

UNITED STATES OF AMERICA  
 U.S. DEPARTMENT OF COMMERCE  
 NATIONAL OCEANOGRAPHIC AND ATMOSPHERIC ADMINISTRATION

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IN RE:

Proposed Waiver and Regulations Governing the Taking of Eastern North Pacific Gray Whales by the Makah Tribe :  
 :  
 : Docket No. 19-NMFS-0001  
 :  
 : RIN: 0648-BI58 and  
 : RIN: 0648-XG584  
 :  
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REPORTER'S OFFICIAL TRANSCRIPT OF PROCEEDINGS  
 NOAA ADMINISTRATIVE PROCEEDING  
 HEARING ON PROPOSED WAIVER and RULEMAKING  
 DAY 4 of 6

Jackson Federal Building  
 915 Second Avenue  
 Seattle, Washington  
 Tuesday, November 19, 2019

BEFORE:

THE HONORABLE GEORGE J. JORDAN  
 ADMINISTRATIVE LAW JUDGE

Also Present:

Heather L. MacClintock, Esquire, Attorney Advisor  
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Timekeeper:

Joseph Heckwolf, Esquire, Attorney Advisor NOAA

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**P R O C E E D I N G S**

**(Time noted: 9:00 a.m.)**

1  
2  
3           THE COURT: Good morning. We're back in  
4 session. Make sure all parties are here. NMFS?

5           MS. BEALE: Present.

6           THE COURT: The Makah?

7           MR. GRUBER: Present.

8           THE COURT: MMC?

9           MR. GOSLINER: Present.

10          THE COURT: AWI?

11          MR. EUBANKS: Present.

12          THE COURT: Sea Shepherd?

13          MR. SOMMERMEYER: Present.

14          THE COURT: And Peninsula?

15          MS. OWENS: Present.

16          THE COURT: Very good. Thank you. Again, sir,  
17 you have been previously sworn.

18          MR. SCORDINO: Yes.

19          THE COURT: Okay. All right. We've finished  
20 redirect and it's now time for recross.

21          MR. SCORDINO: Recross, or the same question?

22          THE COURT: Yeah. First, the question. Yes,  
23 he'll probably ask that question he was asked that we left  
24 off with yesterday, and then they can ask other questions  
25 on cross-examination.

1                   MR. SOMMERMEYER: I just had very items, so --  
2 (Whereupon,

3                                   **JONATHAN SCORDINO**

4 was recalled as a witness, and having been previously duly  
5 sworn, was examined and testified as follows:)

6                                   **RECROSS-EXAMINATION**

7                   BY MR. SOMMERMEYER:

8           Q.     So yesterday -- I don't have it in front of me.  
9 Yesterday I think we asked you the question, you testified  
10 that -- in your direct testimony yesterday, that in 2008,  
11 that you recorded or saw more whales, more gray whales, in  
12 the area of the hunt in 2007, unauthorized hunt, in 2008.  
13 Is that -- was that your testimony?

14           A.     Yes. There was more whales around there.

15           Q.     Okay. And then you said that you could look at  
16 your computer or look at your data, provide some more  
17 information about that; you were going to look at it  
18 overnight. So did you get that opportunity to do so?

19           A.     Yeah, and I think the context was that you were  
20 asking about the individual behavior of whales around the  
21 hunt. And so let's just be very clear. I didn't  
22 photograph the whales that were around the hunt. So what  
23 I'm going to report to you is about the whales that were  
24 in the vicinity that could have been the whales there but  
25 I can't say they were.

1                   So I looked at my surveys for August of 2007. I  
2 had five whales in the vicinity of where the hunt  
3 occurred. Those whales were 242, 244, 819, 878 and 932.  
4 When I surveyed that area in September, I saw four of  
5 those five whales. 242 was not observed. In 2008, again  
6 I observed four of the five whales, and that time it was  
7 242 that was not there. So in either case, 80% of the  
8 whales right after the time period of the hunt were still  
9 around, or in the next year, 80% of the individuals that  
10 were observed in that time were observed again.

11                   And, you know, I'd say that in itself was  
12 abnormal in my database, and it probably was because we  
13 had such great foraging conditions in those years that so  
14 many stuck around.

15                   Q. Thank you. You said yesterday you don't have a  
16 photographic memory, but I think you might, because that  
17 was really good.

18                   A. Well, that was my homework, so, you know, I set  
19 myself to it.

20                   Q. That's good. I guess my memory's not so great.  
21 But your testimony yesterday was we confirmed it to your  
22 report from that time period in 2011 and the data you  
23 collected as to the whales you saw 3 days afterward were  
24 not -- it was not statistically significant, correct? I'm  
25 sorry. Not 3 days after. Let me take that back.

