

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

AMERICAN SOCIETY FOR THE PREVENTION
OF THE CRUELTY TO ANIMALS, ET AL.,

Plaintiffs,

vs.

FELD ENTERTAINMENT, INC.,

Defendant.

CA No. 03-2006
Washington, DC
February 10, 2009
2:30 p.m.

PM Session,

TRANSCRIPT OF BENCH TRIAL
BEFORE THE HONORABLE EMMET G. SULLIVAN
UNITED STATES DISTRICT JUDGE

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I N D E X

WITNESS

DIRECT

CROSS

REDIRECT

RECROSS

For the Plaintiff:

BENJAMIN HART, Ph.D	6/26/35	72	110/122	116
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P R O C E E D I N G S

THE COURT: Ms. Meyer, let me apologize to you for cutting off at the pass your reader. I should let you do that. It's your case in chief. You were introducing presumably admissions of the parties?

MS. MEYER: Yes, Your Honor.

THE COURT: I should let you do that. The question becomes, were they going to be a segue into this testimony or not? If not, then there's no harm. If it is, I want to be fair with you about that. I want you to make your case.

MS. MEYER: I think we're okay, Your Honor --

OFF THE RECORD DISCUSSION

THE COURT: I want to give you the chance to do that. If you'd planned to do that, and I thought you had, I should not have --

MS. MEYER: I had planned to do it before Ms.

1 Sinnott's testimony, and it relates to what Ms. Sinnott was
2 testifying about the transportation orders, because as you
3 saw, she relied heavily on the --

4 THE COURT: Her testimony was extremely helpful in
5 trying to understand those charts.

6 MS. MEYER: So I think we're okay in terms of -- as
7 long as the testimony that we wanted admitted into evidence is
8 now admitted into evidence, we can rely on it, and that will
9 be fine.

10 THE COURT: I provisionally allowed the charts to
11 come in, subject to whatever weight, if any, I give them. So
12 again, I want to be fair. If there are admissions that you
13 wanted to introduce of your party opponent, I want to be fair
14 about that and give you a chance to do that.

15 MS. MEYER: I guess, Your Honor, what I'm talking
16 about is if the rest of the testimony that we wanted to use
17 from the 30(b)(6) deposition can just be admitted into
18 evidence, which is what I understood you to say earlier today,
19 I think we're fine with it. You don't have to hear it orally.
20 Is that right?

21 THE COURT: All right. Unless you think I will
22 really derive a benefit from it. Obviously it was serious
23 enough, important enough for you to block off 30 minutes of
24 time to read it. So again, I just want the record clear, I'm
25 affording you the opportunity. I'll be happy to listen to it,

1 really.

2 MS. MEYER: I think we can go ahead and rely on the
3 deposition testimony now that it's been admitted into
4 evidence, without having to read it to you.

5 THE COURT: All right. That's fine. Call your
6 witness.

7 MR. GLITZENSTEIN: We recall Dr. Hart to the stand.

8 THE COURT: All right.

9 MR. GLITZENSTEIN: One quick housekeeping matter.
10 For the brief on agency authority that is presently due
11 tomorrow at noon --

12 THE COURT: If you need more time, that's fine.

13 MR. GLITZENSTEIN: We were going to ask for one
14 additional day, so it would be due Thursday at noon, and I
15 think that would be true for defense counsel as well.

16 MR. SIMPSON: No objection.

17 THE COURT: Sure. If you need Friday, that's fine.
18 I just, I'd like the benefit of your best thoughts, and I'm
19 sure I'll get the benefit of your best thoughts. If you need
20 Friday, that's fine as well.

21 MR. GLITZENSTEIN: I think if we could do it by
22 Friday, that would be fantastic, Your Honor. Our submission
23 at least would be a lot more coherent if we have that time.

24 THE COURT: That's fine.

25 MR. GLITZENSTEIN: Thank you.

1 THE COURT: Actually, am I going to read it this
2 weekend? I probably won't, only because there are some other
3 matters I have to deal with on Friday. So, there is a holiday
4 coming up. It seems to me that this trial is going to be
5 going on for a while. If I get it -- if you want to file it
6 over the weekend, counsel want to file it over the weekend,
7 that's fine. If you want to file it on Monday, that's fine.

8 MR. GLITZENSTEIN: I think Monday is a holiday. I
9 don't know. We can still file it by then.

10 MR. SIMPSON: They all kind of blend together.

11 MR. GLITZENSTEIN: I think if we can get till
12 Friday, we'd be fine.

13 THE COURT: Friday noon then.

14 MR. GLITZENSTEIN: Thank you. Appreciate the
15 latitude on that.

16 Good afternoon, Dr. Hart.

17 THE WITNESS: Good afternoon.

18 DIRECT EXAMINATION CONTINUED

19 BY MR. GLITZENSTEIN:

20 Q. I think when we finished off we were talking about your
21 research on brain cognition in elephants. We put up on the
22 screen, I want to identify this and make sure that this is the
23 same publication we're talking about. It reads "Large brains
24 and cognition: Where do elephants fit in?" Is that correct?

25 A. That's correct.

1 Q. And this is the publication in which you discussed the
2 research you were talking about, where elephants compare with
3 other animals?

4 A. That's right.

5 Q. If we can look at Page 7 of that. That is the seventh
6 page of that publication. Figure 1. And if you could just
7 look at -- sorry, Figure 2. If you could just describe for
8 Judge Sullivan what that represents and how it correlates with
9 the description you were giving a little bit earlier.

10 A. Your Honor, I had mentioned earlier that the elephant's
11 brain was three times the volume of the human brain. And it's
12 pictured here, you can see, if you take the total volume, it
13 is much larger, as it is of the chimpanzee brain. So it
14 represents in a scale drawing what we know to be true.

15 Q. And if we could then look over at two pages later, Page
16 9, the ninth page, Figure 3. And again, what does this figure
17 depict?

18 A. This figure represents the modeling of the neurons in
19 the elephant brain compared with the primate brain of human
20 and chimpanzee, where, as I was explaining, the neurons in the
21 elephant brain are spread out. They are more globally
22 reaching across the cerebral cortex, allowing the animal to
23 have access to all domains in the cerebral cortex, memory,
24 sensory input. And the human brain and the chimpanzee brain,
25 it's been found by neurobiologists that a lot of action goes

1 on locally, in concentrated neurons, more intrinsic local
2 action for fast action, say quick, fine-grained activities.

3 Q. And I think before you were making some reference to
4 this information as it may relate to elephant memory and other
5 capacities?

6 A. Well, yes, it is. I mean how do elephants really
7 excel? That is a long-term memory. And you can see how this
8 type of a brain organization, that is the hard wiring, is
9 going to give the animal access to memories of distant water
10 holes or forage areas, maybe as much as 35 years ago, in one
11 report in the literature, water holes that are 40 miles apart.
12 Knowing which one is closest when you're out in the middle of
13 nowhere. Social details, details about dialects or parts of
14 the vocalization to different elephants, remembering so many
15 elephants, remembering chemosensory smells, a domain of
16 factors that play into memory.

17 Q. And if we can just go to the end of this publication.
18 The last couple of pages starting with the references.
19 Looking this over, I counted 87 different publications that
20 you cite at the end of this piece of work. Does that sound
21 about right?

22 A. That's about right.

23 Q. Did you read all of those 87 publications in order to
24 prepare this?

25 A. Yes.

1 Q. Now, what kind of a paper is this paper called?

2 A. This is called a review paper.

3 Q. What does that mean?

4 A. Well, there are two kinds of review papers. One is
5 just kind of review what has been known and you don't add
6 anything into it. This one in this particular journal, you
7 specialize in bringing together information from wide, diverse
8 resources, and coming up with some information that really
9 wasn't all that clear before. So that's what this review
10 paper was. You're bringing things together that are well
11 established but they've never been brought together in that
12 way before.

13 Q. As far as you know, is this the only paper which
14 engages in that kind of review with respect to elephant
15 cognition?

16 A. Well, it is of this type, except that we had a chapter
17 in a book that was published the year before, of a smaller
18 version of this, and that's referenced here.

19 Q. And what publication is this article published in?

20 A. This one, the chapter was in the Evolution of Nervous
21 Systems, a four-volume work by a leading National Academy of
22 Science editor. And when we asked our colleague at Davis
23 who's a specialist in neurobiology and large brains if she'd
24 look at this paper and give us some feedback, she said look,
25 look, Dr. Hart, can you give us in very short order a chapter

1 for this to put in our book? It's going to go to press in a
2 couple of months, but we'd really love to have this in there
3 because there's nothing like this in the literature and it
4 would make the book more complete. So that was put together
5 while we were working on this longer, more definitive paper.

6 MR. SHEA: I object to the hearsay portion, move to
7 strike it.

8 THE COURT: To the extent it impacted his state of
9 mind and what he did afterwards, I'll allow it, not for the
10 truth of the matter asserted. But you did something in
11 response to that request?

12 THE WITNESS: That's right.

13 BY MR. GLITZENSTEIN:

14 Q. This particular one that's up on the screen says
15 Neuroscience and Biobehavioral Review, is that --

16 A. That is a journal name.

17 Q. And is that a reputable --

18 A. It's a very highly respected journal.

19 Q. Is it hard to get articles placed in that publication?

20 MR. SHEA: Objection. Objection.

21 THE COURT: It's somewhat argumentative also. What
22 is the process for getting articles placed in that
23 publication?

24 THE WITNESS: You submit an article and it is --
25 the editor sends it out to specialists to review, and then the

1 editor looks at them and decides if it's going to go in the
2 journal, if it meets certain standards, and what kind of
3 modifications you might be asked to make to get that in there.

4 BY MR. GLITZENSTEIN:

5 Q. In preparing this article, did you discuss elephant
6 behavior and cognition with other experts?

7 A. Indeed. We have colleagues on the Davis campus; they
8 were acknowledged. It was sent to people who know elephant
9 behavior very well. I did that as well. So it has been
10 looked at from a behavior standpoint and from the standpoint
11 of specialists in neurobiology of large brains.

12 Q. Have you participated in conferences and symposia based
13 upon your research into elephant cognition?

14 A. I participated in two symposia based on this work. One
15 was in 2005, an invitation to participate in a symposium on
16 cognition at the Animal Behavior Society meeting. And
17 secondly, last summer, in August 2008, to participate in a
18 conference on minds of animals. And those are the two where
19 we discussed this work.

20 Q. Other than the field research and the review that we've
21 been talking about and the other aspects of your background,
22 have there been any other opportunities for you to observe
23 elephants, either in captive situations or in the wild?

24 A. Well, there have been, I mean, in some way. We
25 traveled to Asia when we were looking over the study sites,

1 and spent time watching elephants out there. And the same
2 with Africa. As I mentioned before, my wife has a graduate
3 student, she's now a postdoctoral person, who is doing
4 research on seismic communication. And that was done in
5 Africa as well. So I've been to that study site where they
6 were looking at a water hole. Playback studies and recording
7 studies of elephants visiting a water hole. And spent a
8 couple weeks at those study sites watching those elephants
9 carefully. My wife was a participant in these studies, but I
10 went along to help and observe, see what was going on.

11 Q. Do you consider yourself an expert in animal behavior?

12 A. Yes, I do.

13 Q. Do you consider yourself an expert in elephant
14 cognition and behavior?

15 A. Yes, I do.

16 MR. GLITZENSTEIN: Your Honor, I tender Dr. Hart as
17 an expert in those topics.

18 THE COURT: Any voir dire?

19 MR. SHEA: Yes, Your Honor.

20 VOIR DIRE EXAMINATION

21 BY MR. SHEA:

22 Q. Good afternoon, Dr. Hart.

23 A. Good afternoon.

24 Q. Dr. Hart, you have never been in private veterinary
25 practice, have you?

1 A. No, I have not.

2 Q. You have been an expert witness in several prior
3 matters, is that correct?

4 A. Yes, I have.

5 Q. And those matters involve dogs and cats, is that true?

6 A. Dogs and cats. There's one involving goats.

7 Q. Any others?

8 A. Actually it didn't involve cats; it's been dogs and
9 goats. That's it for right now.

10 Q. This is the first case in which you're testifying about
11 elephants, correct?

12 A. Yes, it is.

13 Q. Some of the topics, Dr. Hart, of your current research
14 are behavioral profiles on breeds of dogs, is that correct?

15 A. That's correct.

16 Q. Another is behavioral profiles on different breeds of
17 cats, correct?

18 A. That's right.

19 Q. Another is the phenomenon of grass eating by cats,
20 correct?

21 A. That's right.

22 Q. Another -- well, that was a follow-up to the project
23 you did on why dogs eat grass, is that true?

24 A. That's true.

25 Q. And another one is the value of companion animals for

1 people with AIDS, correct?

2 A. That's true.

3 Q. None of your current research involves elephants,
4 correct?

5 A. Current research with regard to field studies, but the
6 interest in elephant biology and elephant cognition is an
7 ongoing topic. For example, I have been asked to write a
8 chapter for a book that is coming out of this Animal Mind
9 Symposium that is -- that I haven't written yet, that is for
10 the future. I have been asked to participate. So again, it's
11 an ongoing process with regard to studying the latest on
12 elephant behavior and biology.

13 Q. And that ongoing work that you mentioned is reviewing
14 the literature rather than doing empirical studies, correct?

15 A. Rather than being out in the field.

16 Q. The articles that you've published after writing your
17 report in this case do not involve elephants, do they?

18 A. No. You have the publications in front of you there.

19 Q. Dr. Hart, the example of ongoing research that you gave
20 me in our deposition was an article involving why dogs eat
21 grass, is that true?

22 A. That's true.

23 Q. And you've published only four articles that involve
24 elephants, correct?

25 A. That's true.

1 Q. And you've gone through three of those articles today,
2 true?

3 A. I think we touched on all four, I mean, the book
4 chapter and that final one in 2008, and these other two on the
5 fly switching tool use.

6 Q. Dr. Hart, the 2008 cognition article that was shown to
7 the Court is a longer version of the 2007 cognition book
8 chapter that you wrote, did I understand that correctly?

9 A. That's right, with more extensive discussion and more
10 complete coverage.

11 Q. When I asked for a typical example of your research at
12 deposition, you told me that you were one of the leaders in
13 urine marking by cats, correct?

14 A. That's right.

15 Q. And you pointed out to me at deposition that your
16 research on urine marking by cats had nothing to do with
17 elephants, correct?

18 A. If I recall that conversation, I was referring to the
19 urine marking itself not being related to elephants. But
20 anytime you're involved in study design, it gives you an
21 overall perspective of how to look at literature and how to
22 interpret things, regardless of the animal species.

23 Q. I see. Dr. Hart, let me show you Page 55 of your
24 deposition, beginning on line 8. Sorry, beginning on line 20.
25 I asked, question: Now, you as a part of your behavioral

1 service you conducted medical research on animals, correct?

2 A. You asked that, yes.

3 Q. Answer: Yes, we did. Question: Okay. Were those
4 animals given drugs as part of that research? Answer: That's
5 right. I can give you if you want a typical example.

6 Question: That would be fine. Please.

7 Answer: We were one of the leaders in urine
8 marking by cats -- by the way, it's not elephants -- urine
9 marking by cats in the house. It's a major problem that pet
10 owners have, and we could try all kinds of behavioral
11 manipulations and usually not solve the problem. So we tried
12 one of the psychotropic drugs, the trademark is Prozac, or
13 fluoxetine, and found, you know, in a few pilot animals, found
14 that it stopped the behavior.

15 So then we set up a clinical trial, so then we
16 outlined a trial with a placebo group and a drug group, and
17 then we recruit cats that come in, or we send letters to
18 veterinarians in the surrounding areas and we say we're
19 conducting this trial on urine marking, if you have clients
20 who have such a cat, we've got some sponsorship on this trial,
21 we will do a physical exam, maintain contact with the client
22 and then we will have the drug administered, sent to that
23 client, that either may be a coated drug, a placebo, or a
24 drug, and we will keep track of the urine marking by calling
25 the owner on a weekly basis and having him fill out a form.

1 So that is a typical medical paradigm. You might
2 be testing drugs for arthritis and do the same design. We
3 were using it for a behavioral pattern.

4 Did I read your testimony correctly, Dr. Hart?

5 A. Yes.

6 Q. Dr. Hart, you've written no articles about the
7 veterinary care of elephants, true?

8 A. That's right.

9 Q. Now, as you've mentioned today, you assisted your wife
10 and her graduate student with some research on seismic
11 communication in elephants, correct?

12 A. That's right.

13 Q. This was not your research as author or lead
14 investigator, was it?

15 A. That's true.

16 Q. And those articles have not been completed yet,
17 correct?

18 A. Some have. I don't think they are mentioned here in
19 the literature that has been cited, but I know of one.

20 Q. I thought I understood you to say this morning that
21 that research had not been completed?

22 A. That was in India, and I thought your question was
23 referring to work on elephants in general. And some of the
24 work in Africa, in Namibia, at the Etosha National Park, has
25 been.

1 Q. Dr. Hart, has that study been published yet?

2 A. Well, it's several papers and I cannot tell you at the
3 moment exactly which ones have been, but some of that work has
4 come out.

5 Q. Dr. Hart, you have not conducted empirical research on
6 elephants except for your fly switching studies and helping
7 with your wife's elephant seismic studies, correct?

