and damage to the economy,

NOTE Confidence: 0.864011406898499

 $00:44:27.200 \longrightarrow 00:44:29.438$ then we ought to be thinking

NOTE Confidence: 0.864011406898499

00:44:29.438 --> 00:44:30.930 seriously about ending factory

NOTE Confidence: 0.864011406898499

00:44:30.998 --> 00:44:33.609 farms and one more health issue not

NOTE Confidence: 0.864011406898499

00:44:33.609 --> 00:44:35.430 specifically related to pandemics,

NOTE Confidence: 0.864011406898499

 $00:44:35.430 \longrightarrow 00:44:37.006$ but possibly could be.

NOTE Confidence: 0.864011406898499

 $00:44:37.006 \longrightarrow 00:44:39.370$ Is that because these animals are?

NOTE Confidence: 0.864011406898499

 $00{:}44{:}39.370 \dashrightarrow 00{:}44{:}42.472$ Stressed it's standard in many cases

NOTE Confidence: 0.864011406898499

 $00{:}44{:}42.472 \longrightarrow 00{:}44{:}46.241$ to routinely give them low doses of

NOTE Confidence: 0.864011406898499

 $00{:}44{:}46.241 \dashrightarrow 00{:}44{:}48.916$ antibiotics to improve their survival

NOTE Confidence: 0.864011406898499

 $00:44:48.916 \longrightarrow 00:44:51.917$ and growth to keep them healthy.

NOTE Confidence: 0.864011406898499

 $00:44:51.920 \longrightarrow 00:44:54.545$ But that of course means

NOTE Confidence: 0.864011406898499

 $00:44:54.545 \longrightarrow 00:44:56.120$ that bacteria become.

NOTE Confidence: 0.864011406898499

 $00:44:56.120 \longrightarrow 00:45:00.272$ Develop resistance to the.

NOTE Confidence: 0.864011406898499

00:45:00.272 --> 00:45:02.402 Antibiotics, the animals reading,

 $00:45:02.402 \longrightarrow 00:45:04.950$ and that's a well known health risk.

NOTE Confidence: 0.864011406898499

 $00{:}45{:}04.950 \dashrightarrow 00{:}45{:}06.912$ So we're not talking about viruses

NOTE Confidence: 0.864011406898499

 $00{:}45{:}06.912 \dashrightarrow 00{:}45{:}08.697$ now 'cause we're talking bout

NOTE Confidence: 0.864011406898499

 $00{:}45{:}08.697 \dashrightarrow 00{:}45{:}10.777$ antibiotics were talking about bacteria,

NOTE Confidence: 0.864011406898499

00:45:10.780 --> 00:45:12.236 but resistant bacteria are

NOTE Confidence: 0.864011406898499

00:45:12.236 --> 00:45:14.420 already a well known health risk.

NOTE Confidence: 0.864011406898499

00:45:14.420 --> 00:45:15.804 For example, Golden staff.

NOTE Confidence: 0.864011406898499

 $00:45:15.804 \longrightarrow 00:45:18.332$ And if we lose the ability of

NOTE Confidence: 0.864011406898499

 $00{:}45{:}18.332 \dashrightarrow 00{:}45{:}20.237$ our antibiotics to control them,

NOTE Confidence: 0.864011406898499

 $00:45:20.240 \longrightarrow 00:45:23.257$ we could also be in very serious

NOTE Confidence: 0.864011406898499

00:45:23.257 --> 00:45:24.119 health problems.

NOTE Confidence: 0.864011406898499

 $00:45:24.120 \longrightarrow 00:45:26.549$ So with that I'm going to stop.

NOTE Confidence: 0.864011406898499

00:45:26.550 --> 00:45:28.285 I'm looking forward to your

NOTE Confidence: 0.864011406898499

 $00:45:28.285 \longrightarrow 00:45:29.326$ questions and discussions.

NOTE Confidence: 0.86401140689849900:45:29.330 --> 00:45:30.028 Thank you.