1           The study, the investigation you did where you  
2 looked at whether or not -- how many whales were there the  
3 prior 3 years and the month before and the month ending  
4 September. And then you determined that there were some,  
5 but it wasn't -- there was so few, it wasn't a  
6 statistically significant study. That's what you  
7 recorded, right?

8           A. There was not a statistical difference found in  
9 the proportion of whales between August and September in  
10 those years.

11          Q. Okay.

12          A. But the sample size was so miniscule that it was  
13 not very informative.

14          Q. So, and just to clarify, your objective for  
15 testifying about the 2008 sighting numbers of gray whales  
16 in the area of the hunt in 2008 was to imply there was not  
17 any disturbance, lasting disturbance or shift in  
18 distribution from the hunt; is that correct?

19          A. Yeah, I said that whales were utilizing the  
20 area. So the hunt did not cause whales to avoid the area.  
21 Correct.

22          Q. So that's correct? Yeah. But do you -- you  
23 don't have any specific evidence that the same whales, if  
24 any, in the vicinity of the 2007 hunt returned the next  
25 year, that were actually in the vicinity of the hunt, were

1 | there when the hunt occurred?

2 |       A.    Would you like me to repeat the original -- the  
3 | five whale --

4 |       Q.    No, no.  But you said yesterday you didn't have  
5 | any evidence that the whales you observed were actually in  
6 | the area of the hunt at the time of the hunt.

7 |       A.    And that's what I said just a moment ago too.  I  
8 | could repeat -- was that a question?

9 |       Q.    I was just confirming that was your testimony.  
10 | So your evidence on this point is purely anecdotal; is  
11 | that correct?

12 |       A.    The whales --

13 |       Q.    2007.  Yes.

14 |       A.    -- that I recorded in 2007 were around the area  
15 | in August and through September.  They're likely the same  
16 | whales that were there.

17 |       Q.    But you don't know for sure?

18 |       A.    That's why I started out and I said I did not  
19 | photo ID the whales on the day of the hunt.  My objective  
20 | on that day was that I was the observer to assess the  
21 | injuries of that whale and whether or not it should be  
22 | euthanized.  My focus was on that whale.  I think that  
23 | should be understood.

24 |       Q.    Okay, thank you.  Yeah, I just wanted to  
25 | clarify.



1           A.    Okay.

2           Q.    So then I just had one other, just a clarifying  
3 question also.  Different topic.  In your testimony  
4 yesterday, you expressed the opinion that the 2017  
5 Calambokidis photo ID survey was consistent with the  
6 Lagerquist tagging survey results concerning whale ranges.  
7 So that is at the 60 nautical mile minimum range, it was -  
8 - they were consistent, both Lagerquist and Calambokidis.  
9 I just want to make sure that I understood your testimony  
10 on that point.

11          A.    Yes.  Roughly, you know, half of the whales in  
12 the Calambokidis, et al. (2017) used an area broader  
13 than -- or the 75% inner quartile range is beyond a degree  
14 of latitude 60 nautical miles, which is pretty similar to  
15 the results that the Lagerquist, et al. study found, that  
16 they found a larger proportion had a home range while  
17 they're feeding that is beyond -- they had a different  
18 term, and I don't remember what it is, it's generally --  
19 you know, I'm using the term "home range" there instead --  
20 was beyond the degree of latitude for the majority of the  
21 individuals.

22          Q.    When you say pretty similar, what do you mean?  
23 Just to clarify.  You said Lagerquist was pretty similar  
24 to what Calambokidis said on that point.

25          A.    So this time I didn't bring my binder with me,

1 | or else I'd open it and I'd tell you what those  
2 | percentages were. They were pretty similar. You'll have  
3 | to take me on my word for it.

4 | Q. Okay. Thank you.

5 | MS. SOMMERMEYER: No questions.

6 | THE COURT: AWI? Peninsula?

7 | MS. OWENS: I'll pass.

8 | THE COURT: Okay. MMC? Okay.

9 | MR. GRUBER: Your Honor, yesterday it was pretty  
10 | clear that the Russian harvest in 2018, the number of  
11 | whales was a significant issue to some of the parties.  
12 | Overnight, we were able to find a document that I believe  
13 | Mr. Scordino is familiar with that may help shed some  
14 | light on that harvest level. And with your indulgence,  
15 | we'd like to, for completeness of the record --

16 | THE COURT: I would rather have a complete and  
17 | clear record. If there was an issue -- that was clearly a  
18 | bit of confusion yesterday.

19 | MR. GRUBER: I do have a hard copy, and I'll --  
20 | Cara can put it up on the screen as well. Your Honor,  
21 | approach --

22 | THE COURT: Okay.