8 A. That's true.

9 MR. GLITZENSTEIN: There's no definition of
10 empirical research means.

11 THE COURT: Do you understand the question?

12 THE WITNESS: My understanding is he's talking
13 about being in the field and observing animals, not looking at
14 empirical studies, looking at empirical studies -- and you can
15 call that research, that is literature research, you're
16 looking at empirical studies. Depends on how you interpret.

17 THE COURT: Why don't you rephrase the question so
18 there's no misunderstanding about what you're asking.

19 MR. SHEA: Your Honor, I may be able to clear this
20 up by showing him his deposition, beginning on Page 97, line
21 8.

22 BY MR. SHEA:

23 Q. Dr. Hart, if you would read with me. Page 97, line 7.
24 I apologize. I asked a question: Have you conducted any
25 empirical research on elephants other than your research on

1 fly switching behavior? Answer: No.

2 And then you said: Oh, can I -- Question: If
3 you need to clarify, please do. Answer: My wife, Lynette
4 Hart, collaborates with a graduate student, Caitlin Rodwell
5 O'Connell, on the seismic communication in elephants, and they
6 publish together, and that deals with elephants when they make
7 low-pitched rumbles, the energy, some of the energy is
8 transmitted into the feet, and then it's transmitted into
9 Rayleigh waves in the ground -- R-A-L-I-E, something like
10 that. I'm not sure of the spelling.

11 Did I read that correctly?

12 A. That's right, you did. I might add then your question
13 about empirical research was -- within this context it would
14 refer to in the field.

15 Q. In the field where you're gathering data, correct?

16 A. Yes.

17 Q. Now, Dr. Hart, you have performed no studies on
18 stereotypic behavior in wild elephants, correct?

19 A. No, I haven't. I've never seen it.

20 Q. You have performed no studies on stereotypic behavior
21 in captive elephants, correct?

22 A. Sorry. Say that again.

23 Q. You have performed no studies on stereotypic behavior
24 in captive elephants, correct?

25 A. That's true. The captive elephants I'm experienced

1 with in India, I have not seen it.

2 Q. You have performed no studies on the welfare of
3 elephants that are transported or -- well, strike that. Dr.
4 Hart, you've also performed no studies on the effects of ankus
5 use on elephant behavior, have you?

6 A. What kind of use?

7 Q. Ankus?

8 A. The bull hook? No, I haven't.

9 Q. And you have performed no studies on the effects of
10 ankus use on elephant cognition, correct?

11 A. The use of bull hooks on cognition, no, I have not.

12 Q. And you have performed no studies on the effects of
13 ankus use on elephant welfare, correct?

14 A. No, I have not performed studies on that.

15 Q. And you have performed no studies on ankus use on
16 elephant emotions, correct?

17 A. No direct studies, no.

18 Q. Dr. Hart, you've performed no studies on tethering or
19 chain use on elephant behavior, have you?

20 A. No, I have not.

21 Q. And you've performed no studies on elephant -- or on
22 the use of chains with elephants and effects on cognition,
23 have you?

24 A. No.

25 Q. And you've performed no studies on the use of chains

1 with elephants and elephant welfare, correct?

2 A. No studies per se.

3 Q. And you've performed no studies on the use of chains
4 with elephants on elephant emotions, correct?

5 A. No studies per se.

6 Q. You're not a member of the Elephant Managers
7 Association, are you?

8 A. I am not.

9 Q. You're not a member of the International Elephant
10 Foundation, correct?

11 A. I am not.

12 Q. Not a member of the American Zoo and Aquarium
13 Association, correct?

14 A. No, I'm not.

15 Q. And you're not a member of the Elephant Taxon Advisory
16 Group of the American Zoo and Aquarium Association, are you?

17 A. I am not.

18 Q. And you've not been asked to consult with any of those
19 entities, have you?

20 A. I have not.

21 Q. Dr. Hart, you've never rendered veterinary care for
22 elephants, have you?

23 A. No, I haven't.

24 Q. And you've never provided foot care for elephants, is
25 that correct?

1 A. I have not.

2 Q. You've never prescribed a proper diet for elephants,
3 correct?

4 A. I have not.

5 Q. You've never diagnosed any disease in elephants,
6 correct?

7 A. I have not.

8 Q. And you've never euthanized an elephant, true?

9 A. That's true.

10 Q. And you've never developed the expertise necessary to
11 train an elephant to be managed by free contact methods,
12 correct?

13 A. Well, I'd like to qualify my answer there. You said --
14 would you rephrase your question. I think you said develop
15 the -- could you rephrase that, please.

16 Q. I'll ask you again, you have never developed the
17 expertise necessary to train an elephant to be managed by free
18 contact methods, correct?

19 A. I'll give that in two parts if I may, the answer. One
20 part is that I have not trained elephants per se. The other
21 part is understanding the principles of learning apply
22 regardless of species. There's a broad range of species. So
23 positive reinforcement, punishment, negative reinforcement,
24 ratios of reinforcement, I know these very well, I've written
25 about them many times. We use them clinically with dogs, we

1 use them with goats, you can use them with horses.

2 Those are general principles that you can apply
3 to a wide variety of species, of course including elephants.
4 So yes, I have been trained, I have learned the principles
5 that would apply to training elephants in a noncontact arena.

6 Q. Dr. Hart, I'd like to show you Page 111 of your
7 deposition in this case, beginning on line 9, and I'd ask you
8 to read along with me. Question: Now, elephant training,
9 have you developed the expertise necessary to train an
10 elephant to be managed by free contact methods? Answer: No.

11 Did I read your testimony correctly?

12 A. That's right.

13 Q. Did Hart, you've not developed the expertise necessary
14 to train an elephant to be managed by protected contact
15 methods, correct?

16 A. Within the context that question was asked, I was
17 thinking of familiar with those particular elephants, working
18 with a zoo or something, you know, within that context. I was
19 not, when I answered I wasn't thinking about the principles in
20 general. The expertise about that particular elephant or that
21 particular place that it's done in, that requires a different
22 kind of expertise. You wouldn't walk into a zoo or strange
23 setting and just start applying your principle of learning.

24 Q. Dr. Hart, let me show you Page 111 of your deposition,
25 beginning on line 14. I'd ask that you read with me.

1 Question: Have you developed the expertise necessary to train
2 an elephant to be managed by protected contact methods?

3 Answer: No.

4 Did I read your testimony correctly?

5 A. That's right.

6 Q. You're not an expert in elephant training, are you?

7 A. No, I'm not an expert in having trained a lot of
8 elephants. I know the procedures very well. They are very
9 common principles of learning.

10 Q. Dr. Hart --

11 THE COURT: You know all the procedures for
12 training elephants?

13 THE WITNESS: I don't know all the procedures. I
14 know the general principles, Your Honor.

15 BY MR. SHEA:

16 Q. Dr. Hart, you've never trained an elephant, correct?

17 A. No, I haven't.

18 Q. You've never managed an elephant, is that correct?

19 A. Well, I mean, we've done these studies in India and
20 Nepal, and you have to manage experiments on them, you have to
21 conduct the studies, you have to set it up.

22 THE COURT: Why don't you rephrase that question.
23 I'm not sure what you mean by manage. Rephrase it.

24 BY MR. SHEA:

25 Q. Dr. Hart, you've not provided day-to-day husbandry

1 management for an elephant, have you?

2 A. No. That's true.

3 Q. And you've never handled an elephant with a guide or
4 ankus, correct?

5 A. I have not.

6 Q. And in your report -- well, Your Honor, that's the end
7 of our voir dire. We move to strike Dr. Hart's testimony for
8 the reasons stated in our notice of Daubert objections and his
9 testimony today. He has not provided veterinary care for an
10 elephant; he has not provided foot care, diet for an elephant,
11 or diagnosed disease in an elephant; has not provided
12 husbandry care; has written no articles about the veterinary
13 care of elephants and conducted no empirical studies regarding
14 elephants except his two fly switching studies, and helping
15 with his wife's seismic studies.

16 We do not believe that he can be qualified to
17 address anything other than fly switching in elephants, and he
18 should not be permitted to testify that FEI's use of the guide
19 or FEI's use of tethering in the management of its elephants
20 at issue in this case constitutes a taking or inflicts
21 physical or psychological wounds, nor should be allowed to
22 offer opinions regarding elephant conservation in general, or
23 whether FEI's success in breeding captive elephants meets a
24 goal of elephant conservation.

25 THE COURT: All right. Any further questions?

1 MR. GLITZENSTEIN: Yes, Your Honor. Two follow-up.
2 And then if it would help the Court, I could just explain
3 exactly what it is we're using Dr. Hart to address, because a
4 lot of those topics are not things we were going to get into
5 in any event.

6 THE COURT: Then I'm going to ask the doctor to
7 step outside for a few minutes so we can discuss.

8 DIRECT EXAMINATION CONTINUED

9 BY MR. GLITZENSTEIN:

10 Q. If we can take a look at Page 111 through 112 of your
11 deposition, Dr. Hart. You were asked by defense counsel
12 questions that he posed. But just to complete the testimony,
13 the question was: So I take it you're not an expert in
14 elephant training, correct? This is at the bottom of Page
15 111.

16 Answer: Training per se? That's true.

17 Question: You qualified your answer. What is your
18 qualification? Continuing over at Page 112: Well, I have
19 opinions about training. I know behavioral principles. I
20 know positive reinforcement, negative reinforcement,
21 punishment, I know that field. That is relevant to training.

22 Was that your testimony?

23 A. That's true.

24 Q. What did you mean by that you know behavioral
25 principles and -- let me start with that.

1 A. Well, the principles are widely known among
2 behaviorists, the conditioning, positive reinforcement, the
3 use of punishment, the use of negative reinforcement,
4 schedules of reinforcement. And those are true regardless of
5 the mammalian species. Humans in fact, they hold with
6 chimpanzees, they hold with dogs, and they hold with
7 elephants.

8 Q. When you say you know behavioral principles, you know
9 them based upon what, Dr. Hart?

10 A. The principles have been based on multitude of studies
11 on animals in general to work out these principles of
12 behavior.

13 Q. I think you testified earlier that you began research,
14 the field research in the early 1990s, is that correct?

15 A. True.

16 Q. Since that time, over the last 18, 20 years, would you
17 say you've spent a significant amount of time on the study of
18 elephants?

19 A. I would say I have. We've traditionally gone back for
20 one to two months in the summers while we're conducting these
21 studies. And each study takes more than one trip back there,
22 two or three years to get the data together. So you're
23 watching, you're going back quite a bit, and you're thinking
24 about it, you're dealing with that topic for a long period of
25 time.

1 Q. And over that time do you believe -- and again
2 independent of this case -- that you've become familiar with
3 literature about elephant behavior?

4 A. Yes, I have.

5 Q. You were asked questions by Mr. Shea relating to cat
6 urine. Do you believe that your research on cat urine -- let
7 me ask it this way. How was it you can become somebody who
8 does research on cats and dogs and also do research on
9 elephants?

10 A. Well, if you spend 40, 42 years in the area, you've
11 developed an expertise in a number of areas, and in veterinary
12 school I'm expected to give some attention to dog and cat
13 problems, and I do. When I have my own my free time, the
14 other half of my time if you will, I do field studies, and
15 field studies on a number of species.

16 So the wider you get exposed to animal behavior
17 and among -- in the species, the better perspective you have
18 to view the subject of interest, in this case elephants.
19 You've got a context of animal behavior to view you the
20 elephant behavior, not just looking at the elephant alone, but
21 you understand its behavior relative to what behaviorists know
22 about animals in general.

23 Q. In going back to your research, the review paper that
24 we were talking about a little bit ago on elephant cognition.

25 Your Honor, I neglected, especially since there

1 is this outstanding Daubert issue, to move the admission of
2 that final publication of Dr. Hart's that we had relied upon,
3 on the same rationale that we had previously discussed with
4 the Court.

5 THE COURT: I'll allow it over objection.

6 MR. GLITZENSTEIN: For the record, it would be
7 Plaintiffs' Exhibit 155. I thank you, Your Honor.

8 THE COURT: Over objection.

9 MR. SHEA: Your Honor, that is for the limited
10 purpose of qualifications, is that true?

11 THE COURT: Yes. Yes.

12 MR. SHEA: Thank you.

13 MR. GLITZENSTEIN: Thank you, Your Honor.

14 BY MR. GLITZENSTEIN:

15 Q. In terms of empirical research, and how animal behavior
16 scientists approach their field, is field research in your
17 view the only way in which one can become an expert in an
18 area?

19 A. No, field research is not the only way. Field research
20 is complementary to other ways of -- going to meetings,
21 conferences, learning about behavior, reading the literature,
22 putting things together. So the field studies complement an
23 overall intellectual approach.

24 Q. When I asked you before whether you consider yourself
25 to be an expert in elephant behavior and cognition, why did

1 you answer yes to that question?

2 A. I answered yes because I think I've done
3 ground-breaking research in understanding the elephants'
4 relationship, with their large brain, to an array of
5 intellectual capacities that is really -- as I said, it's
6 ground-breaking research and it hasn't been done by someone
7 else, so I actually bring something to this field that I think
8 is quite unique.

9 Q. And as -- Your Honor, I don't want to ask him his
10 opinion because I know Your Honor hasn't ruled yet on the
11 Daubert issue. But I was going to ask him one question, not
12 getting into his opinion, but why he thinks his expertise may
13 be helpful to the Court in sifting through the issue.

14 THE COURT: I was going to ask that question
15 myself. Go ahead.

16 BY MR. GLITZENSTEIN:

17 Q. Insofar as your expertise you've discussed, why do you
18 believe that your research into elephant brains and the other
19 things you've talked about would be of any value to Judge
20 Sullivan in addressing the issues in this case as you
21 understand them?

22 MR. SHEA: Objection, vague.

23 THE COURT: Do you understand the question?

24 THE WITNESS: I do.

25 THE COURT: All right. So do I. I'll allow the

1 question to be answered.

2 THE WITNESS: Thank you. The issues involve
3 chaining --

4 THE COURT: Before you answer that, what is your
5 understanding of the issues in this case?

6 THE WITNESS: My understanding of the issues in
7 this case are chaining and confinement for long periods of
8 time, and the use of the bull hook in managing the animals.
9 And understanding the chaining and confinement, I think it's a
10 very important question to ask, the animal that is being
11 confined and chained for long periods of time, what is
12 their -- what is their awareness, what is their intellectual
13 domain? Is it just the same as taking a rat and confining
14 them, or is this an animal with higher mental powers, with a
15 large brain, is it going to be much more impactful on this
16 species than other species?

17 So I think it's important to understand the
18 elephant's brain and cognitive capacities in the context.

19 THE COURT: And am I correct -- if I'm incorrect
20 tell me, but am I correct in saying that the majority of your
21 work involving elephants has focused on elephant brain, brain
22 capacity and the extent of knowledge that it requires?

23 THE WITNESS: That's right, cognitive behavior,
24 cognitive processing, yes, right. So it has to do with
25 their -- again, their higher -- the importance of a large

1 brain animal that is aware, can sense what is going on in
2 other elephants, can sense what is going on in its own brain
3 therefore. So that's important to understand the harmfulness
4 of confinement, long-term confinement, and being able to just
5 do nothing for hours and hours and hours.

6 MR. GLITZENSTEIN: Your Honor, I have nothing
7 further on voir dire.

8 THE COURT: All right. Can I ask you to step
9 outside the courtroom for just a few minutes so the attorneys
10 and I can talk about the case.

11 THE WITNESS: Yes.

12 (Witness exits the courtroom).

13 THE COURT: So, you're offering him on the issue of
14 an expert with respect to elephant cognitive behavior. Is
15 that what it is?

16 MR. GLITZENSTEIN: That's correct, Your Honor.

17 THE COURT: He can't testify about bull hooks or --
18 sorry, did you have an objection?

19 MR. SHEA: No, I thought you were addressing both
20 of us. I apologize.

21 THE COURT: I'm going to hear from you. I just
22 want counsel to make his argument. I didn't want to talk
23 about the doctor in his presence. So persuade me why should I
24 allow him to testify as an expert. And if so, should it be
25 limited just to that issue, cognitive behavior of an elephant?

1 MR. GLITZENSTEIN: I think cognition and behavior.
2 We're not talking about veterinary care, We're not talking
3 about anything relating to physical wounding. He is a vet,
4 but we're not asking to qualify him as that.

5 THE COURT: Are you trying to elicit opinions about
6 the use of the bull hook?

7 MR. GLITZENSTEIN: The only thing we would ask
8 about the bull hook are two things based on his research. One
9 is that they have developed this capacity for fly switching,
10 tool development, and that says something about the elephants'
11 exposure to discomfort, even from a fly. And this is
12 something he's personally observed. So that is the only thing
13 that we would be asking him.

14 And the other thing is going to their memory
15 abilities, their cognition, something Your Honor had asked
16 about. You had posed the question the other day, does this
17 mean if an elephant remembers being struck when young, is that
18 something they are likely to carry with them for the rest of
19 their lives. This is the expert who can talk about something
20 like that.

21 So we're not talking about ongoing bull hook use,
22 anything relating to that. He's not opining on that. This
23 all relates to the cognitive ability of the elephant and how
24 injury manifests itself, as Dr. Hart has put it, in a large
25 brain sociable animal. That is what we're going to limit his

1 testimony to.

2 THE COURT: Why shouldn't I allow that for that
3 limited purpose, counsel? Come forward. It helps the court
4 reporter.