23 | **RE-CROSS-EXAMINATION**

24 | BY MR. GRUBER:

25 | Q. Mr. Scordino, did you attend the 2018 Scientific

1 Committee meeting?

2 A. Yes, I did.

3 Q. And if you could take a look at this document?

4 Are you familiar with this document?

5 A. Yes, I reviewed it as part of the Aboriginal  
6 Whaling Management Procedures subcommittee.

7 Q. And who is the author of this document?

8 A. It's Ilyashenko. He's the commissioner for --  
9 or was the commissioner for the Russian delegation for the  
10 IWC.

11 Q. And does that suggest to you this is a  
12 submission, effectively, by the Russian delegation?

13 A. Yes.

14 Q. If you could turn to page 4 of the document,  
15 please, there's a table. And it's the lower part of the  
16 table, the last row. You see where it says on the left --  
17 bottom left corner, "2018 for Russia," and then to the  
18 right it says 105? What does that information indicate to  
19 you about Russia's view of the number of available gray  
20 whales for 2018?

21 A. It suggests to me that Russia -- analysis that  
22 they did of their catch limit and the available whales to  
23 them was that they only had the 105 to harvest in 2018,  
24 which is probably why we saw the drastic reduction in the  
25 harvest in that year.

1           Q.    You think that this table submitted by the  
2 Russians to IWC is a plausible explanation for their  
3 harvest of 107 whales in 2018?

4           A.    Yeah, I think it's very plausible that that's  
5 the reason.

6           MR. GRUBER:  Thank you.  That's all, Your Honor.

7           THE COURT:  Okay.  All right.  We will add this  
8 as a Makah exhibit.

9           MR. GRUBER:  Yes, Your Honor.  It is labeled  
10 Exhibit M-311.

11          THE COURT:  M-31.  Okay.  Very good.

12          Are there any questions concerning this exhibit  
13 by the party?

14          No.  Okay.  All right.  All right, then.  Thank  
15 you very much, sir.

16          THE WITNESS:  Thank you.

17          THE COURT:  You're excused.

18          **(Witness excused.)**

19          THE COURT:  Does Makah have any other witnesses?

20          MR. GRUBER:  Your Honor, we have no additional  
21 witnesses.

22          THE COURT:  Okay.

23          MR. EUBANKS:  Your Honor, Animal Welfare  
24 Institute calls DJ Schubert.

25          THE COURT:  Very good.

1 (Whereupon,

2 **DONALD J. SCHUBERT**

3 was called as a witness, and having been duly sworn, was  
4 examined and testified as follows:)

5 THE COURT: Be seated.

6 **DIRECT EXAMINATION**

7 BY MR. EUBANKS:

8 Q. Good morning, Mr. Schubert.

9 A. Good morning.

10 Q. William Eubanks for AWI. Could you please state  
11 your name for the record and spell your last name?

12 A. My name is Donald Schubert. Last name is  
13 spelled S-C-H-U-B-E-R-T. And I use my initials, DJ.

14 Q. And where are you employed?

15 A. I'm employed at the Animal Welfare Institute.

16 Q. And what is your position at AWI?

17 A. A wildlife biologist.

18 Q. And can you please describe your job  
19 responsibilities?

20 A. Yeah. I have a fairly diverse portfolio at AWI.  
21 I work on international and domestic wildlife issues. In  
22 the international arena, I primarily work on the  
23 Convention on International Trade in Endangered Species of  
24 Wild Fauna and Flora, and the International Convention for  
25 the Regulation of Whaling.

1           Within that work, I coordinate or work with  
2 colleagues from both other U.S. organizations and  
3 international organizations on relevant issues pertaining  
4 to those two conventions. That could include the  
5 preparation of reports, the collection of scientific  
6 information about various species or other issues that are  
7 being debated at those conventions. I also -- make sure I  
8 cover what the relevant information -- I also work with  
9 colleagues that are not members or not associated with my  
10 organization on issues pertaining to other conventions,  
11 like this Convention on Migratory Species, Convention on  
12 Biological Diversity.

13           For my domestic work, I work on a variety of  
14 different wildlife species and campaigns: Yellowstone  
15 bison, ungulate management, ungulate management in  
16 national parks, contesting wildlife -- or opposing  
17 wildlife contest hunts, opposing USDA's wildlife services  
18 program, trapping, you know, just a variety of issues.

19           I provide advice and I review federal and state  
20 legislation if requested by my colleagues, if that  
21 legislation is related to wildlife issues. I assist in  
22 the preparation of lawsuits that AWI may pursue regarding  
23 any wildlife issues. And I also, if colleagues request  
24 information about a particular species or topic, I will  
25 conduct literature reviews or assist with the preparation

1 of literature reviews on those subjects to aid my  
2 colleagues.

3 Q. Thank you. Can you please describe any relevant  
4 background and experience working on cetacean issues?

5 A. So I became involved in this particular issue,  
6 the Makah whaling issue, in '96 or '97, as I recall. I  
7 was not -- I wasn't employed by the Animal Welfare  
8 Institute until 2005. So at the time I became involved in  
9 Makah whaling issues, I believe I was working for a public  
10 interest law firm, Meyer & Glitzenstein, in Washington,  
11 D.C.

12 In addition to the work on this issue, I also  
13 work with other colleagues from other organizations on  
14 cetacean issues that come up in CITES, Convention on  
15 Migratory Species, Convention on Biological Diversity, and  
16 the IUCN Conservation Congress. I've spent 5 or 6 of the  
17 previous years working fairly extensively on efforts to  
18 protect the vaquita porpoise, and those efforts have been  
19 undertaken both in, you know, coordination or --  
20 coordination with our colleagues in Mexico, but also in  
21 meetings with the delegates from Mexico within CITES,  
22 within the IWC, and within the, within the World Heritage  
23 Committee.

24 I am the unofficial chair of the -- what's  
25 called the Whales Need Us Coalition, which is a coalition

1 of U.S.-based organizations that work on IWC-related  
2 issues. At IWC meetings, both before and at the meetings,  
3 I coordinate, I guess, discussions, strategy meetings, et  
4 cetera, of over 50 organizations, including U.S.-based and  
5 international organizations that come together and  
6 generally are likeminded on cetacean issues that are  
7 raised at the IWC. And I've had the good fortune in the  
8 past decade of serving as the NGO representative -- non-  
9 governmental organization representative -- on the U.S.  
10 delegation to the IWC on multiple occasions.

11 Q. And when did you first attend an IWC meeting?

12 A. My first meeting was in 2006 in St. Kitts.

13 Q. And you may have already covered this, but is  
14 there any other background or experience in gray whale  
15 issues specifically that you'd like to provide?

16 A. Well, my involvement in gray whale issues is  
17 nearly entirely in regards to the Makah issue, Makah  
18 whaling issue. In that context, I've -- like I said,  
19 started in '97. Submitted comments on some of the early  
20 environmental assessments since I was employed by the  
21 Animal Welfare Institute in 2005. I understand from a  
22 colleague that the Animal Welfare Institute provided  
23 comments to the Coast Guard when the Coast Guard was  
24 soliciting input on a proposal to establish a safety zone  
25 around Makah whaling canoes and the support vessels.



1           But since my employment with AWI, it's become  
2 more involved in the issue in the context of preparing  
3 science-based comments on the 2008 and 2015 environmental  
4 impact statements. I've also prepared, you know, multiple  
5 reports, documents, briefings, factsheets, action alerts  
6 and correspondence related to the Makah issue. FOIA  
7 requests as well. I've attended, I think, at least one,  
8 if not more, NMFS public meetings related to this issue.  
9 And helped develop the lawsuits that were filed against  
10 NMFS in the late '90s, early 2000s. And have, in the  
11 course of all of those activities, I've been able to  
12 gather significant amount of the scientific literature  
13 related to gray whales, their biology, ecology, you know,  
14 habitat, threats to gray whales, gray whale genetics,  
15 PCFG/WNP issues, and have tried to familiarize myself with  
16 as much of that literature as possible.

17           Q.    And why did Animal Welfare Institute decide to  
18 become a party to this waiver proceeding?

19           A.    Well, the Animal Welfare Institute has had a  
20 long history within the International Whaling Commission,  
21 and including on aboriginal subsistence whaling issues.  
22 It is -- prior to my time at AWI, it's my understanding  
23 that the AWI opposed the U.S. Government's request for a  
24 gray whale waiver at the 1996, 1997 and 2002 IWC meetings.  
25    Since I've been employed by AWI, I know it has opposed

1 | the subsequent requests submitted by the U.S. Government  
2 | for the waiver in 2007, 2012 and 2018, as I recall. So  
3 | AWI, you know, has an interest in not just aboriginal  
4 | subsistence whaling issues, but also specifically in  
5 | regards to the issue pertaining to the Makah Tribe.

6 |           I would note -- and I've said this multiple  
7 | times to the press, I've said it to -- in other public  
8 | fora, that AWI has great respect for the Makah Tribe. It  
9 | respects their culture, their traditions, their practices.

10 | I spoke to Dr. Reid yesterday and mentioned that I  
11 | enjoyed reading his very lengthy report on Makah culture  
12 | and its whaling history. However, we do not believe that  
13 | the Makah Tribe qualifies for an aboriginal subsistence  
14 | whaling quota from the IWC, and we don't believe the  
15 | standards that are required to be met in this proceeding  
16 | have been met. And so we're here, you know, to try to  
17 | make our case, both in this proceeding and in subsequent  
18 | proceedings that follow, as to why we believe that is the  
19 | case.