5 Subject to the Court giving it whatever weight, if
6 any, it's entitled to.

7 MR. SHEA: Sure, Your Honor. One point, regarding
8 an elephant remembering being struck while young. His
9 cognition articles are literature reviews on existing
10 literature. And frankly, I don't know that they establish
11 anything regarding that specifically. And he said he's not
12 done any studies regarding ankus use. And I can assume only
13 that the striking would be done with an ankus. So I don't see
14 how he's qualified to address that issue. And --

15 THE COURT: You can certainly probe that during
16 cross-examination in an effort -- you can probe that during
17 cross-examination in an effort to persuade the Court that his
18 opinion is not worthy of any weight.

19 MR. SHEA: Your Honor, I understand I can, and I
20 probably will, but the point is --

21 THE COURT: I have no doubt you will.

22 MR. SHEA: -- if he's not qualified, he shouldn't
23 be testifying about that in the first place.

24 THE COURT: I'll let him testify for that limited
25 purpose, subject to cross-examination, and of course subject

1 to whatever weight the Court gives his ultimate testimony.
2 Over objection.

3 MR. GLITZENSTEIN: Thank you, Your Honor.

4 (Witness takes the stand again.)

5 THE COURT: Thank you, Doctor. You may proceed,
6 counsel.

7 DIRECT EXAMINATION RESUMED

8 BY MR. GLITZENSTEIN:

9 Q. Dr. Hart, are you a member of any animal rights or
10 protection organizations?

11 A. No, I'm not.

12 Q. Are you philosophically opposed to all elephants being
13 in captivity?

14 A. No.

15 Q. Are you being compensated for your testimony?

16 A. My time is being compensated, yes.

17 Q. And what is -- how much are you being compensated?

18 A. It's \$100 an hour for time spent on studying, writing
19 reports.

20 Q. Is that your usual rate for such services?

21 A. No, my usual rate is \$300 an hour.

22 Q. Why are you charging a hundred dollars an hour?

23 A. I feel this is in -- the topic is in the public
24 interest, people are interested in elephants, they read about
25 them, they are intrigued by them, they know that they are

1 particularly intelligent special animals, and so as a public
2 service, that I feel it is my duty to come forth and represent
3 whatever I can to the topic, the discussion.

4 Q. Did you go on a site inspection in connection with this
5 case?

6 A. Pardon me?

7 Q. Did you go on a site inspection in connection with this
8 case?

9 A. I did a site inspection at the Auburn Hills circus area
10 in Michigan.

11 Q. About when did you do that?

12 A. What did I do?

13 Q. When did you do it?

14 A. Oh, when did I do it? Exactly when that trip was, I
15 don't recall. It wasn't in the last year at any rate. It was
16 before the deposition and after report. I forgot. I don't
17 want to guess.

18 Q. If I said about November 2007 would that seem about
19 right?

20 A. Yeah.

21 Q. Did you go on the site inspection to the CEC facility
22 in Florida?

23 A. No, I did not.

24 Q. And when you went on the Auburn Hills inspection, what
25 did that entail?

1 A. It entailed standing around a lot waiting for these
2 elephants to be released from the boxcar, watching them walk
3 out, the two which we were allowed to watch. Going in and
4 looking at the boxcar after the elephants have exited. And
5 then waiting until they had been taken to the pen. I call it
6 the staging area. And then later on put on the chains and put
7 in what they call a picket line.

8 Q. If we can take a look at Plaintiffs' Will Call Exhibit
9 118, these are the photos that have already been admitted into
10 evidence. And look first at Page 4 of that exhibit. And then
11 look at Page 5 of the same exhibit, and then look at Page 8.
12 Do these look like the boxcars that you saw in your
13 inspection?

14 A. Yes, they do.

15 MR. SHEA: If I could ask that the P.L. numbers be
16 read into the record so we know what we're talking about here.

17 THE COURT: I agree.

18 MR. GLITZENSTEIN: I'd be happy to do that, Your
19 Honor.

20 BY MR. GLITZENSTEIN:

21 Q. I believe I'm correct in saying that they are P.L.
22 15017, 15018, and 15118, in the order in which they were
23 presented. Could you describe the railroad cars?

24 A. The cars? Well, you saw the pictures. They are about
25 10 feet wide, 20-some, 20, 30 feet long. You can see this one

1 here, there's not much space above the elephant's head. Four
2 walls, pretty barren, just four walls and blocked over windows
3 there. That's --

4 THE COURT: I can't see. It's hard to tell how
5 much space there is, or is his head touching the top of that?

6 THE WITNESS: To be honest with you, we weren't
7 allowed in until they came out, so I could not see myself how
8 close they were, but I'm going by this photograph here, and
9 looking at the -- my recollection of how high they were. This
10 is not unrealistic.

11 BY MR. GLITZENSTEIN:

12 Q. And in terms of the chain setup, can you describe that?

13 A. Well, there's a chain, the elephant's usually chained
14 on opposite feet, one chain on the front foot and one in the
15 back, and they can move one step forward, one step backwards,
16 and that's it.

17 Q. If you'd take a look at what has been provisionally
18 admitted as Plaintiffs' Exhibit 50. And this is the chart
19 that was discussed this morning, Your Honor. And particularly
20 Page 34. And the data on times that are reflected in that
21 chart, or some of those times. And this is for the Blue Unit.

22 And just to, say, take an example of one of the
23 numbers that is in there, 37 hours. Assuming for the sake of
24 the following question that elephants were chained for 37
25 hours in a railroad car like that one, without being allowed

1 to get off the train, do you have an opinion on whether that
2 would have an effect on the behavior of the elephant?

3 MR. SHEA: Your Honor, I object. This is beyond
4 the scope of the offer for this expert, the two issues counsel
5 enunciated. Additionally, confinement for long periods of
6 time I don't believe is subject to the notice letters that
7 were filed in this case, and therefore it's not properly
8 before the Court.

9 MR. GLITZENSTEIN: Number 1, on the last point, our
10 notice letter, which I don't think Your Honor is probably
11 going to want to entertain argument over at this particular
12 juncture, specifically talks about chaining, and this is
13 chaining in a railroad car, just like we're talking about --

14 THE COURT: I'll let him answer over objection.
15 What is your answer?

16 THE WITNESS: Okay. Let's state the question one
17 more time.

18 MR. GLITZENSTEIN: Can the question be read back?

19 THE WITNESS: You had asked me a question about
20 what effect would I feel this would have, being in a railroad
21 car like this under these conditions for 37 hours, right?

22 BY MR. GLITZENSTEIN:

23 Q. Correct.

24 A. There are in my mind kind of two ways of looking at it.
25 One is just you can imagine any, almost any animal, being, I

1 mean a chimpanzee, a dog or a person, in a car like this, so
2 you can step one step forward, one step back, for three days,
3 and you're fed water, but you would expect an animal -- you
4 would expect abnormal behavior. You would expect misery.
5 It's just in my sense, given -- especially given the large
6 brain intelligent capacities of an elephant, to sit there like
7 that, stand there like that for that period of time is in my
8 mind, you know, it just speaks for itself is a harmful,
9 injurious situation.

10 THE COURT: So, in other words, you're not invoking
11 your expert privilege then, your answer is just as a matter of
12 common sense then, is that correct?

13 THE WITNESS: I'm saying given the elephant's
14 brain, its intellectual capacities, it makes it a more serious
15 concern than it does with other animals. Plus the fact that
16 the elephant's brain is hard-wired to be moving around, to go
17 to water holes, to be foraging all day, that is the way their
18 brain is put together, not to stand in one place and move one
19 foot forward, one foot backward. So it is invoking my
20 expertise to understand this.

21 Now, the other area of my expertise that's relevant
22 here is, is there a way of looking for markers, is there a way
23 of measuring how bad it is. And one could then ask the
24 question, well, what is a good marker? A good marker is
25 what's called stereotypic behavior, just kind of repetitive

1 things done over and over again.

2 THE COURT: What do you mean by your testimony that
3 the elephant's brain is hard-wired to be moving around?

4 THE WITNESS: Okay. In the field of animal
5 behavior and cognitive behavior, it's understood that the
6 brain reflects an animal's, what they call ecological niche.
7 In other words, if you forage for fruits and vegetables,
8 you're going to be aware of where the fruits and vegetables
9 are and how to get at those. And if you're foraging on low
10 quality forage all day long, and you're just -- you're geared
11 up to remember where the forage is and where the water holes
12 are, your brain is put together to reflect that
13 predisposition. It supports that ecological importance and
14 your own biology, because elephants need to move around to
15 find their forage in nature. Sure, you can supply it to them
16 in grass, but that is what the brain is kind of hard-wired to
17 facilitate. That's why the memory is important for an
18 elephant, to remember where water holes are or where forage is
19 going to occur this time of year a hundred miles away. So the
20 brain is put together that way, and that's why I referred to
21 these neurons that stretch from one side to the other.

22 THE COURT: So the saying having a memory like an
23 elephant is not just a gratuitous saying?

24 THE WITNESS: No, it's not. You hear that and it's
25 actually true.

1 THE COURT: What is the origin of that?

2 THE WITNESS: I think, you know, there have been a
3 lot of field studies on elephants over the time, people have
4 written books, and they've talked about they remember
5 something, they remember something that happened 20 years ago,
6 and I gave the example of a female matriarch who 35 years ago
7 could remember where she was as a youngster, where you could
8 take your family to and survive when the park dried up. So
9 when that happened, she was still with that -- she could lead
10 that group to that spot 35 years later. And the other animals
11 who didn't have that kind of a matriarch that old, they
12 suffered in that park, they didn't know where to go.

13 So that's the memory, and that's a very
14 convincing -- they remember social things too. They remember
15 yearning of their mother decades later. They have amazing
16 memory.

17 THE COURT: Go ahead. I don't want to
18 monopolize --

19 MR. GLITZENSTEIN: Your Honor, I'm happy to defer.

20 BY MR. GLITZENSTEIN:

21 Q. You just referred to the social memories. Does that
22 have anything to do with your opinion about the effect of
23 keeping the elephants chained for a long period of time in the
24 railroad cars?

25 A. Just like elephants are -- their biology is to move

1 around to forage, be active, they also are very -- they are
2 put together to respond socially. They are very social
3 animals. And they have family groups and they can communicate
4 and they recognize the dialects of their own family members,
5 and they can -- even if it's degraded they can figure that out
6 out of hundreds of others, they can figure out which one is
7 their family or that individual. So their brain facilitates
8 the social interactions, and they have an affinity to be with
9 a group of course, the females especially.

10 So I was saying, if you don't mind, I'll just --
11 there are some -- one could look for a marker of the
12 adversity. One would be abnormal behaviors. And stereotypic
13 behavior is an abnormal behavior, it's kind of doing something
14 over and over again, repetitive. In elephants it's weaving,
15 it's head tossing or trunk waving. And so you can measure
16 that, you can put video cameras up there and measure that.

17 As it turns out, one of the studies that I
18 remember that's dealt with this in railroad cars shows that
19 elephants that just go on the car for a relatively short
20 period of time, say an hour, up to three hours, they make the
21 movements, that abnormal movements. You know, sometimes it's
22 zero, sometimes it may reach up to 30 percent of the time.

23 But if you keep them on for say seven hours or
24 longer, and of course that's going to be more -- the longer
25 they are there, the more adverse it becomes. Then the

1 stereotypic behavior sort of plateaus out and reaches a max,
2 and there you are, 50 percent of the time. 50 percent of the
3 time in these boxcars, if you're there for long enough periods
4 of time, eight hours or more, you are weaving back and forth.
5 And that's on average, looking at the work on five elephants,
6 that is the average, 50 percent of the time, moving. And just
7 maxes out. You keep them on for 36 hours, whatever, it maxes
8 at 50 percent. To me that is a strong marker of the
9 adversity.

10 Q. Dr. Hart, just one last point on the information that
11 is before you. We just used 37 hours, if I'm not mistaken, as
12 an example. You said above seven hours was your view. Are
13 many of these numbers that are just taken from this chart over
14 seven hours?

15 A. As I look at them I don't think there is anything less
16 than seven hours. The nine hour one, but you know, no, those
17 are long.

18 Q. In your view those are the kinds of long trips you're
19 talking about?

20 A. These are very long trips, yeah.

21 Q. Could we go to Plaintiffs' Will Call Exhibit 143. And
22 we're talking here about the 4 hour, 46 minute mark, and we'll
23 go through the 4 hour, 48 minute mark. And this, Your Honor,
24 again is the video inspection from the Auburn Hills inspection
25 that has already been admitted as an exhibit.

1 (Video played).

2 And Dr. Hart, if you can tell me if that video
3 looks familiar to you?

4 A. That's right, this was taken at Auburn Hills, yes,
5 right.

6 Q. Does that have anything to do with the kind of behavior
7 that you were just describing?

8 A. Well, look at the elephant over here on the left.

9 Q. Do you know which elephant that is?

10 A. I believe it's Karen. Just back and forth.

11 Q. Your Honor, can I back up one moment. I made a
12 mistake. Can you hold that for a second. I had thought that
13 that one was admitted. It was the other inspection video that
14 we talked about. This one has not yet -- this is 143. I
15 assume the same principle would apply. I don't believe
16 there's an objection to the official inspection video coming
17 in.

18 THE COURT: Any objection?

19 MR. SHEA: No, we have no objection as long as we
20 know what parts we're referring to, counsel is referring to in
21 his direct.

22 THE COURT: Fine.

23 MR. GLITZENSTEIN: Once again, 4 hours, 46 minute
24 mark, through 4 hours, 48 minutes.

25 THE COURT: Okay.

1 BY MR. GLITZENSTEIN:

2 Q. We can resume the video.

3 (Video played).

4 I'm sorry, Dr. Hart, to have interrupted. Can
5 you proceed with your --

6 A. I'm just saying the one you see here on the left side
7 is back and forth, back and forth. She's got some hay here,
8 but she just keeps doing it.

9 Q. Why would you describe that as stereotypical behavior?

10 A. Well, in the literature that is described as
11 stereotypic behavior, back and forth, back and forth,
12 functionless, repetitive, has no function. I mean, that --
13 each species of animal has stereotypic behavior, kind of has
14 their own pattern. In elephants it's been seen over and over
15 again, they sway back and forth, they swing their trunks back
16 and forth, and they head bob. Those are what they record when
17 they are looking at recording stereotypic behavior.

18 THE COURT: How do I know that's not an indicator
19 that the elephant is happy that she's eating hay or playing
20 with hay? Is the elephant ingesting that hay?

21 THE WITNESS: If they, the elephants -- we were
22 watching the elephants for about two hours, and this one has
23 hay in it, but after the hay was finished or she had eaten all
24 she wants, then she's still doing it. She was just doing it
25 continuously.

1 THE COURT: How do I know she's not doing it
2 because she's happy with that hay?

3 THE WITNESS: Because this is --

4 THE COURT: Better still, how do you know she's not
5 doing it because she's happy?

6 THE WITNESS: Sure. Right. There's no indication
7 that she's happy with the hay, because when the hay is gone,
8 she is still doing it. As a matter of fact, the hay is a bit
9 of a distractor. And if you look at -- you have to look at
10 this in the context of these movements in general, the reports
11 of the animals in a picket line, they do this, they do this a
12 lot. The elephants in the railroad cars, they are doing this.
13 And the elephants in different contexts.

14 So it's not just being fed some hay. I mean if you
15 are showing -- if you have been in this situation year after
16 year after year, and it's adverse, and you engage in this,
17 how do you deal with it? Okay, maybe I'm just going to sway,
18 I'll sway, it's all I can do. Then you're fed some hay, of
19 course you're going to eat. And so you're going to see this
20 mixed in. When the hay is gone, you're swaying back and forth
21 again.

22 BY MR. GLITZENSTEIN:

23 Q. Dr. Hart, in your -- I think you mentioned earlier in
24 response to testimony that you hadn't seen this type of
25 stereotypical behavior when doing your studies. Is that a

1 correct statement about what you said?

2 A. We're referring to studies in Asia, we have not seen --
3 all the hours we spend watching elephants in wild, we haven't
4 seen it. The elephants that were in captivity there that had
5 what is in the literature referred to as kind of a seminatural
6 captivity. They were allowed to walk around at night, or
7 taken out during the day and had long -- when they were
8 chained, it was a long chain, 8-foot chain. I did not see
9 stereotypic behavior in those animals.

10 THE COURT: Is this the type of behavior that you
11 would observe in a zoo setting as opposed to a circus?

12 THE WITNESS: I think some zoos you could see this
13 too. There are zoos where you would not, generally, but there
14 are zoos where there is confinement and you will -- you can
15 see this. I haven't done a survey, but I certainly have
16 talked to colleagues, and it's one of the pressures behind
17 zoos, to change their management from small pens to more open
18 space.

19 BY MR. GLITZENSTEIN:

20 Q. So I understand, when you said confinement, did you
21 mean chaining in a small space?

22 A. I mean chaining here, yes.

23 Q. And are you aware of any research that would support
24 the opinions you just offered to the Judge?

25 A. Well, I certainly would -- there's two kinds of

1 studies, if you will. One is just to look at when animals are
2 chained, the elephants are chained, how often, how much time
3 they spend on average with this weaving back and forth or the
4 head bobbing. And a number of studies have shown that it
5 averages between 20 to 50 percent of the time, they do that.
6 As they are chained, that is what they do, the average over
7 long periods of time, and repeatedly on the same animal.

8 And then there are studies that show but when
9 you've got animals in large pens, a different place, different
10 location, but they are elephants nonetheless, Asian elephants,
11 they engage in relatively little stereotypic behavior.
12 Generally the smaller the pen, the more they do it, but it's
13 never as much as when they are chained, with this moving one
14 foot forward and one foot backwards. Those are comparisons of
15 animals in situation A or situation B.

16 Now, there are some studies showing the same
17 elephants taken from a chain, tethering, to putting into a
18 pen, and then compare the rate of these movements. And the
19 studies that I've referred to in my report show a reduction in
20 average stereotypic movement, marked reduction going from the
21 pen condition -- or the chained condition to the pen. When
22 you go to the pen, there's less, not zero, it's not like a big
23 place.

24 There is one place it pretty much goes to zero,
25 and that is at Zoo Atlanta, where they have a large outdoor

1 arena, and they bring them in at night, and they see
2 relatively -- in one study no stereotypic behavior even at
3 night, and the other one is like 3 percent when the animals
4 are first brought into the barn. But it's nothing compared to
5 these.

6 So then in zoos you're going to find, in my
7 opinion and recollection, you're going to find a variety of
8 prevalence of this behavior.

9 Q. Just so I understand, the prevalence that you suggested
10 relates to the amount of chaining?

11 A. That's right. Prevalence of a stereotypic behavior.
12 And in zoos, if they are chained like this, it's going to be
13 more frequent than if they are free ranging.

14 Q. If I heard you correctly before, you referred to
15 research specifically on the elephants on the train for the
16 circus.

17 A. That's right.

18 Q. Which study were you referring to?

19 A. On one that is by -- the authors are Williams and
20 Friend, 2003, I believe.

21 Q. If we can call up your Deposition Number 14 and ask you
22 if this is the study you're referring to?

23 A. That's right.

24 Q. And why is it that you say that this study supports
25 what you just suggested?

1 A. Well, I alluded to, just imagine an elephant with that
2 high degree of brain development, intellectual development, or
3 mental, higher nervous function if you will instead, being put
4 in that condition. And it just seems like it's natural
5 assumption that it's going to be very aversive. But what is a
6 marker? A marker is a stereotypic movement. How do you find
7 a study that measures that. And it turns out these authors
8 did measure it in a circus that was moving from one place to
9 another in various periods of time. And so they are reporting
10 the frequency of stereotypic movement, and it's a marker of
11 abnormal behaviors.

12 Q. And what did it say about the frequency of those kinds
13 of behaviors with relationship to the amount of time on the
14 train?

15 A. What this study shows is that if an animal or elephant
16 is put in and it's relatively short, maybe, from what we can
17 read from the data, three hours or something like that, they
18 may have no stereotypic behavior, or maybe 30 percent, but
19 relatively little. And then if they are in that train for a
20 longer period of time, then it goes up to -- well, this study
21 it goes up to 88 percent of the time, but if you look on the
22 average, it's 50 percent of the time across the board for
23 elephants. And they had five elephants that they looked at.
24 Every elephant engaged in stereotypic behavior, from the
25 30 percent to the above 50 percent, around 70 percent, when

1 put on for a long period of time.

2 Q. By long period of time, can you give the Judge at least
3 some thumbnail sketch of what you're referring to?

4 A. A long period of time is anything over seven hours.

5 MR. GLITZENSTEIN: And Your Honor, I would move the
6 admission of this study as an exhibit. I anticipate an
7 objection, which we can get, and then I can explain to you why
8 I think it makes sense under the circumstances.

9 THE COURT: Tell me why it makes sense first.

10 MR. GLITZENSTEIN: Let me tell you that.
11 Anticipating Mr. Shea's objection. As he suggested earlier,
12 it is the case that ordinarily, and certainly in jury trials,
13 you would not allow scientific publications to be admitted
14 into evidence, because you don't want jurors reading them and
15 drawing their own conclusions.

16 THE COURT: So why should judges read them?

17 MR. GLITZENSTEIN: Because judges I think -- two
18 reasons. One, there's a relatively small number of studies
19 that both parties are going to be talking about. Certainly
20 the experts everybody agrees can opine upon them and what they
21 mean. Your Honor, I am fully confident that Your Honor can
22 read them, these particular studies. We're not --

23 THE COURT: I assure you I can read them.

24 MR. GLITZENSTEIN: Not just read them, Your Honor,
25 but actually fully understand them.

1 THE COURT: Does this article focus on the studies
2 that both sides will be talking about?

3 MR. GLITZENSTEIN: They do, Your Honor. And it
4 just seems to us to make an enormous amount of sense in a
5 bench trial. These are published peer reviewed studies for
6 the most part. Actually I'm not sure exactly what the status
7 of this one, but this is actually coauthored by one of
8 defendant's expert witnesses. You're going to hear a lot
9 about these particular studies.

10 THE COURT: That expert witness is going to talk
11 about this study as well?

12 MR. GLITZENSTEIN: He is.

13 THE COURT: What is the objection, counsel? Why
14 not let it in for whatever weight?

15 MR. SHEA: Number 1, Dr. Hart didn't write it. He
16 didn't conduct the research.

17 THE COURT: Your expert --

18 MR. SHEA: It's frank hearsay, and the rules
19 clearly state that learned treatises don't come in in paper.
20 They can be read in, you can hear -- the Court can hear his
21 opinions, as they can Dr. Friend's when we bring him to court.

22 THE COURT: He's one of your experts, the coauthor
23 of this?

24 MR. SHEA: Yes.

25 THE COURT: I assume he's going to talk about his

1 studies as well?

2 MR. SHEA: We would have him talk about his
3 studies, certainly.

4 THE COURT: You don't want me to read his treatise
5 that he coauthored?

6 MR. SHEA: Your Honor, I'm more concerned with
7 setting a precedent of letting these in over hearsay in the
8 trial, because of all of the long list of science articles
9 that plaintiffs tendered to us on their 72-hour notice for
10 this witness, the next, and I assume the next witness as well.

11 MR. GLITZENSTEIN: Quickly, Your Honor, for
12 clarification, we're not invoking the learned treatise
13 exception for this. We don't think it's a learned treatise.
14 Rather we're simply relying on the general exception to the
15 hearsay rule, the residual exception.

16 And in terms of making precedent, there in fact is
17 precedent within this court, Richardson versus
18 Richardson-Merrell, Inc., 649 F.Supp. 799, 802, Footnote 9,
19 noting that a judgment affirmed by the D.C. Circuit, 857 F.2d
20 823 --

21 THE COURT: I'm sorry, what's the citation?

22 MR. GLITZENSTEIN: I apologize, Your Honor.
23 Richardson v. Richardson-Merrell, M-E-R-R-E-L-L, Inc. 649
24 F.Supp. 799 at 802, Footnote 9, District of D.C. 1986.
25 Judgment affirmed on other grounds, 857 F.2d 823, D.C. Circuit

1 1988.

2 THE COURT: So that was not an issue on appeal?

3 MR. GLITZENSTEIN: That was not an issue on appeal.
4 What I was simply citing it for is the court did note,
5 apparently without addressing the issue, that the District
6 Court had admitted studies which appeared in peer reviewed
7 professional journals, under the residual exception to the
8 hearsay rule. I don't believe that was a bench trial, but I'm
9 not positive about that.

10 And then another citation is Dolcin Corp. versus
11 Federal Trade Commission, 219 F.2d 742 at 748. And
12 unfortunately -- we can get this to you later -- I don't have
13 the court that that was from. I think D.C. Circuit, but I'm
14 not positive about that. We're not sure. That's left off my
15 notes.

16 I think in a bench trial with a discrete number of
17 publications, we're not going to try to besiege the Court with
18 this kind of material. And I'm happy to proceed whatever way
19 they want to, but frankly --

20 THE COURT: I will provisionally allow it. If I
21 rely upon it I'll tell the parties the reasons why I'm relying
22 upon it. I didn't get the citation for the appellate decision
23 at page 823 that recognizes an affirmance for other reasons.
24 It was something F.2d 823. What is the --

25 MR. GLITZENSTEIN: What's the page citation?

1 THE COURT: No, the volume.

2 MR. GLITZENSTEIN: 857 F.2d 823.

3 THE COURT: Over objection I'll allow it
4 provisionally. If I rely upon it, I'll tell everyone the
5 reasons why I relied upon it. But the objection is noted.
6 Let's proceed.

7 MR. GLITZENSTEIN: Thank you, Your Honor. So I
8 think we're up to Plaintiffs' Will Call Exhibit 156, is what
9 this would be.

10 BY MR. GLITZENSTEIN:

11 Q. Dr. Hart, in addition to that study are there any
12 others that you found particularly informative on the topic
13 we've been discussing?

14 A. That are informative. Well, not with railroad cars,
15 but with the penning versus the on a chain, the two
16 conditions. There are other studies there that have some data
17 on this kind of behavior that we've been talking about.

18 Q. What would that be?

19 A. Well, there's a Friend and Parker study, and then
20 there's a Gruber, et al. that compared animals that were --
21 elephants that were penned -- that were chained, and then they
22 were put into pens, and they could look at their behavior
23 under the two conditions.

24 Q. If we can take a look at Deposition Exhibit 13 from
25 your deposition, and ask you if that's the Gruber, et al.

1 study you're referring to?

2 A. That's true.

3 Q. Is Dr. Friend a coauthor of that study as well?

4 A. He is.

5 Q. And why is it that you say that this study supports
6 your view about stereotypic behavior?

7 A. Okay. This paper by the way focuses on stereotypic
8 behavior. It's in the title. They acknowledge that it's a
9 concern on welfare and acknowledge that it's an important
10 issue. And they looked at the same group of elephants that
11 were on chains, and then they were allowed into pens. So they
12 did -- they have individual data on the individual elephants
13 and they've got the average data across the board for the
14 elephants.

15 And if you look at the -- you know, the best
16 scientific way of looking at the data is if you take the
17 average for the elephants in that circumstance, and then the
18 same elephants in the pen, you look at the reduction in the
19 average amount of stereotypic behavior. And there is a
20 substantial reduction. I don't recall exactly what it is on
21 this one, but let's say it's about 30 percent of the time --
22 one of these has a much higher level than the other one --
23 anywhere between 30 and 50 percent of the time while they are
24 chained they are doing this back and forth, back and forth
25 kind of all the time. And --

1 THE COURT: You have to describe it. I mean I saw
2 you swaying.

3 THE WITNESS: I'm sorry, the stereotypic behavior.
4 Thank you.

5 THE COURT: That was a swaying motion.

6 THE WITNESS: Swaying back and forth, swaying the
7 trunk back and forth, head bobbing, the types of stereotypic
8 behavior, that goes from anywhere between like 27 to
9 50 percent to down to less than half of that when they are
10 penned. So there is a marked reduction. Not an elimination,
11 because I don't think that small pens are that good either,
12 but it's going from bad to not as bad.

13 BY MR. GLITZENSTEIN:

14 Q. If you can take a look at the bottom of the first page
15 of that study, Dr. Hart, the last sentence leading over to the
16 next reads: As a result of chaining, species-typical
17 behavior, such as foraging for food, social interactions, play
18 behavior and locomotion, are greatly restricted. This
19 inability to perform species-typical behaviors may contribute
20 to the development of stereotypies in elephants.

21 Did I read that correctly?

22 A. Yes, that's read correctly.

23 Q. Does that comport with your own view?

24 A. Well, I mean, let's take it. Elephants cannot exhibit
25 anything like natural species-specific behavior while they are

1 chained up. They can move one foot forward and one foot
2 backwards. There's nothing that's in their natural behavior
3 repertoire. So that's what they're referring to.

4 THE COURT: Wouldn't that be true for any animal
5 chained?

6 THE WITNESS: I believe it would be, but if you --
7 if I could add a little bit. If you took, let's say a tiger
8 or a lion, that hunts and gets their food and then they maybe
9 sleep for as long as a day -- we've seen that in Africa, their
10 bellies are full and they just lie around and sleep the rest
11 of the day -- if you were to take an animal in the zoo like
12 that, feed it very well and it lies around, you'd say well,
13 that's not going to be as interruptive of their natural
14 behavior as it is an elephant, an animal that spends all day
15 moving around, moving around.

16 THE COURT: Looking for food.

17 THE WITNESS: Foraging for food, right.

18 BY MR. GLITZENSTEIN:

19 Q. How about if a dog were chained front leg and back leg
20 for 36 hours? Do you think that would be adverse to a dog?

21 A. I think it certainly would. Everything I know about
22 dogs, it would be very adverse.

23 Q. Based upon your review of literature, et cetera, that
24 sentence that I just read about the relationship between
25 chaining and inability to perform species-typical behaviors

1 for elephants, do you have an opinion about whether that is a
2 widely held view in the animal behavior community?

3 A. I think it's a very widely held view. You see it in
4 these papers that focus on stereotypic behavior, it's often
5 mentioned in an introduction, and among behaviorists in
6 general at work in this field, it's considered to be a
7 primary, not the only, but the primary, one of the primary
8 factors that evokes or leads to stereotypic behavior.

9 MR. GLITZENSTEIN: For the same reasons we just
10 went through, I would move the admission of this study also as
11 an exhibit.

12 MR. SHEA: Same objection.

13 THE COURT: Over objection, I'll admit it.

14 MR. GLITZENSTEIN: I think this is Plaintiffs' Will
15 Call Exhibit 157 then.

16 THE COURT: All right.

17 BY MR. GLITZENSTEIN:

18 Q. Dr. Hart, any other studies that you think are
19 particularly pertinent?

20 A. One in the same group of animals, I think by Friend and
21 Parker, basically found the same -- basically found the same
22 picture.

23 Q. If we can take a look at what was your deposition
24 Exhibit 12, Exhibit 158. Is this the article you were
25 referring to?

1 A. That's the one, right.

2 Q. This is also coauthored by Dr. Friend?

3 A. True.

4 Q. Is there any significance to the fact that he's the
5 first person listed?

6 A. I don't think it's particularly significant whether
7 he's first or second. It depends on if they were a graduate
8 student or some colleague. Academicians have different ways.
9 Sometimes the most important person's name is last, sometimes
10 it's first. It depends on -- and I don't know the
11 circumstances here.

12 Q. And again, why does this study support the opinion
13 you've offered?

14 A. Well, this is -- again you look at the title,
15 stereotypic behavior, they are concerned about stereotypic
16 behavior or they would not have done the study. And it's
17 penning versus picketing. And again, if you looked at the
18 data, you'd find, if you look at the animals as a group, when
19 they are picketed, can move just this little bit, they engage
20 in much more of this abnormal stereotypic behavior than they
21 do when they are, same animals, are allowed into a pen. And
22 it doesn't disappear, as I mentioned, in a pen, it just goes
23 down, because I don't think pens are -- it's not like an open
24 field, but it's not as bad as being penned up. At least they
25 can interact with other elephants and move around a bit.

1 Q. Any other studies --

2 MR. GLITZENSTEIN: Your Honor, just to complete the
3 record, if we can move the admission of this exhibit on the
4 same rationale as the other one.

5 THE COURT: Same ruling, over objection.

6 MR. SHEA: Objection.

7 MR. GLITZENSTEIN: Which would be Plaintiffs' Will
8 Call Exhibit 158.

9 BY MR. GLITZENSTEIN:

10 Q. Before we move on, any other studies?

11 A. Well, there is a relevant paper by Schmid. It's done
12 in another country. And I don't know if you want to pull that
13 one up, but it's basically saying the same thing. They
14 actually found a little bit more stereotypic behavior when
15 animals were -- when they were chained versus when they are in
16 a pen. The pens were larger in this case, by the way.

17 Q. And if we can take a look at page 87 of that
18 publication, which I believe is near the beginning of the
19 article. And take a look at the last sentence of the first
20 full paragraph under Introduction, there is a statement that
21 says: Stereotypies, also called weaving, are connected with
22 unsuitable keeping systems.

23 Do you see that statement?

24 A. I do.

25 Q. Is that a statement that you agree with?

1 MR. SHEA: Objection, leading. This line is
2 leading.

3 THE COURT: It was leading. Sustained.

4 BY MR. GLITZENSTEIN:

5 Q. Do you have any opinion about that statement?

6 MR. SHEA: It's still leading.

7 THE COURT: If he has an opinion he can render it.
8 What is it?

9 THE WITNESS: They're making a -- this is in the
10 introduction, it's the authors' opinion who are studying this.
11 This is their opinion, that they are connected with
12 unsuitable --

13 THE COURT: This is --

14 THE WITNESS: -- keeping conditions.

15 THE COURT: -- the authors' opinion. All right.

16 THE WITNESS: And I agree.

17 THE COURT: Why?

18 BY MR. GLITZENSTEIN:

19 Q. Why do you agree with that?

20 A. Why do I agree? Because I think they are connected
21 with not allowing the animal to engage in its natural
22 behaviors. That is the most severe thing. They cannot
23 interact with other elephants, they cannot walk about for
24 food, which their whole biology is geared up for walking
25 about. They're highly social, they cannot interact and choose

1 who they interact with. They don't show comfort behavior with
2 other animals in the group. So it's a very severe disruption
3 of their normal behaviors, and I think that's -- it's
4 unsuitable conditions.

5 THE COURT: All right. But then that would apply
6 to any animal in captivity, it would be unsuitable in your
7 opinion then, correct?