20 |           I would, again, emphasize that the fact that  
21 | this is relates to Makah whaling has nothing to do with  
22 | our opposition. If another entity, regardless of whom,  
23 | were to propose a plan to kill, intentionally kill 25 gray  
24 | whales and take potentially thousands of others over the  
25 | course of the next decade, AWI would oppose that as well.

1           Q.    In your view, was sufficient time provided for  
2 the preparation and submission of direct testimony?

3           A.    I don't think so.  I realize that, pursuant to  
4 the regulations, the government provided more than the  
5 required time.  Nevertheless, the government submitted  
6 pretty significant declarations with a lot of exhibits on  
7 April 5th, or published them on April 5th, and I believe  
8 it was somewhere in the neighborhood of 4900 pages.  After  
9 having a chance to review those exhibits in particular,  
10 it's true that some of them, many of them, were already in  
11 the public domain.

12                        Nevertheless, I do not have a photographic  
13 memory.  I cannot read a study, you know, and remember its  
14 findings and conclusions for the rest of my life.  And  
15 consequently, you know, I had to endeavor to review not  
16 only the declarations but as many of the exhibits as I  
17 could in the timeframe provided.  And given that the  
18 timeframe was so limited, it compromised my ability and  
19 perhaps compromised the ability of other parties to  
20 submit, you know, informed and substantive testimony to  
21 this proceeding.

22           Q.    Can you please identify the testimony you have  
23 filed in this proceeding?

24           A.    Sure.  I submitted direct testimony, rebuttal  
25 testimony, and then I submitted direct testimony on the

1 unusual mortality event and rebuttal testimony on the  
2 unusual mortality event.

3 Q. And in preparing those four declarations, have  
4 you spoken to any relevant experts?

5 A. Yeah. I did speak to a number of experts. I  
6 spoke to some before the May 20th deadline, and I spoke to  
7 some after the May 20th deadline for the direct testimony.  
8 I spoke to experts in the U.S., in Canada and Mexico. I  
9 spoke to experts on gray whales. I spoke to experts on  
10 Arctic ecology. I spoke to experts that study benthic  
11 ecosystems in the Arctic. In some cases, I have spoken to  
12 a few of the experts more than once.

13 Q. And what is your understanding as to why those  
14 experts chose not to file testimony in this proceeding?

15 A. So when I contacted the experts, I didn't ask or  
16 encourage some of them to submit testimony to this  
17 proceeding. That's because some of them, at least one, as  
18 I can recall, was a National Marine Fisheries Service  
19 employee, and I figured that she would not be  
20 authorized to submit testimony in this proceeding without  
21 approval of her supervisors. In other cases, I either  
22 understood or had reason to believe that the experts  
23 probably received funding from the National Marine  
24 Fisheries Services to support their work, and I didn't  
25 want to put them in the somewhat awkward position of

1 | potentially submitting testimony in a proceeding that  
2 | might jeopardize -- not that it would, but that it could  
3 | jeopardize their funding.

4 |           There were a few experts that I did encourage to  
5 | submit testimony. And I would note, just to back up a  
6 | little bit, that when I contacted these experts, I  
7 | approached them not only to seek information but to, you  
8 | know, inform them about this process and that it was  
9 | happening. I don't think some of those experts  
10 | necessarily monitor the *Federal Register* the way many of  
11 | us do. But for the experts that I asked if they could  
12 | submit rebuttal testimony, they either couldn't do it  
13 | because of other work responsibilities, projects or  
14 | studies that they were involved in that required their  
15 | attention, including out in the field, or they simply  
16 | didn't have the time to prepare, you know, scientifically  
17 | rigorous testimony by the relevant deadlines.

18 |           Q. Do your declarations incorporate the advice and  
19 | input that you received from the various experts?

20 |           A. Yes and no. In some cases, like I said, the  
21 | experts provided information that I did rely on in my  
22 | testimony. In some cases, they might have sent me a study  
23 | or two that I had not seen before that I thought was  
24 | relevant to this proceeding, and so I submitted it as an  
25 | exhibit to my declarations. In other cases, they -- in

1 | our discussions, they reaffirmed information that I  
2 | already knew, so -- and information that I submitted in my  
3 | -- or put into my declaration. So I'm not sure that  
4 | necessarily qualifies as informing my declarations, but --  
5 | so those were the two categories of information that I  
6 | gleaned from the experts.

7 |       Q.    And can you please summarize your direct written  
8 | testimony?

9 |       A.    I can try. So in my direct written testimony,  
10 | after I sort of go through the relevant Marine Mammal  
11 | Protection Act waiver criteria and I think it's the, sort  
12 | of, purposes of the Act, I also discuss why it is that the  
13 | Animal Welfare Institute does not believe that the Makah  
14 | Tribe qualifies for a waiver -- sorry -- not a waiver. A  
15 | quota from the International Whaling Commission.