8 THE WITNESS: Not really. In the sense that if you
9 have a -- if you have an elephant in a large arena or large
10 place and moves around, can -- it's not like in the wild, but
11 they can move around some, and they can maybe --

12 THE COURT: Let's limit it to circuses. That would
13 be unsuitable in your opinion then, keeping any animal in a
14 circus?

15 THE WITNESS: Well, I think that would be -- I
16 don't think I'd go along with that.

17 THE COURT: How about elephants?

18 THE WITNESS: Keeping any elephants -- if you
19 didn't have to -- you'd have to -- I guess --

20 THE COURT: If I understood you correctly, you just
21 told me that limiting its movement, its ability to interact,
22 its ability to socialize is unsuitable. And my question is
23 then, it must be your opinion that an elephant in a circus
24 setting under those conditions is an unsuitable environment,
25 is in an unsuitable keeping system, is that right?

1 THE WITNESS: I'd like to qualify my answer there.

2 THE COURT: Give me an answer. Am I correct or
3 not? If I'm not --

4 THE WITNESS: I think you're incorrect in my
5 assumption.

6 THE COURT: Am I correct?

7 THE WITNESS: No, I don't think you are expressing
8 my feelings.

9 THE COURT: What is your opinion?

10 THE WITNESS: Okay. All right. If you are going
11 to haul elephants in these cars from one circus setting to
12 another, and it's going to be on average 24 hours, I think
13 that's unsuitable, and keeping them on pickets for 8, 10 hours
14 a day. However, if you had a circus that was in a location
15 and there was a large arena out there, and the animals were
16 moving, they could get some water, they could play with water,
17 they could interact a little bit, and then you bring them in
18 to perform and lead them in, I think that would be a perfectly
19 good show, as long as you weren't expecting them to do things
20 that were maybe painful to do in the circus. But you could
21 have them --

22 THE COURT: Limit it to Ringling Brothers and the
23 type of confinement that elephants are subjected to there.
24 Unsuitable keeping system there?

25 THE WITNESS: Well, I'm not in a position to say

1 what would be manageable for them. I can tell you what I
2 think is not appropriate. And if they can put together
3 something where the animals are not penned or not on a picket
4 line for that period of time --

5 THE COURT: I'm talking about as it exists now.

6 THE WITNESS: As it exists now?

7 THE COURT: Yeah.

8 THE WITNESS: All right. As it exists now, the way
9 they are doing it right now, from what I've seen -- now I
10 haven't seen all their circuses and I haven't seen what else
11 they can do, but --

12 THE COURT: Based on what you've seen --

13 THE WITNESS: Based on what I've seen.

14 THE COURT: -- is it an unsuitable keeping system?

15 THE WITNESS: This is unsuitable condition for
16 these elephants the way I see it happening.

17 THE COURT: All right.

18 BY MR. GLITZENSTEIN:

19 Q. Just to summarize, why is it you have that opinion?

20 A. Because from what -- again the point of reference is
21 can animals engage in any kind of naturalistic behavior when
22 they are in this picket line for all the time, or in a very,
23 very little, small pen, then that's -- they are not allowed to
24 engage in that naturalistic behavior. And to the -- it is
25 reflected in their high degree of abnormal stereotypic

1 behavior, then I think that is unsuitable. That is -- it's
2 that's harming the elephants.

3 Q. And does your answer to Judge Sullivan's question
4 relate to the amount of time they are spending in those
5 conditions?

6 A. Well, it does relate to the amount of time. I mean,
7 anytime you're going to give some care to elephants, you're
8 going to have veterinary care, examination, you'll have to
9 chain them up. And you may chain them for an hour or maybe
10 two hours. That is a different story than this long periods
11 of time.

12 THE COURT: Then correct me if I'm wrong, but is it
13 your opinion that keeping elephants under conditions that
14 Ringling Brothers keeps elephants is indeed an unsuitable
15 keeping system?

16 THE WITNESS: For the ones I'm familiar with, for
17 example, at that site visit --

18 THE COURT: You would be opposed to keeping them in
19 captivity under those circumstances?

20 THE WITNESS: Keeping them, not in captivity but
21 for that kind of performance venue where they are not allowed
22 to engage in their naturalistic behavior.

23 THE COURT: Well, they are in captivity then.

24 THE WITNESS: They're in captivity, but there are
25 elephants in captivity that move around and they don't show

1 these --

2 THE COURT: I'm focusing on Ringling Brothers and
3 the circumstances in which they are kept in captivity. That
4 is unsuitable then, correct?

5 THE WITNESS: From what I've seen, my familiarity
6 with that, yes, sir.

7 THE COURT: And then as an expert you're opposed to
8 keeping those elephants in captivity under those
9 circumstances?

10 THE WITNESS: Under these circumstances here, those
11 elephants.

12 THE COURT: All right. How much more time? I'm
13 not trying to curtail you, but if we're going to 5:30, maybe
14 we should take an afternoon recess.

15 MR. GLITZENSTEIN: I probably have no more than
16 five or 10 minutes.

17 THE COURT: All right. Why don't you go ahead and
18 finish your direct.

19 BY MR. GLITZENSTEIN:

20 Q. Just so we're clear about your answer on captivity,
21 based upon what you've seen or read, are there other elephants
22 in captive situations where you would not have those concerns?

23 A. Oh, certainly, there's other captive situations where I
24 would not have those concerns.

25 Q. For example?

1 A. Well, for example, in situations where they have
2 freedom to move about. Maybe even just during the night
3 moving around, where you let them go loose at night, or in a
4 large arena and then you bring them in. That kind of
5 arrangement. And there are a number of zoological settings
6 where the elephants are given a lot of space. That is
7 captivity. I haven't given thought to how you could have
8 performing circus animals where they wouldn't have this degree
9 of abnormality, and one thing that occurs to me is they are --
10 at nighttime they could have a big open area so they are not
11 confined that much.

12 THE COURT: Maybe a stationary circus. Maybe a
13 stationary circus somewhere.

14 THE WITNESS: Exactly.

15 BY MR. GLITZENSTEIN:

16 Q. Dr. Hart, does your research on fly bites and switching
17 behavior indicate anything to you at all about the sensitivity
18 of elephants' skin?

19 A. Well, it influences my opinion about the sensitivity of
20 elephant skin in the sense that -- you know, the term
21 pachyderm means thick skin, and you'd think well, maybe it's
22 not that sensitive. But in fact when we were doing this work
23 on fly switching, we could tell when there are flies alighting
24 on an elephant and taking a blood meal, that is why they have
25 this fly switch, getting these flies away.

1 THE COURT: Does that depend on the type of fly
2 that is alighting and biting?

3 THE WITNESS: I think it does depend on the type of
4 fly, and these are -- entomologists refer to them as tabanids,
5 for example, they are big horse flies. And they've got --
6 I've been bit by horse flies. And they hurt. And so it's --
7 elephants, they switch these off. If you can swat one with
8 your hand you'll have a palm full of blood, because they take
9 a lot of blood. And these elephants undoubtedly feel it,
10 because that's what they are fly switching for, so it does
11 show that these parts of the body are sensitive.

12 BY MR. GLITZENSTEIN:

13 Q. Do you have an opinion about whether an elephant hit
14 with a bull hook would remember that even years after the
15 fact?

16 A. If an elephant was hit with a bull hook, and assuming
17 it was painful, adverse, they would certainly probably --
18 I've been saying -- and know about elephant memory, they would
19 remember that. And if they had been hit several times and
20 reinforces that memory, certainly they would remember that
21 bull hook.

22 MR. GLITZENSTEIN: I have nothing further, Your
23 Honor.

24 THE COURT: All right. We'll take a 15-minute
25 recess. How much time do you need? Can you finish your

1 cross-examination this afternoon, do you think?

2 MR. SHEA: I would hope to, Your Honor.

3 THE COURT: Thank you, Doctor. You don't have to
4 stand. You can take a recess for 15 minutes. You should not
5 discuss your testimony with anyone.

6 THE WITNESS: Okay.

7 BRIEF RECESS

8 AFTER RECESS

9 THE COURT: Counsel.

10 MR. GLITZENSTEIN: Your Honor, I had neglected to
11 move our last exhibit into evidence, which was that Schmid
12 study. So, for the same rationale we would just move that
13 one --

14 THE COURT: Same ruling, same objection. It's
15 admitted.

16 MR. GLITZENSTEIN: 158. 159, Your Honor.

17 THE COURT: Let me do this, also. Let me encourage
18 the time keepers to talk among themselves and see where they
19 are, see if they're on the same clock. Let me know if there's
20 any problem with that. My guess is you're fairly accurate. I
21 don't need to jump in unless there's a conflict.

22 MR. SIMPSON: We're pretty close. They think we've
23 used less time than we do. I think we've got the better view
24 on that.

25 THE COURT: You're pretty close. Let's just see --

1 that's good. I have no doubt about that. I know there are
2 time keepers on both sides and we're keeping time. I'd just
3 as soon stay out of it unless I need to jump in. All right.
4 There's enough to jump in here.

5 MR. SHEA: If it please the Court.

6 THE COURT: Yes. What I'm talking about, they're
7 keeping time for each side -- all right, you know.

8 CROSS-EXAMINATION

9 BY MR. SHEA:

10 Q. Dr. Hart, during your Direct Examination you discussed
11 the Schmid, SCHMID study from 1995 with counsel, did you not?

12 A. Yes.

13 Q. That counsel -- or I'm sorry, that study does not prove
14 that chaining elephants causes stereotypic behavior in them,
15 does it?

16 A. Well, I'm not sure what you mean by causes it, could
17 you explain?

18 Q. Dr. Hart, in my deposition with you we discussed the
19 Schmid, the Brockett and the Wilson studies?

20 A. Right.

21 Q. Regarding stereotypic behavior, correct?

22 A. That's right.

23 Q. And that's because you cited them in your report,
24 didn't you?

25 A. Yes, I did.

1 Q. And you also cited several studies by Dr. Friend that
2 you discussed today, correct?

3 A. That's true.

4 Q. And as to Brockett, Wilson and Schmid articles, those
5 studies do not prove that chaining causes stereotypic
6 behavior, correct?

7 A. Those studies were not intended to prove that the
8 chaining causes it because the Brockett and the Wilson one,
9 they're looking at elephants in pens. Their intention is to
10 show you can manage elephants in pens, and they don't -- they
11 aren't aggressive, they aren't -- there's no problems that
12 arise, so, they are showing the advantage of doing that.

13 Q. I see. But then they don't prove that chaining causes
14 stereotypic behavior in elephants?

15 A. They didn't set out to do that, no.

16 Q. Dr. Hart, in your opinion there is some threshold of
17 chaining that causes stereotypic behavior, correct?

18 A. I would say there is -- the studies point to a
19 threshold being -- I don't know of any studies that address,
20 say, being on a chain for just an hour, you know, once a day,
21 if you're going to see stereotypic behavior then. But the
22 fact that you see it when they're chained for a long period of
23 time and then they're taken off suggests that it's aversive.
24 But the studies do not correlate per se intentionally looking
25 at the period of time chained versus the degree of stereotypic

1 behavior. And if they vary in the period of time, again, I
2 would refer to my comments about in the railroad cars, you
3 know, once you reach a certain point you kind of max out on
4 your stereotypic behavior.

5 Q. Dr. Hart, if I understood your answer correctly, then
6 you believe there is some threshold of chaining that causes
7 stereotypic behavior in elephants, is that right?

8 A. Well, I believe that you could argue that there's a
9 threshold. Where that threshold is going to be, I can't at
10 the moment tell you. I can tell you for the railroad cars
11 because we've got some data that kind of addressed that.

12 Q. And you're referring to Dr. Friend's study in 2003,
13 Williams and Friend, is that correct?

14 A. Yes, I was.

15 Q. Well, in your opinion, if an elephant is chained over
16 that threshold, it doesn't matter whether the elephant was
17 chained longer than that period of time, correct?

18 A. Well, I think it matters to the elephant. You're going
19 to max out on the abnormal behavior to the observer. If
20 you're going to be chained for -- I'm just going to give you a
21 figure now, eight hours, or are you going to be chained for 15
22 hours. My opinion is that they would max out on that abnormal
23 stereotypic behavior. So, you're not going to see more at 24
24 than at eight or at 12 hours than eight.

25 But if you were to look at a half hour of

1 chaining and that's it, then my opinion is that you could very
2 well see relatively little. But those studies have not
3 addressed that particular issue.

4 Q. So, Dr. Hart, if I understood it correctly, the length
5 of time threshold that you're alluding to, there's no science
6 to select or to state how long that threshold is, correct?

7 A. To give you that threshold, I would say there isn't,
8 but the studies all assume that you're going to -- they're
9 looking at chaining the way it's customarily done, which is
10 for eight hours or nine hours or whatever. So, they're not
11 looking at trying to find out what that threshold is. So, the
12 studies don't have that context to look at a threshold.

13 Q. Dr. Hart, do you recall mentioning to me or telling me
14 in deposition that it could be 12 hours?

15 A. That the chaining -- that the threshold could be 12
16 hours?

17 Q. Yes.

18 A. If I recall, we were referring to a study where it went
19 from 12 to something else, and that at 12 there wasn't that
20 much difference between 12 and maybe more than that, 16, or
21 whatever, I don't recall the figures. And I said, well, if I
22 recall, I said something like, you know, they would probably
23 max out at about 12. That could be -- you could call that the
24 threshold, but I was saying they max out, I don't think I
25 referred to that as a threshold.

1 But once you reach that level you're going to --
2 it doesn't matter whether it's 12 or longer. But I wasn't --
3 there's no data to address: What if it's only one hour.?

4 Q. Dr. Hart, did I just understand you to say that you did
5 not tell me there was a threshold at deposition?

6 A. I probably used that term, I'm just telling you right
7 now the way in which I would -- the way -- the conversation as
8 it's going right now using threshold, I probably -- I could
9 well have used that in that discussion because that was the
10 minimum period of time, if I recall in the study that we're
11 talking about, that was reflected in those data. So, 12 would
12 certainly be the threshold, and the threshold may be less than
13 that. But in this case you'd have to say that 12 is at least
14 a threshold.

15 Q. Dr. Hart, regarding 12 being the threshold, are there
16 any studies that establish 12 hours to be the threshold that
17 we've been discussing?

18 A. Not that I'm aware of.

19 Q. Dr. Hart, you mentioned or discussed stereotypic
20 behavior with counsel during your Direct Examination today,
21 correct?

22 A. That's right.

23 Q. Stereotypic behavior can be habit-like and persist even
24 when welfare conditions have improved, correct?

25 A. Well, you're referring to some studies that are looking

1 at stereotypic behavior, if I recall, in animals in general,
2 not particularly elephants. They're speaking about
3 stereotypic behavior in a variety of animals. In a variety of
4 animals sometimes they've got it even in -- what looks like
5 fairly good conditions. So, that's what the authors are
6 saying, and so I take their word for it that the confinement
7 isn't the end all and be all, but it's a very important
8 aspect.

9 Q. Do you recall what article you're speaking of there?

10 A. Well, if I recall our conversation, it was Mason -- the
11 Mason paper.

12 Q. Was it Mason and Latham?

13 A. Yes.

14 Q. And you cited that article in your report, correct?

15 A. I do.

16 Q. And, Doctor, the authors -- well, strike that. Let me
17 start again. I'll just ask you, stereotypic behaviors are
18 likely be unreliable indicators of the current state of
19 welfare, isn't that true?

20 A. You're asking me if I believe that or if they said
21 that?

22 Q. I'm asking you if those authors in Mason and Latham
23 said that?

24 A. Well, I'd have to see if that's the exact wording.

25 Q. Let's see if I can refresh your recollection because we

1 discussed this. Page 193 of your deposition on Line 14. I
2 asked -- and if you'd follow along, please. Question: If
3 you'd like at Page S-64 of Mason and Latham with me, please,
4 and you could look down the second column against the right
5 margin, you'll see the word -- well, you'll see the sentence
6 beginning "In addition" stereotypies that had become centrally
7 controlled (habit-like) or that arise from autistic-like
8 changes in the control of all behavior (preservation) are
9 likely to be unreliable indicators of current state because
10 they can be elicited by other circumstances that improve
11 welfare. Then I asked, did I did read that correctly?

12 And you answered: That's right. That, in my
13 sense, addresses what I just said, that's one that seems to
14 occur whatever the habitat. So, autistic-like is the give
15 away. There are some instances where this seems to be an
16 ongoing abnormality, perhaps putting words in their mouth,
17 going back to the animals' experience as a young animal.

18 Did I read that correctly?

19 A. Yes, you did.

20 Q. Dr. Hart, now, in your opinion -- well, strike that.
21 Dr. Hart, you discussed ecotourism trips where you had seen
22 captive elephants in home range countries with your counsel
23 earlier today, correct?

24 A. Say that again, please.

25 Q. Certainly. You discussed earlier today taking

1 ecotourism trips to home range countries where you observed
2 captive elephants, correct?

3 A. I don't know if I would refer to our trip as
4 ecotourism, but we were visiting, for one reason or another,
5 where animals were kept in captivity. For example, in one
6 area I was asked by a colleague that was studying tourist
7 effects on rhino, to look in on the study and offer what
8 advice I could. So, that's where we saw elephants using these
9 fly switches for the first time.

10 Q. So, Doctor, have you seen tourists riding elephants in
11 home range countries?

12 A. I've seen tourists writing on a haute in Nepal and
13 India, yes.

14 Q. And the haute is a large wooden platform, is that
15 right?

16 A. That's right.

17 Q. The platform is put on the elephant's back and strapped
18 under her belly, is that true?

19 A. That's true.

20 Q. And what kind of trips did you see this activity
21 during?

22 A. Well, in Nepal. On our first visit, I referred to -- I
23 went to a colleague's study site, and our work subsequently at
24 the same study site and another one in Nepal. We've seen them
25 in India where -- this is why -- the reason -- this is the

1 reason the elephants are in captivity there, because they're
2 used to take tourists on a little walk twice a day.

3 Q. And that activity is referred to as ecotourism, is it
4 not?

5 A. Some people would, I don't want to be restricted to
6 that term, ecotourism. I'm not sure if you ask these tourists
7 if they were ecotourists or just tourists, I don't know.

8 Q. Dr. Hart, now, the tourists sit on top of that large
9 wooden platform, is that right?

10 A. That's right.

11 Q. And the mahout sits on top of that as well, the
12 elephant guide?

13 A. No.

14 Q. They do not?

15 A. The mahout sits behind the elephant's head, their feet
16 are usually behind the ears, that's how they guide the
17 elephant and get the elephant stopped, go forward with their
18 feet.

19 Q. Now, elephants in home range countries are kept in
20 stables and chained, are they not?

21 A. The elephants in their what?

22 Q. In home range countries?

23 A. Home range? You mean elephants in India that are used
24 to take tourists on rides?

25 Q. Well, let's start with those. Those are kept on chains

1 in stables, correct?

2 A. For part of the day. They are kept on a nine foot,
3 let's say, nine or ten foot chain, connected to a stake. The
4 elephant is usually in a circle. They're brought food during
5 the day. And they are either, as I said, they are saddled up,
6 if you will, to take the tourists on a ride in the morning and
7 the evening. At one location they are taking out in the day
8 for five or six hours and allowed to forage, move around,
9 they've got a mahout on their back. The mahout gathers
10 branches for the evening meal and the elephant moves around
11 and has some freedom. In another situation the elephants are
12 allowed to go into the forest at night.

13 THE COURT: So, the person who sits -- the guide,
14 I'm sorry, what's the name of the guide?

15 THE WITNESS: They call it mahout.

16 THE COURT: Mahout. That person is able to guide
17 the elephant with the use of his feet or her feet?

18 THE WITNESS: That's right.

19 THE COURT: And control the elephant?

20 THE WITNESS: It does control the elephant. These
21 elephants are highly trained, of course.

22 THE COURT: Do you have an opinion about the people
23 in circuses who ride on the elephants, are they able to
24 control the elephants that are riding on them. It's more
25 often than not a woman sitting on top of the elephant. Are

1 they controlling?

2 THE WITNESS: No, I could not tell you. I have not
3 ridden or talked with them. They are probably controlled in
4 some way, yes. And I would -- my opinion would be these
5 elephants are trained to do a particular act, so they know
6 what to do, and they've been trained prior to that at some
7 winter location perhaps. And, so, whether they've got Person
8 A or Person B on their back, they know what to do. So, maybe
9 they're given a signal, forward or back.

10 The mahouts are really bonded to their elephants, I
11 mean, they know their -- they're the ones in the stable
12 feeding them, carrying for them, they are -- a much closer
13 relationship. So, I would feel much more direct control by a
14 mahout than in a circus where the elephants are trained to do
15 certain performances.

16 THE COURT: Do the mahouts use the ankus or a hook
17 or anything equivalent to --

18 THE WITNESS: They often will have kind of a small
19 ankus or bull hook. I've never seen them jab. They may poke
20 or something. I think it's kind of a status symbol because
21 people are used to seeing a mahout with this hook. And I've
22 never seen them use it in a painful way.

23 THE COURT: But, nevertheless, it has a point on
24 it, I assume?

25 THE WITNESS: Usually it's got that kind of curve

1 on it, yes.

2 THE COURT: Similar to like a fireplace poker?

3 THE WITNESS: Kind of like that, yes.

4 THE COURT: Go ahead.

5 BY MR. SHEA:

6 Q. Dr. Hart, now, in Nepal elephants are chained to
7 stakes, right?

8 A. They're chained during the night and they're then
9 chained during the day just before they're going to be taking
10 tourists for a ride, and then they are ridden out into the
11 forest to forage after the first batch of tourists finish
12 their ride. And then they are out there for five or six
13 hours. You can usually see them from the camp, you can see
14 the mahouts and the elephants wondering around, the elephants
15 foraging and the mahouts gathering things. And they come back
16 in time for the 5:00 or 6:00 o'clock ride in the evening. And
17 then in that place, they stay there all night and they're
18 given some food, a lot of branches.

19 THE COURT: How do the mahouts restrain the
20 elephants, if at all, from being assaultive towards those
21 tourists, eco or otherwise, who are about to board them?

22 THE WITNESS: Right. They can -- I mean, the
23 elephants are just -- they're pretty trained. These are
24 females, you wouldn't do it with a male.

25 THE COURT: You would not do that with a male?

1 THE WITNESS: You would not do it with a male.
2 Males are not nearly as easily managed as females.

3 THE COURT: It is rare to see a male elephant in a
4 circus?

5 THE WITNESS: I don't want to say yes or no, I'm
6 sure most of them are females, almost all of them are females,
7 but no guarantees. You see males in zoos. I mean, sometimes
8 they breed -- try to breed elephants. But I don't recall a
9 male in a zoo, to be honest with you, an adult male.

10 THE COURT: All right. But getting back to my
11 question. How do they -- this is a -- it's the center of
12 attention for a lot of tourists, eco or otherwise, to go on a
13 safari or go on a tour or ride on the back of an elephant.
14 How are they controlled? How does the mahout or -- is the
15 mahout in control of the situation, the interaction between
16 the tourist and the elephant?

17 THE WITNESS: They do.

18 THE COURT: How do they control the elephant? How
19 do they control the elephant? How do they keep them from
20 wading into the lines of tourists waiting to board them on a
21 day that they don't want to be boarded.

22 THE WITNESS: They get off, they hold the elephant
23 and they say, stay, a lot of verbal commands that elephants
24 understand.

25 THE COURT: No weapons are used?

1 THE WITNESS: Not to hit. They may move them with
2 the stick or the ankus.

3 THE COURT: What does that mean, move it with a
4 stick or ankus?

5 THE WITNESS: They may push them to go back or --
6 with the other hand they --

7 THE COURT: With the point of that stick?

8 THE WITNESS: Not necessarily with the point, just
9 the end.

10 THE COURT: The point -- with their hand, with the
11 blunt end of the stick?

12 THE WITNESS: Or you can use the -- I'm going by
13 recollection now. You could use the curved end, but you're
14 not going to hit them with it.

15 THE COURT: Is it -- am I correct or not then that
16 this ankus is universally used to control elephants to a
17 certain extent?

18 THE WITNESS: The ankus, as far as I know, goes
19 back thousands of years, and it used to be used brutally with
20 elephants, but then they stopped doing it that way. They
21 learned that you can use some positive reinforcement, some
22 foot, verbal commands. You got that bond between the mahout
23 and the elephant, and they say, move back. As I said, there
24 are a lot of verbal commands that the elephants understand.
25 Elephants I think like doing this kind of tourist ride thing.

1 So, for one thing, they aren't going to object to it that
2 much.

3 And then they get to go out and then they come back
4 in the stables. The mahouts are giving them special treats,
5 they have a -- it's quite a large treat of molasses and stuff,
6 and they give them that. And they get them to lift their leg
7 up, they can get them to go in the water. I've gotten on the
8 back of an elephant. The mahout says something like, lift
9 your front left. The elephant does that. You stand on the
10 front leg. And then put their head down, you can get over
11 their back and back off again. And that's just all verbal
12 commands.

13 THE COURT: All right. This is not -- I'm not
14 cutting into your time, Counsel, by asking questions. I'm not
15 charging that against you. Go ahead.

16 MR. SHEA: Certainly, Your Honor.

17 BY MR. SHEA:

18 Q. Now, Dr. Hart, in India the elephants are -- again,
19 they are kept in stables during the day and they are chained
20 by drag chains, isn't that true, at night?

21 A. You mean at nighttime?

22 Q. Yes.

23 A. No, they are -- they pull around a chain. In other
24 words, you can't just say, you know, go out and have a good
25 time. The chain slows them down, so, it's a chain that they

1 drag around, maybe nine feet long, and then they drag that and
2 they can move. And they can interact with wild elephants. As
3 a matter of fact, it's customarily for the females there to be
4 bred by the wild males, and that's how they get pregnant.

5 Then but easier then for the mahout to go out and
6 find where they are, whether it's a Jeep or walking around,
7 because they can't move that fast and that far kind of
8 dragging this chain around.

9 Q. Dr. Hart, the chains are so heavy that the elephants
10 can't go very far from the stable, isn't that true?

11 A. I wouldn't say how heavy they are. I would say that
12 it's long enough to prevent them from going very far. So they
13 stay within walking distance or a Jeep ride distance.

14 Q. A substantial chain?

15 A. It depends on your definition. It's substantial enough
16 to keep them from walking away.

17 Q. Let me show you Page 214 of your deposition, beginning
18 on Line 1. I'm going to start with Line 1 to provide context.
19 If you'd follow along. Dr. Hart, I asked you Question: Have
20 you seen a mahout train a baby elephant in any of your
21 travels? Answer: No, I haven't. Now, I might finish my
22 comment, in India it's slightly different. Question: I'm
23 sorry, I didn't mean to interrupt you. Answer: No. In India
24 it's slightly different, they keep them in stables during the
25 day, some food, and they take them for rides, tourist rides,

1 but at night they are released in the park so they are free
2 ranging. And they pull like a nine foot chain on one foot so
3 that slows them down so they can't run around with the wild
4 elephants that they interact with, but they do interact with
5 wild elephants and the mahouts gather the elephants in the
6 morning. Question: How do though do that? Answer: Well,
7 they can't go very far, maybe ride around in a Jeep and find
8 out where they are, and they get on the elephant and ride them
9 back. Question: I take it this is a pretty substantial chain
10 that goes around the elephant's -- Answer: Yeah. Yes.
11 Right. Yeah. That slows them down. Actually, the females
12 get bred by the wild bulls. Question: And that chain would
13 be something like an anchor or chain on a ship or something
14 heavy enough to really slow to elephant down? Answer: No, I
15 mean, I don't know, something like that, I mean (indicating)
16 sure.

17 Did I read your testimony correctly?

18 A. Well, the reason you saw me hesitate there is because I
19 don't know what you mean by an anchor chain. I've seen anchor
20 chains that are like that (indicating), and I know they
21 aren't that big. I thought I made myself clear. It's large
22 enough to slow them down. And I was not very definite when
23 you asked me if it's an anchor chain because in my mind
24 there's different kinds of anchor chains.

25 Q. Dr. Hart, did I read your testimony correctly?

1 A. Yes, you did.

2 Q. Dr. Hart, you discussed some of the articles this
3 morning or today with counsel that were written by Dr. Friend,
4 correct?

5 A. True.

6 Q. One of those articles was Hart Deposition Exhibit 11,
7 and I'm sorry, Your Honor, I don't have the record cite in
8 front of me, it was just admitted. Could you display that,
9 please?

10 MR. GLITZENSTEIN: Your Honor, this was not one of
11 the ones we had discussed on the record in Direct Examination.

12 MR. SHEA: I apologize, I thought it was one that
13 had been discussed.

14 THE COURT: You both want it to come into the
15 record?

16 MR. SHEA: I'm not moving it into the record at
17 this time, Your Honor.

18 BY MR. SHEA:

19 Q. Dr. Hart, this is an article by Dr. Friend that you
20 cited in your report, correct?

21 A. That's right.

22 Q. And I'd like to show you Page 81, and going to the
23 paragraph under Section 3.3, Time Budgets, 2400 to 0400 hours.
24 Do you see that paragraph in front of you?

25 A. I do.

1 Q. Dr. Hart, that paragraph states: Consistent with
2 previous observations, behavior was highly variable across
3 elephants even during this time period, Tables 5 and 6. Six
4 of the elephants displayed no stereotypic weaving, although,
5 one of those displayed head bobbing. Bunny, Table 5, and
6 Kelly, Table 6, spent half of this period weaving.

7 Did I read that correctly?

8 A. Yes, you read that correctly.

9 Q. As to this statement, you have no basis to disagree
10 that stereotypic behavior was highly variable across the
11 elephants, do you?

12 A. Well, in my mind that discussion of that by the author
13 is somewhat misleading because stereotypic behavior consists
14 more than just weaving, it also consists of head bobbing.
15 So -- and this author has explained that stereotypic behavior
16 includes more than just weaving. So, head bobbing would also
17 be called stereotypic behavior. He's speaking of the weaving
18 only, but it's not just -- there are other kinds of
19 stereotypic behavior.

20 Q. Dr. Friend (sic), have you completed your answer to my
21 question?

22 A. You wanted to know if I agreed about it being
23 variable --

24 Q. Dr. Hart, that wasn't my question. Let me ask it. As
25 to this statement, you have no basis to disagree that

1 stereotypic behavior was highly variable across the elephants,
2 do you?

3 A. I do not disagree when he's speaking of these tables,
4 right. He's referring to these tables and I would agree.

5 Q. Dr. Hart, let me show you Page 234 in your deposition,
6 starting on Line 16, and I'll ask you to follow along.

7 Question: We'll get to that in just a minute. Now, in this
8 study -- well, let's turn to Page 81, that will probably speed
9 it up. There's a heading right in the middle of the page, the
10 sentence right below that heading says, quote, consistent with
11 previous observations, behavior was highly variable across
12 elephants, even during this time period, end quote. And then
13 he reports that -- he says, quote, six of the elephants
14 displayed no stereotypic weaving, although one of those
15 displayed head bobbing, end quote. So, first off, do you have
16 any basis to disagree that the behavior was highly variable
17 across the elephants in this study? Answer: No.

18 Did I read your testimony correctly?

19 A. Yes, you read my testimony correctly.

20 Q. Let's go to Page 84 of this article, and if we can look
21 at the sentence beginning midway down the page, beginning the
22 paragraph, first word, overall. Dr. Hart, this says:
23 Overall, these elephants spend less than half the time
24 performing weaving during roughly comparable time periods than
25 the elephants in five smaller European circuses studied by

1 Schmid (1995).

2 Did I lead that sentence correctly?

3 A. Right.

4 Q. And, Dr. Hart, you have no basis to disagree with this
5 statement, correct?

6 A. No.

7 Q. And the Schmid (1995), that's the article that you
8 discussed with counsel earlier today, is that correct?

9 A. That's right.

10 Q. And, Dr. Hart, I'd like to show you Page 87 of this
11 article. I'd like to show you the last paragraph right above
12 acknowledgments. That paragraph states: After traveling with
13 this circus and studying its elephants on numerous occasions,
14 over three years, this author's experience concurs with the
15 conclusions of Kiley-Worthington (1990) that the physical and
16 psychological welfare of circus elephants is not as a rule
17 inferior to that of other animal husbandry systems in zoos,
18 stables, kennels or farms.

19 Did I read that correctly?

20 A. You read that correctly.

21 Q. And you have no basis in the literature to disagree
22 with that statement, do you?

23 A. Well, I mean, this is the discussion of the author, of
24 course, he has a prerogative of making whatever statements he
25 likes to. So, I don't disagree that this is his opinion.

1 Q. Dr. Hart, let's look -- I believe you did discuss
2 Friend and Parker (1999), correct?

3 A. That's correct.

4 Q. I'd like to show -- it's Hart Deposition Exhibit 12.
5 I'd like to show you that article. This is another article
6 that you cited in your report, correct?

7 A. That's right.

8 Q. I'd like to show you Page 224 of this article. It's
9 basically the last sentence of the conclusion right above
10 Acknowledgments, beginning with the word "Even with".

11 Dr. Hart, this article states: Even with the
12 occasional use of chaining, our experience concurs with the
13 conclusions of Kiley-Worthington (1990) that the physical and
14 psychological welfare of circus elephants is not as a rule
15 inferior to that of other animal husbandry systems in zoos,
16 stables, kennels -- and I believe the next line says, or
17 farms.

18 Did I read that correctly?

19 A. That sentence follows immediately a previous one about
20 chaining required for veterinary examination and treatment.
21 And then following that, he said, you know, you certainly need
22 it for these occasions, and he's -- basically it's the same
23 sentence as in the other publication.

24 Q. I'm sorry, I didn't understand --

25 A. That's right. You're reading it correctly.

1 Q. And do you have any basis to disagree with that
2 statement?

3 A. Again, it's the author's conclusion. And I agree that
4 that's the author's conclusion. I have not read -- I haven't
5 done the analysis that Kiley-Worthington has done, so I can't
6 give you my opinion, but I can certainly say that this is the
7 author's opinion and he wrote that, clearly.

8 Q. Now, Dr. Hart, you mentioned or you discussed Williams
9 and Friend (2003) with counsel earlier today, correct?

10 A. That's right.

11 Q. And you cited that in your report, correct?

12 A. Right.

13 Q. Now, during your deposition -- could we show that as
14 Exhibit 14, the first page? During your deposition you were
15 critical of a statement made by Dr. Friend that weaving on
16 train cars was highly variable, weren't you?