16 |            I then provide information in response to the  
17 | direct regulations, and in response to the -- what is the  
18 | -- preliminary issues of fact, I think they were called,  
19 | that the National Marine Fisheries Service put forth as  
20 | potentially warranting consideration in this proceeding.  
21 | In the context of those different categories, I included  
22 | information about the stock structure of the Pacific Coast  
23 | Feeding Group gray whales, Western North Pacific gray  
24 | whales, concerns about the Arctic and changes in the  
25 | Arctic and how that's impacting gray whale populations.

1 | And I know there was more. I'll leave it at that.

2 |       Q.    Okay. Can you please summarize your rebuttal  
3 | testimony?

4 |       A.    Yeah, so in my rebuttal testimony, I provided  
5 | additional information in support of the materials that I  
6 | included in my direct testimony. I questioned some of the  
7 | statements made in the direct testimony submitted by other  
8 | witnesses, and then I provided some new information that I  
9 | thought was relevant to this proceeding. So in the  
10 | context, again, of those broad categories, I included more  
11 | information about the Arctic and the changes occurring in  
12 | the Arctic. I included information about the UME. I  
13 | included information about -- more information about the  
14 | Pacific Coast Feeding Group and its stock structure,  
15 | Western North Pacific gray whales. And I -- several  
16 | paragraphs about the economic value of whales in the  
17 | context of whale watching, and then I included reference  
18 | to the report from Canada, the COSEWIC report, C-O-S-E-W-  
19 | I-C, and I summarized some of the contents of that report.

20 |       Q.    And could you please summarize your testimony  
21 | concerning the ongoing unusual mortality event, the UME?

22 |       A.    Sure. So I submitted, again, direct and  
23 | rebuttal testimony on that issue. In both cases, I  
24 | provided information about the UME that was publicly  
25 | available information that NMFS was maintaining on its

1 | website. I discussed my -- you know, in the rebuttal  
2 | testimony, of course, I questioned some of the statements  
3 | made by a witness or two regarding how -- that I thought,  
4 | sort of, seemed to disregard the importance of the UME and  
5 | suggested that this waiver proceeding should go forward  
6 | regardless of the UME.

7 |           I provided some -- I provided information about  
8 | what I think has caused the death of the gray whales, but  
9 | I also noted that, in regards to the current UME, we don't  
10 | -- no one knows the severity of this UME. No one knows  
11 | its duration. No one knows what the impact will be on  
12 | gray whales. And because of that, I included statements  
13 | -- I included a statement suggesting that I thought this  
14 | proceeding should be, you know, suspended or terminated at  
15 | least until the government, the National Marine Fisheries  
16 | Service, understands the UME, of what its causes are, and  
17 | determines if -- you know, what the overall impact has  
18 | been on the gray whale population, including the ENP, PCFG  
19 | and WNP gray whales.

20 |           Q.    Are you familiar with the rebuttal testimony  
21 | submitted by Mr. Scordino, Mr. Yates, Dr. Bettridge,  
22 | Dr. Moore and Dr. Weller?

23 |           A.    I am. And I thank them for submitting the  
24 | rebuttal testimony. I read all of them, and I compared  
25 | their criticisms that were directed at my declarations to



1 | my -- the language I used, and I determined that in some  
2 | cases I wasn't very clear in what I wrote. In other  
3 | cases, I didn't provide a sufficient explanation for why I  
4 | said what I said. There were some instances where, in  
5 | their rebuttal testimony, they provided clarification to  
6 | issues that I didn't understand, and I appreciate that.

7 |           There were a couple places where I think it was  
8 | just a difference in interpretation of, you know, the data  
9 | or a particular study. And then there were places where I  
10 | continue to stand by my statement, and I believe that the  
11 | criticism was, you know, perhaps based on a  
12 | misunderstanding of what I said. And then finally, I will  
13 | concede that there were a few areas where, after reading  
14 | their rebuttal testimony, I concede that I was in error.

15 |           Q.    Based on the best available scientific evidence,  
16 | is it your opinion that the proposed hunt plan satisfies  
17 | the statutory criteria for a waiver under the Marine  
18 | Mammal Protection Act?

19 |           A.    No, I don't think it does.

20 |           Q.    And why not?

21 |           A.    Well, I tried to capture that as best as I could  
22 | in my various declarations. I think that the best  
23 | available scientific evidence regarding gray whale  
24 | abundance and distribution and migration, breeding habits  
25 | and, you know, the direct -- the potential direct and

1 indirect impacts of the proposed hunt on gray whales does  
2 not warrant the issuance of this waiver. I also believe  
3 that the waiver, if issued, would disadvantage the gray  
4 whales, which I think is one of the Marine Mammal  
5 Protection Act criteria. I don't think it's consistent  
6 with sound resource management and protection. I don't  
7 think NMFS considered the economic value of gray whales.  
8 And I think they've sort of -- what's the best word --  
9 they've undervalued or -- yeah, I guess undervalued the  
10 role of gray whales in the ecosystem.