17 A. Yes, I was.

18 Q. But that was not an untrue statement, was it?

19 A. On my part, you mean?

20 Q. No, on Dr. Friend's part. That statement that weaving
21 on train cars was highly variable was not an untrue statement,
22 was it?

23 A. You mean, in other words, he made that statement, yes.

24 Q. Let's look at Page 8 in the abstract, this statement
25 which I will read to you: Occurrence of weaving was highly

1 variable between elephants. Did I read that correctly, first
2 off?

3 A. You read that correctly.

4 Q. And you were critical of that statement in your
5 deposition, weren't you?

6 A. That's right.

7 Q. And you were critical of it because you would have said
8 something else about the data that were in Table 1 of the
9 article, is that true?

10 A. That's true.

11 Q. Yet, you acknowledge that Dr. Friend's statement
12 highlighted here was not an untrue statement, correct?

13 A. In other words, it's there. I mean, do I agree that
14 that's in print? Yes.

15 Q. Let me show you Page 260 of your deposition, starting
16 on Line 17. Starting on Line 17. Page 260, Line 17, I
17 apologize. Dr. Hart. Please follow along. Question: Isn't
18 it a statement in -- isn't it standard in literature to report
19 the range. Answer: It is. Question: Of values, which is
20 what they're doing here, 0 to 68.5. Answer: 0 to 88, I think
21 that's the -- abstract is not portray the data as one should
22 logically look at it. Question: So, you would have written
23 it up differently? Answer: Yes, I would have. Question:
24 Okay. But that's not an untrue statement. Answer: It's not
25 untrue.

1 Did I read your testimony correctly?

2 A. That's right.

3 Q. Dr. Hart, you also told the Court in your deposition
4 that it was standard in the literature to report the range of
5 such values, did you not?

6 A. Range is reported in two ways. One way reporting the
7 range is you have X numbers of animals, let's say you've got
8 five animals and you've got several measurements per animal,
9 and you get an average for that animal and you report the
10 range of averages for each of your five subjects. That's the
11 range. Or you can -- you've got, say, three different
12 measurements on each of five animals, you can report the
13 lowest of one animal and the highest of the other animal. So,
14 the author will usually tell you what these ranges that he's
15 reporting to refer to.

16 Q. And you say here that it is standard to report the
17 range of values, correct?

18 A. As I've just explained it, yes.

19 Q. Dr. Hart, you've talked about elephants sensing pain
20 earlier today, is that true?

21 A. Elephants being --

22 Q. -- sensing pain?

23 A. Yes.

24 Q. Is that true? In your opinion, it's difficult to
25 determine whether an elephant is experiencing pain from its

1 actions or its affect, correct?

2 A. That's true.

3 Q. Thus, an elephant could be experiencing pain and not
4 displaying outward signs of that pain, correct?

5 A. It could be because they do not have like facial
6 expressions, they can't grimace, they don't yelp.

7 Q. So, if an elephant looks comfortable, you can't tell
8 one way or the other if she's experiencing pain, is that true?

9 A. Yes, there are ways of detecting whether an animal
10 feels pain.

11 Q. But not from their actions or affect, correct?

12 A. Not by their what?

13 Q. Actions or affect, correct?

14 A. You know, you have to look at species typical or
15 species specific, biology and behavior. And if you're dealing
16 with an animal that doesn't have the facial musculature to
17 grimace or show you something. You can look at other ways
18 whether they experience pain. One would be, do they try to
19 get away from it, do they escape from it, do they move from
20 it?

21 Q. And I was asking about actions and affect?

22 A. You were asking for -- referring to my comment about
23 the facial expressions of elephants don't really tell you the
24 degree of suffering or pain or agony.

25 Q. So, you can't tell one way or the other by looking at

1 their facial expressions, right?

2 A. Well, maybe you could if that work could be done, maybe
3 there might be some slight things you could look for, but I'm
4 not aware of any literature that deals with it at that level.

5 Q. Dr. Hart, you did not attend the elephant inspection
6 ordered by this Court at the Ringling Brothers Center for
7 Elephant Conservation, correct?

8 A. I did not attend that facility.

9 Q. Thus, the only elephants that you observed directly
10 were at the Auburn Hills inspection, correct?

11 A. That's right.

12 Q. Do you recall the names of those two elephants at
13 Auburn Hills?

14 A. Karen and Nicole.

15 Q. And you were shown a film clip of Karen and Nicole
16 earlier today, correct?

17 A. That's right.

18 Q. Nicole was not swaying in that film clip, was she?

19 A. That's right.

20 THE COURT: Let me ask you something. You talked
21 about the facial expressions, the elephant not having facial
22 expressions in reaction to pain, but are there not some
23 reactions, physical sequella reactions to pain by elephants,
24 or not?

25 THE WITNESS: Well, I would think that --

1 THE COURT: I don't want you to think, based on
2 expertise.

3 THE WITNESS: From what I've seen, yes. Move away
4 from pain. If you were to strike them with something painful,
5 they move away.

6 THE COURT: What about the raising of the trunk, is
7 that a reaction or not?

8 THE WITNESS: That's not a very good predictor in
9 my mind. For one thing, if they did it they'd get at least
10 stabbed on the trunk when they raise it, they learned not to
11 do that. There's not a real give away that, you know, this
12 hurts other than their movements away from it.

13 THE COURT: What about their sounds? Any sounds
14 that emanate as a result of pain?

15 THE WITNESS: Elephants are pretty quiet. They do
16 have some sounds that we tend not to hear called infrasonic,
17 but we can't hear those. They trumpet, people know that, but
18 they usually trumpet to chase away some other elephants, you
19 know, to chase a strange male or something they trumpet. But
20 there's not like a yelp like a dog.

21 THE COURT: Not to react to a handler with a
22 bull -- with one of these ankus?

23 THE WITNESS: Right.

24 THE COURT: Not to do that --

25 THE WITNESS: I don't believe they vocalize or make

1 a sound.

2 THE COURT: What's your opinion about that? Why
3 don't they?

4 THE WITNESS: Why don't they?

5 THE COURT: Yeah.

6 THE WITNESS: Well --

7 THE COURT: Is it because it doesn't hurt them?

8 THE WITNESS: No, I would go back to my perspective
9 of an animal behaviorist and interested in biology and
10 elephant behavior in biology. In nature -- in nature they
11 aren't ever confronted with a pointed ankus. They aren't
12 confronted with the things --

13 THE COURT: You tell me a little while ago --

14 THE WITNESS: They have not evolved --

15 THE COURT: People have used ankuses over the years
16 from when the Egyptians were --

17 THE WITNESS: Right.

18 THE COURT: They were using these ankus things,
19 right?

20 THE WITNESS: But the evolution of the elephant
21 hasn't changed, I mean, it is the same elephants as they were
22 in nature. And they have not evolved to respond with a
23 yelping, they move away from it.

24 THE COURT: Is that the only way that pain can be
25 measured, they are move away?

1 THE WITNESS: Well, nothing comes to mind readily
2 right now.

3 THE COURT: That's very interesting because you
4 tell me that they swat the flies because they hurt.

5 THE WITNESS: Well, that's right. But they can do
6 that and they're used to flies and they learn to be around
7 flies. Whether they would swat at an ankus, I mean, maybe
8 some do and some don't because I haven't seen that many ankus
9 hits, to be honest with you.

10 THE COURT: So, it's not easy then to determine?

11 THE WITNESS: It's not easy, no, no. I mean, I
12 would say if -- but at some point you have to make
13 generalizations about animals in general, I would say. For
14 example, if you hit any animal with a sharp object and you
15 make a wound --

16 THE COURT: Let me -- I've been looking at film
17 footage of elephants maybe on the Blue Team, maybe on the Red
18 Team, being arguably hit upwards with the bull hook, and I
19 pull back because I sense the pain.

20 THE WITNESS: Yeah.

21 THE COURT: Maybe I'm overreacting.

22 THE WITNESS: I think it's very realistic. I mean,
23 if any animal were stabbed like that, you would expect -- pain
24 is a very basic feeling, a very basic emotion. All animals,
25 all mammals -- all animals that we know of have pain receptors

1 and pain responses, so it's a very -- I flinch as well, I
2 mean, it's a very -- and I would imagine elephants if they're
3 hit like that do pop up, you know.

4 THE COURT: But is that just a reaction, though?
5 Could that be some reaction other than a reaction to pain
6 itself?

7 THE WITNESS: I would say it's a reaction to pain.
8 I think that's the most logical explanation from a behavioral
9 standpoint.

10 THE COURT: But you agree that my reaction could be
11 an overreaction, though?

12 THE WITNESS: Well, I'm not going to argue with you
13 about whether --

14 THE COURT: Look, I'm trying to figure out this
15 myself -- I'm sorry, we're giving the court reporter a fit.
16 Look, no, I'm wrestling with this, and if I'm overreacting I
17 want you to tell me that. I'm not arguing with -- I've seen
18 lot of film footage and I have -- there have been a couple
19 times I closed my eyes, put my hands over and maybe I'm
20 overreacting to what I see.

21 THE WITNESS: I'm --

22 THE COURT: Not pain.

23 THE WITNESS: I'm an animal behaviorist --

24 THE COURT: That's why I'm asking.

25 THE WITNESS: And I react the same way. And I

1 would react the same way when my dog is jabbed, if she ever
2 was. If my dog yelped, I would react the same way. If a
3 chimpanzee in a circus were jabbed and yelped, I'd react the
4 same way. If I see an elephant jabbed like that, I react the
5 same way. I think it's not an exaggeration.

6 THE COURT: Elephants in the wild fight among
7 themselves and fight other animals and predators and
8 otherwise?

9 THE WITNESS: They do.

10 THE COURT: In your opinion, do they experience
11 pain during those fights?

12 THE WITNESS: Well, one thing about pain in
13 fighting animals is it tends to go -- if you're already
14 emotionally involved in a fight, that painful stimulus makes
15 you fight harder.

16 THE COURT: Sometimes the rush of adrenaline masks
17 pain, though, and athletes will tell you that.

18 THE WITNESS: They probably are -- it goes on the
19 fighting, and then with the emotion of the moment they don't
20 necessarily feel it.

21 THE COURT: All right. So, it's difficult to
22 measure pain, though, is that a fair statement?

23 THE WITNESS: It's difficult unless you're going to
24 set up a laboratory study where you're going to measure
25 something in the brain, you measure the brain light up in

1 certain places. Or you look at how hard the animal worked to
2 get away from that, and it's been studied in laboratory in
3 that way, or at least it used to be. You can use pain
4 blockers to see how well they block pain, that's is the way
5 human pain medicines are sometimes developed, is you
6 measure -- you have a pain and you see how well it blocks it.

7 THE COURT: It is a fair statement then that on
8 occasion when these hooks are used, then it's within the realm
9 of reason that an elephant may not experience pain as such by
10 the use of the bull hook?

11 THE WITNESS: That an elephant may not experience
12 pain?

13 THE COURT: Or are you saying that every time a
14 bull hook is used an elephant experiences pain?

15 THE WITNESS: No, I would not say that.

16 THE COURT: All right. Sorry, this time is not
17 being counted against you. I'm sorry, it gave me time to
18 think of two other questions. When fighting in the wild, do
19 elephants make noise?

20 THE WITNESS: They trumpet, yes, they do. They
21 make noise.

22 THE COURT: All right. During the fight or in an
23 effort to scare away antagonists?

24 THE WITNESS: I think it's both. If they are
25 involved in a fight they'll trumpet and go at each other and

1 trumpet. But they'll also use the trumpet to scare away --
2 they might scare away people in a Jeep driving up too close.

3 THE COURT: That's interesting because you don't
4 have an opinion that they use that trumpeting sound in
5 captivity, though, in circuses?

6 THE WITNESS: I think it's been trained. You can
7 train elephants to trumpet.

8 THE COURT: All right. In the wild, while
9 fighting, do they use a swatting motion of their tail as they
10 would use to swat away a meddlesome fly?

11 THE WITNESS: Not in fighting, I think the stakes
12 are higher.

13 THE COURT: It wouldn't accomplish any objective?

14 THE WITNESS: That's true.

15 THE COURT: And is it your opinion that they don't
16 use the swatting method in circuses as a reaction to the use
17 of bull hooks or chains?

18 THE WITNESS: Not that I'm aware of.

19 THE COURT: Do you have an opinion as to why not,
20 if this is antagonizing -- antagonistic to touch or pain? If
21 it produces pain, why they don't use the natural swatting
22 method? There's a natural swatting method used to -- because
23 they are disturbed by a fly that's biting them and hurting
24 them, but they don't use it in the circus in reaction to
25 either chains or the hooks, if I understand you correctly.

1 THE WITNESS: The fly swatting is --
2 usually there's three or four flies buzzing around, one bites,
3 it's kind of an ongoing process, and it takes awhile to get
4 that branch -- find a branch, move it up there and swat them
5 off. If an ankus -- one jab with an ankus, it's -- there
6 isn't really time to kind of move it away, you just got to get
7 out of there because it's -- in my mind, and my professional
8 opinion, it would be more painful than a fly bite.

9 THE COURT: What about the use of the ankus while
10 the elephant is in one of these -- being paraded and holding
11 onto the tail of an elephant in front of him as a constant --
12 not constant as if I'm moving my hand rapidly, but fairly
13 consistent use of the bull hook to keep the elephant in the
14 parade? You've seen the parades from the train stations to
15 the venue?

16 THE WITNESS: Part of it, actually, we weren't --

17 THE COURT: Have you seen the use of the bull hook
18 during those parades?

19 THE WITNESS: To be honest with you, I think we did
20 not participate in that parade, so I cannot say.

21 THE COURT: All right. Sorry. Go ahead. This is
22 not counted to your time. Go ahead.

23 BY MR. SHEA:

24 Q. Dr. Hart, to follow up one question regarding what you
25 were just discussing. Different elephants will have different

1 responses to use of the ankus, correct?

2 A. Did I say that?

3 Q. I'm asking you.

4 A. You're asking me?

5 Q. I'm asking you. Will different elephants have
6 different responses to use of the ankus?

7 THE COURT: When you say different, are you
8 referring to Asia versus African or --

9 MR. SHEA: No, different individuals.

10 THE COURT: Individual elephants.

11 THE WITNESS: If I give you kind of a long answer
12 to that, is that all right? If you took a sharp ankus and you
13 stabbed behind the ear, I'm giving you an example, three
14 elephants in a row, three stabbed, I think all three of them
15 will have a similar response. They'll move away. There will
16 be a reaction to that blow, which would be painful.

17 THE COURT: Move away, no noise, no swatting, just
18 move away?

19 THE WITNESS: Move away, yes.

20 BY MR. SHEA:

21 Q. Let me show you Page 204 of your deposition, starting
22 on Line 8. 204. Starting on Line 8 going through 13. And,
23 Dr. Hart, I asked, Question: And different elephants'
24 responses to the bull hook, you would expect to be different
25 correct? Answer: In -- well, there is individual differences

1 just like there are in people and how they manifest stress?

2 Did I read that correctly?

3 A. Yes, I did.

4 Q. Dr. Hart, going back to --

5 A. Do you want me to elaborate? I'm sorry --

6 THE COURT: I'd like you to, yes.

7 THE WITNESS: I was asked the question differently,
8 and I was giving you an example where I can -- I would say all
9 animals would act the same way. The context in this
10 deposition was, are they going to respond differently to the
11 bull hook. Now, if you were to show -- put in front of the
12 elephant, you know, put in front of their face a bull hook,
13 one might respond differently than the other.

14 I'm not talking about stabbing. It would depend on
15 their recent history with that bull hook. It would depend on
16 what happened last. It depends on their memory of the
17 context. So that you would expect some individual
18 differences, and in the context in which I perceived that
19 question was asked, I said individual differences. So, I gave
20 you one answer, the first one, or I can expect that they would
21 all react the same way. The other one, right now, how they
22 can respond differently.

23 BY MR. SHEA:

24 Q. Dr. Hart, going back to your -- the inspections in this
25 case. Now, you didn't inspect elephant Jewell, did you?

1 A. No.

2 Q. Elephant Lutzi?

3 A. No.

4 Q. Elephant Mysore?

5 A. No.

6 Q. Elephant Susan?

7 A. No.

8 Q. And you didn't inspect an elephant named Zina, correct?

9 A. No.

10 Q. Other than at the Auburn Hills inspection -- let me
11 back up a second. You were shown pictures of the insides of
12 train cars earlier today, correct?

13 A. That's true. That's right.

14 Q. Other than -- and that occurred at the Auburn Hills
15 inspection, correct?

16 A. The train ride -- arrival of the trains.

17 Q. When you viewed the inside of train cars, that occurred
18 at the Auburn Hills inspection, correct?

19 A. That's right.

20 Q. And other than the Auburn Hills inspection, you have
21 not seen the inside of any FEI train car, correct?

22 A. That's right.

23 MR. SHEA: Those are all the questions I have.

24 THE COURT: All right. Redirect, Counsel.

25

REDIRECT EXAMINATION

BY MR. GLITZENSTEIN:

Q. Dr. Hart, going back to the question you were asked a short while ago about variability in response to a bull hook?

A. Uh-huh.

Q. Were you suggesting that there is variability as to whether or not the elephants jabbed with a sharp end of a bull hook would experience pain?

A. My first answer -- if they took three elephants and you jabbed them -- you jabbed them behind the ear good and hard, right? I would say all three were experiencing pain.

Q. What is your basis for saying that?

A. I think it's within the -- just reading animal biology in general. When any animal is hit with a very sharp object, and they -- especially if they flinch, then it's a scientific and a very reasonable conclusion that they're experiencing pain.

Q. Do elephants have similar pain receptors to other mammals?

A. As far as I'm aware, yes.

Q. Do you have any reason to think that they don't?

A. No, they don't. One thing that people don't understand about elephant skin, I mean, we call it pachyderm, but there are papillae that stick up in the skin that carry blood vessels and nerve fibers. So, it's -- there are places where

1 nerves are kind of brought close to the surface by virtue of
2 these papillae that stick up.

3 Q. Are you were aware of any other biological differences
4 between elephants and other mammals, subject to which
5 elephants would not experience pain when other animals would?

6 MR. SHEA: Objection, leading and argumentative.

7 THE COURT: I'll allow the question to be answered.

8 THE WITNESS: Okay. As to whether the perception
9 of pain in elephants is different qualitatively than other
10 species, that's what you're asking?

11 BY MR. GLITZENSTEIN:

12 Q. Qualitatively or physiologically?

13 A. Right. No reason to believe that it is any different.
14 Not that I'm aware of, no.

15 Q. You were asked about the Mason and Latham study, if we
16 can pull that up for a moment. This is the study, just for
17 the record, that reads: Can't stop, won't stop, stereotypia
18 reliable animal welfare indicator, and you were asked about
19 one portion of that. I'd ask you to take a look at the
20 abstract. There's a first question: Do you know whether this
21 study was specifically about elephants?

22 A. No, this wasn't.

23 Q. If you take a look at the second sentence of this
24 study, I will read that: Where data exists most,
25 approximately 68 percent situations that cause increased

1 stereotypies also decrease welfare. Stereotypy eliciting
2 situations are less likely to be poor for welfare, although
3 exceptions exist. Do you see that?

4 A. Yes.

5 Q. Do you think those sentences are an accurate summary of
6 this study based on your reading of it?

7 A. Yes.

8 Q. Do you have an opinion about whether elephants that are
9 carried on the trains for -- take the examples we were using
10 before, I think 35 hours was about the timeframe we talked
11 about, would be the kind of stereotypy eliciting situation
12 that this article is referring to?

13 MR. SHEA: Objection.

14 MR. GLITZENSTEIN: I just asked if he had an
15 opinion.

16 THE COURT: I'll allow it.

17 THE WITNESS: I actually used the term more than
18 seven hours. But, yes, I would say that falls into the
19 category of poor welfare.

20 BY MR. GLITZENSTEIN:

21 Q. You were asked some questions about the mahouts and the
22 conditions of those elephants. The elephants that you were
23 describing, are they able to engage in more naturalistic
24 behavior than the Ringling Brothers' elephants based on your
25 observations?

1 A. Definitely.

2 MR. SHEA: Objection, leading.

3 THE COURT: I'll allow it.

4 THE WITNESS: Yeah, definitely.

5 THE COURT: Let him testify. Start rephrasing your
6 questions, Counsel. I want him to testify. I want to be
7 able, if appropriate, to credit testimony -- not the testimony
8 of the lawyer.

9 BY MR. GLITZENSTEIN:

10 Q. My question was whether you have an opinion on whether
11 or not the elephants you described in India -- how they deal
12 with the mahouts, are able to engage in more naturalistic
13 behaviors than the elephants in the Ringling Brothers circus?

14 MR. SHEA: Same objection and it's argumentative.

15 THE COURT: All right. It's overruled. You do
16 have an opinion, what's the opinion?

17 THE WITNESS: My opinion is, naturalistic usually
18 means referring to the animal living in the wild situation.
19 So, we're familiar with them moving around, engaging in family
20 groups and going to waterholes and so forth. Looking at an
21 approximation of that, the elephants kept in India and Nepal
22 have a much closer approximation to that, they're out in the
23 day foraging, they're out at night foraging. They're not near
24 as closely chained or tethered as they are in the Ringling
25 Brothers situation, so they can move back and forth and touch

1 the animal next to them and engage in eating these branches,
2 which is their natural food.

3 So, certainly they're engaging in something much
4 closer approximation to naturalistic behavior than the
5 Ringling Brothers case that we're talking about where they are
6 picketed in a line and they can move one foot forward and one
7 foot backwards, they are brought hay, they are brought water
8 once in awhile. That's very minimum naturalistic behavior, in
9 my mind.

10 BY MR. GLITZENSTEIN:

11 Q. You were asked some questions on Cross about the --
12 what's been marked as Plaintiff's 157, Will Call 157, the
13 Variation and Stereotypic Behavior article by Gruber Friend,
14 et al., do you recall that?

15 A. That's right.

16 Q. And I'd ask you to take a look at the first full
17 paragraph on the second page of that article, which is Page
18 210. And it's a sentence beginning with: Stereotypies can be
19 defined as unvarying repetitive behaviors that have no obvious
20 goal or function. Then some citations. And then:
21 Stereotypies have been associated with suboptimal housing or
22 management systems. Closed quote. Do you see that statement?

23 A. I do.

24 Q. Do you agree with those statements?

25 A. Yes, I do. This is statement by Dr. Friend and the

1 colleagues at the beginning of this paper -- giving the
2 context of the paper.

3 Q. With regard to the mahout situation, again, that you
4 referred to. You said that they had never seen the elephants
5 or seen the ankuses or bull hooks used in a painful way on
6 those elephants, what did you mean by that?

7 A. Where they jabbed the elephant and it flinched away.
8 I've seen them push or touch it or move it around, but not hit
9 it. Or, to me as an observer, looked like a painful reaction,
10 which would be a flinch or a move away from it.

11 Q. Do the mahouts transport their elephants for many hours
12 at a time in railroad cars?

13 A. No, they don't.

14 Q. And going back to the study that we had referred to
15 about the behavior of elephants in railroad cars, which was
16 marked as Plaintiff's Exhibit 156, is there anything in the
17 data in this article or any of the other articles that we've
18 discussed which in your view would suggest that these
19 elephants are not experiencing the level of stereotypical
20 behavior because of anything other than poor welfare
21 conditions?

22 MR. SHEA: Objection, leading.

23 THE COURT: I'll allow it.

24 THE WITNESS: No, I can think of no other reason
25 that you would find this abnormal level of stereotypic

1 behavior other than this long term confinement where you move
2 forward, back one foot and the other, and 36 hours or whatever
3 on end.

4 BY MR. GLITZENSTEIN:

5 Q. Did you have an opinion about whether that's injurious
6 to the elephants?

7 A. As to --

8 Q. Whether it's injurious to the --

9 MR. SHEA: Objection, it goes beyond the proffer --
10 the offer of this witness.

11 THE COURT: I'll allow it.

12 THE WITNESS: Yeah, it is injurious to the animal's
13 welfare, to its engagement in naturalistic behaviors, yes.

14 MR. GLITZENSTEIN: I have nothing further, Your
15 Honor?

16 THE COURT: Do you have any questions before I
17 excuse the witness?

18 MR. SHEA: I do, and they are follow-alongs.

19 RECROSS-EXAMINATION

20 BY MR. SHEA:

21 Q. Dr. Hart, just now you mentioned seven hours again, and
22 I understand it's your opinion that elephants should not be
23 chained more than seven hours per day, did I understand that
24 correctly?

25 A. I think we were referring to the train rides. I might

1 have misunderstood, but I think it was in the boxcars in the
2 train rides.

3 Q. Well, is it your opinion that elephants should not be
4 chained more than seven hours per day?

5 A. Are you talking about chaining now.

6 Q. Yes.

7 A. In my opinion they should not be chained more than
8 seven hours a day, that's true.

9 Q. That's means that elephants, in your opinion, should
10 not be chained overnight, correct?

11 A. Well, I think there's plenty of examples. They can be
12 turned loose in a pen at nighttime, they'd do just fine. Even
13 small pens, they aren't going to fight, they aren't going to
14 get into trouble. I would see that there's no particular
15 reason to chain them up overnight. So, I would -- but, again,
16 in the elephants we have seen in India and Nepal, they would
17 be -- in the Nepal they were chained on this long chain,
18 giving them more than one foot backward and one foot forwards,
19 they can move many, many lengths backwards and forwards. They
20 are chained overnight, and I've never seen stereotypic
21 behavior in them. So, it depends on the context.

22 BY MR. SHEA:

23 Q. Then if I understand your testimony, elephants should
24 not be chained overnight if they are chained to a tether that
25 goes to some point to which it is affixed, correct?

1 A. And they are allowed only one foot forward, one foot
2 back. I would say that is not a desirable situation.

3 Q. Is that the only situation in which elephants shouldn't
4 be chained overnight, Dr. Hart?

5 A. I'm sorry.

6 Q. Is that the only situation in your mind, in your
7 opinion, that elephants should not be chained overnight?

8 A. In what situation?

9 Q. What you just described? The type of tethering you
10 just described?

11 A. Is that the only -- I'm not sure what other ones there
12 would be. I'm talking about chain them so you can move one
13 foot forward, one foot back, can't go anyplace else, I'm
14 referring to that. Now, if you want to say, can we chain them
15 and give them -- tether the back foot and give them 10 foot of
16 chain and stake it someplace and move around on some dirt, you
17 know, that's a different story.

18 Q. Dr. Hart, is it your opinion that elephants shouldn't
19 be chained for 12 hours a day?

20 A. Again, chaining meaning what I'm familiar with with the
21 Ringling Brothers' situation, which is chained so you can move
22 one foot forward, one foot backwards, and that's all you can
23 move for a 12-hour period, I don't think they should be
24 chained that long.

25 Q. It is your opinion that an elephant can be chained for

1 12 hours a day on a longer chain?

2 A. Well, again, I would have to qualify my answer, it
3 depends on the substrate. It depends on -- I would say you'd
4 look at whether stereotypic behavior develops in these animals
5 as a marker for how aversive it is. Chaining with a 10-foot
6 chain, and you got one next to you with a 10-foot chain, and
7 one over here this way and you can interact, and you get
8 something that takes longer than a bale -- a batch hay to eat,
9 then that's a different story. But if they showed a high
10 degree of stereotypic behavior, I'd say there's something
11 wrong. But if they don't show stereotypic behavior, then I
12 think you can consider it.

13 Q. Dr. Hart, if you take an elephant that has been chained
14 for a period of years and put that elephant out in a field
15 with, let's say, a square mile of room, would that elephant
16 stop stereotypic behavior?

17 A. I'll answer according to what my perception is where
18 it's probably been done. And some of these rescue
19 organizations for elephants where they take elephants in that
20 are turned over to them from Animal Control or from some place
21 and they have such a wild -- not wild, wide space. I've not
22 seen any stereotypic behavior or seen any reported in these
23 animals.

24 THE COURT: Let me ask you this. Do you have an
25 opinion as to how a circus such as Ringling Brothers could

1 transport elephants from say New York to Chicago by train
2 without producing stereotypic behavior in the elephants?

3 THE WITNESS: Boy, that's a tough one. You know, I
4 would think -- well, maybe two hours and get off and move
5 around, and then two hours back on, move around. And if you
6 built some reinforcement into it, maybe some food treat when
7 they get back on, something to do, so it doesn't take on that
8 aversive atmosphere of a 24-hour ride.

9 So, you could determine how long you could keep
10 them on a train before they start -- before stereotypic
11 behavior shows up. And even in the Williams and Friend study
12 there was a pretty low level for three hours. You can put
13 them on three hours and then take them off, get them a good
14 field to go around in and bring them back and another three
15 hours. It will take longer than otherwise, but I would think
16 that you could put together a reasonable system where it would
17 work.

18 THE COURT: It may take longer, may cost more, but
19 in the long run it might be -- the elephant's best interest
20 might be better served, huh?

21 THE WITNESS: The elephant's best interest, yes.

22 BY MR. SHEA:

23 Q. Dr. Hart, let me so you Williams and Friend (2003), the
24 first page, the last sentence of the abstract. You were just
25 asked questions about this, correct? This article, is that

1 right?

2 A. I was asked questions about this article?

3 Q. Yes.

4 A. By you or the previous --

5 Q. By your counsel.

6 A. Okay.

7 Q. Dr. Hart --

8 A. I was asked questions about this article, I don't know
9 about this line.

10 Q. Dr. Hart --

11 THE COURT: I'm not trying to stop you -- maybe I
12 am. We promised the court reporter 5:30 -- I'd be happy to
13 ask the doctor -- one more question, that's it? All right.

14 BY MR. SHEA:

15 Q. Dr. Hart, it says here: Because the elephants observed
16 in this study engaged in a range of activities while weaving
17 and were not in a trance-like state, weaving during transport
18 did not appear to be indicative of poor behavior. Did I read
19 that correctly?

20 A. You read that correctly.

21 Q. And you disagree with Dr. Williams and Dr. Friend's
22 opinion that I just read, correct?

23 A. I do.

24 MR. SHEA: I have nothing further.

25 THE COURT: Do you have any other questions?

1 MR. GLITZENSTEIN: No, Your Honor.

2 THE COURT: Are you sure?

3 MR. GLITZENSTEIN: Yes.

4 THE COURT: Thank you very much. Good talking to
5 you. Have a safe trip home. Are you returning home this
6 evening?

7 THE WITNESS: No, tomorrow.

8 THE COURT: Have a safe trip home. Let me ask you
9 something, don't put this on the record, it has nothing to
10 do --
11 OFF THE RECORD.

12 MR. GLITZENSTEIN: I neglected to ask my co-counsel
13 whether they had any final questions. Could I pose one final
14 question?

15 THE COURT: It should be on the record. Not about
16 dogs and vomiting?

17 MR. GLITZENSTEIN: Although we could use some
18 advice on that.

19 REDIRECT EXAMINATION

20 BY MR. GLITZENSTEIN:

21 Q. You were asked -- the last question from counsel for
22 the defendant was whether you disagreed with that statement
23 from the Friend study, and you just said you did not agree
24 with it. I'd just ask you why you don't agree with it?

25 A. Well, I don't agree with it for two reasons. One, he

1 says they were not in a trance-like state. I've never seen in
2 the literature that if you were in a trance, it's not
3 stereotypic behavior, and if there was a reason to believe
4 that, there was no measurement of trance-like behavior. I
5 mean, it didn't describe it, didn't report it, didn't measure
6 it, so I didn't see where the data had come from.

7 And the fact this they would throw some -- throw
8 some hay around once in awhile, that was by the author's own
9 statements in there, it's a relatively small period of time
10 that they did have hay or throw hay around. So, that did not
11 explain engaging in stereotypic behavior 50 percent of the
12 time.

13 MR. GLITZENSTEIN: Thank you, Your Honor.

14 THE COURT: Do you have a last question, Counsel?

15 MR. SHEA: No, Your Honor.

16 THE COURT: Thank you very much, Doctor.

17 MS. WINDERS: Can quickly clear something up for
18 the record.

19 THE COURT: Yes.

20 MS. WINDERS: Delcianna Winders. I'm meant to
21 bring this up when Ms. Sinnott was on the stand, and I'm sorry
22 I neglected to that. The defendant has also listed Ms.
23 Sinnott as a witness and subpoenaed Ms. Sinnott. My
24 co-counsel has talked to opposing counsel, and they indicated
25 that that was just to question her about the chart we

1 discussed earlier, Will Call 50.

2 THE COURT: After her testimony this morning.

3 MS. WINDERS: No, no.

4 THE COURT: Her testimony is going to come in
5 anyway at some point about the chart. I found it very
6 helpful.

7 MS. WINDERS: I'm glad. As you know, she's a very
8 essential part of our trial team, and we just wanted to clear
9 up, if they do have more questions about the chart, and if so,
10 if we can go ahead and get those taken care of sooner rather
11 than later.

12 MR. SIMPSON: We have no further questions. We
13 have no further questions.

14 THE COURT: All right. Have a nice evening, we'll
15 start at 10:00 tomorrow.

16 MR. SIMPSON: Your Honor, before we break can we
17 find out what it is we're actually going to do tomorrow.

18 THE COURT: I thought I laid down the law earlier.
19 Didn't you tell them which witnesses, which exhibits --

20 MR. SIMPSON: We know we've got one live witness
21 that was going to follow Dr. Hart, but --

22 THE COURT: Doctor, you can step down. Enjoy your
23 evening. I really don't think this is necessary. I thought I
24 said quite clearly earlier, tell them who the witnesses are
25 and what the exhibits are.

1 MS. MEYER: Your Honor, I had a discussion with Ms.
2 Joiner earlier during the break and we agreed that as soon as
3 I get back to the office I'm going to give her -- we've
4 already given them 72 hours notice on everything, but I'm
5 going to tell her specifically, since we're behind, what we're
6 planning on doing tomorrow.

7 THE COURT: Let them know before you leave this
8 evening, that's only fair. They shouldn't have to wait for a
9 telephone call. Let them know before you leave. I don't
10 think that's unfair to plaintiffs, counsel. Everyone is here,
11 let them know before they go. All right. And the same
12 procedure for tomorrow, let them know before you leave court
13 tomorrow who the witnesses are for Thursday and the exhibits,
14 that's only fair. Everyone have a wonderful evening.
15 COURT ADJOURNED AT 5:35 p.m.

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C E R T I F I C A T E

I, Lisa M. Hand, RPR, certify that the
foregoing is a correct transcript from the record of
proceedings in the above-titled matter.

Lisa M. Hand, RPR

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