11 I would note just to be clear, that I'm  
12 absolutely well aware that the waiver that's been  
13 requested is a waiver for Eastern North Pacific gray  
14 whales. Nevertheless, I think it's very clear from the  
15 testimony that's been given over the last several days  
16 that you can't tell an Eastern North Pacific gray whale  
17 from a Pacific Coast Feeding Group gray whale from a  
18 Western North Pacific gray whale without the use of photo  
19 ID or genetic matching. And consequently, I'm concerned  
20 that the National Marine Fisheries Service hasn't  
21 adequately considered the direct and indirect impacts of  
22 the hunt to those two smaller groups of whales, you know,  
23 PCFG and WNP.

24 I'm also -- and again, this has been discussed  
25 by many, just about everybody that's taken the stand. But

1 I'm gravely concerned about the current unusual mortality  
2 event, based on the previous unusual mortality event in  
3 1999 to 2000. You know, a quarter of the population was  
4 lost. That's a quarter of the population in 2 years,  
5 which I still find to be astounding. And like I said  
6 earlier, no one really knows what the, you know, impact to  
7 the current UME will be in terms of its duration, its  
8 severity, how it will affect the abundance of gray whales.  
9 And in combination with the just drastic changes that are  
10 occurring in the Arctic, that frankly I -- I mean, I see a  
11 new study weekly documenting those changes. Even though  
12 the Eastern North Pacific gray whale is estimated to be  
13 nearly 27,000 animals, I'm not entirely convinced that  
14 that is a secure population.

15 MR. EUBANKS: Thank you. I have no further  
16 questions.

17 THE COURT: All right.

18 **CROSS-EXAMINATION**

19 BY MS. BEALE:

20 Q. Good morning, Mr. Schubert.

21 A. Good morning.

22 Q. My name is Laurie Beale. I'm one of the  
23 attorneys for the National Marine Fisheries Service. I'm  
24 going to ask you some questions about your testimony. If  
25 you don't understand any of my questions or don't hear

1 something, just please let me know so that we can have a  
2 clear record.

3 Q. Just a few questions about your background. You  
4 mentioned some of your job responsibilities for AWI and  
5 with respect to the Makah waiver. You've been working on  
6 that since about the mid-1990s; is that right?

7 A. Again, '96 or '97. I can't remember which year.

8 Q. And you state that as part of your preparation,  
9 you read numerous articles; participated in meetings,  
10 phone calls, emails; prepared letters, reports, action  
11 alerts, factsheets and briefing documents as well as  
12 comments, correct?

13 A. Yeah, in terms of my overall involvement in this  
14 issue, those things are all relevant. If you're asking  
15 about my preparations --

16 Q. I'm just going over your background.

17 A. Okay. Fair enough. Yeah.

18 Q. And what is an action alert?

19 A. An action alert is a device used by most non-  
20 governmental organizations to ask their supporters, their  
21 members -- their supporters and members to take action,  
22 whether it's to take action to support something, to take  
23 action to oppose something, to take action to, you know,  
24 write or call a government official to ask them to do A, B  
25 or C. It's a very common tool used by the conservation

1 and animal protection community.

2 Q. Is it fair to say that with the Makah waiver,  
3 you are requesting that these people take action to oppose  
4 the proposed waiver?

5 A. We haven't done an action alert on the waiver.

6 Q. Okay.

7 A. And I should add that at this point I don't know  
8 if we will do an action alert on the waiver. I mean,  
9 there's -- as I understand the regulation, there's a  
10 public comment period during some portion of this process,  
11 but we have not had any internal discussions as to whether  
12 or not we would do or would not do an action alert.

13 Q. Okay. And you've also worked on preparation of  
14 public comments in this matter?

15 A. Yes.

16 Q. You also gave press interviews?

17 A. I have.

18 Q. Would it be fair to say that your job  
19 responsibilities at AWI include advocating to oppose a  
20 Makah tribal hunt?

21 A. AWI as an organization does not support the  
22 issuance of the waiver. What I try to do personally is I  
23 try to use the science that I'm aware of to build an  
24 argument to support what I believe to be and AWI believes  
25 to be the proper position. I am not paid to take a

1 | certain position on issues. If I think AWI should not  
2 | oppose something because I just don't think the science is  
3 | solid or I think there's other reasons not to oppose  
4 | something, I can communicate that to my colleagues, and  
5 | they either agree with me or they disagree with me.

6 | Q. So in your opinion and advice that you've  
7 | provided to AWI, is that advice to oppose a Makah tribal  
8 | hunt?

9 | A. AWI has consistently opposed the Makah tribal  
10 | hunt since I was employed in 2005, and I assume before  
11 | then.

12 | Q. Okay. Mr. Schubert, you've publicly stated that  
13 | AWI opposes the killing of a single whale by the Makah  
14 | Tribe, correct?

15 | A. Have I? I don't remember that. Perhaps I have.

16 | MS. BEALE: If I may approach, if this would --

17 | THE COURT: You may approach.

18 | BY MS. BEALE:

19 | Q. If this would refresh your recollection. This  
20 | was a radio interview.

21 | A. Okay.

22 | Q. I don't have the transcript, but perhaps that  
23 | would jog your memory.

24 | So again, there's no transcript. This is the  
25 | website where you could go to and access this interview.

1 | And I don't intend to ask you any questions at length, but  
2 | is it correct that you have publicly stated that AWI  
3 | opposes the killing of a single whale by the Makah Tribe?

4 |       A.    I don't recall.  I honestly don't recall doing a  
5 | radio interview with WBUR on or around April 8th of 2019,  
6 | which would have been a few days after the *Federal*  
7 | *Register* notices were published.  My memory is not very  
8 | good, so it's possible I did.  However, I would also note,  
9 | not in the context of this issue, but I've noticed that I  
10 | have sometimes given press interviews to print media  
11 | reporters, and sometimes reporters that prepare segments  
12 | for radio will refer to me and refer to something I said  
13 | in the print interview.  Although I now -- I see Here &  
14 | Now's Peter O'Dowd.  Honestly, I don't remember speaking  
15 | to him, but I -- perhaps I did.  And if I did, you know,  
16 | would I have said something like that?  Yes, I could have  
17 | said something like that.

18 |       Q.    Okay.  Mr. Schubert, based on your training as a  
19 | wildlife biologist and your review of the scientific  
20 | literature, is it your professional opinion that the  
21 | killing of a single whale by the Makah Tribe would affect  
22 | the biological status of the ENP gray whale stock?

23 |       A.    I think that's, I think that's too simplistic.  I  
24 | think that it's more complicated than that.

25 |       Q.    I'm actually trying to ask a very simple

1 question.

2 A. Yeah, I understand that, but I'm --

3 Q. Just your professional opinion as a scientist,  
4 are -- let me ask you this. Are you here testifying today  
5 as a scientific expert on gray whales?

6 A. Yeah. I have scientific expertise on gray  
7 whales. I have not studied them to the extent that  
8 Mr. Scordino or Dr. Weller has, but I've read enough  
9 literature that I feel I'm an expert on many aspects of  
10 gray whale biology, ecology, et cetera.

11 Q. So I understood -- setting aside your opposition  
12 to the hunt, which I understand, as a trained wildlife  
13 biologist and based on your review of the scientific  
14 literature, is it your opinion that the killing of a  
15 single whale by the Makah Tribe would have a detectable  
16 impact on the ENP gray whale stock or in any way affect  
17 its biological status?

18 A. I would -- numerically, because the ENP stock is  
19 nearly 27,000 animals, biologically, it would have very  
20 little impact. Nevertheless, as I was trying to say  
21 before, this is more nuanced than that because the  
22 proposal is not just about lethal take. It also involves  
23 nonlethal take and harassment and so on and so forth. And  
24 then you have to add to that all the other threats to gray  
25 whales, whether it be bycatch, ship strikes, contaminants,



1 | toxins, the changes that are occurring in the Arctic, so  
2 | on and so forth.

3 |       Q.    I understand.  Thank you for your answer,  
4 | Mr. Schubert.  I would like to ask you again.  Just  
5 | setting aside --

6 |           MR. EUBANKS:  Your Honor, I'd like to object.  
7 | Improperly cutting off the witness should not be allowed  
8 | in the course of cross-examination.

9 |           MS. BEALE:  I apologize.  I thought he was  
10 | finished.

11 |           THE COURT:  I thought he was --

12 |           BY MS. BEALE:

13 |       Q.    Do you have -- would you like to further answer  
14 | your question?  Well, let me just rephrase.  The question  
15 | is that, based on your expertise, training or review of  
16 | literature on gray whales, whether it's your opinion that  
17 | the killing of a single whale by the Makah Tribe would  
18 | affect the status, the biological status, of the ENP gray  
19 | whale stock?

20 |       A.    And what I was simply trying to say is that it's  
21 | not that black and white in my opinion, that there are  
22 | other threats to gray whales, some of which are quite  
23 | significant, some of which may not be as significant.  But  
24 | there are other threats to gray whales and to gray whale  
25 | habitat -- Eastern North Pacific, Pacific Coast Feeding

1 Group, Western North Pacific, et cetera, that I think has  
2 to be taken into consideration when you examine the  
3 biological impact of the proposed hunt.

4 Q. Let me ask you, maybe a different way that would  
5 be more consistent with your line of reasoning. So again,  
6 based on your expertise as a scientist and your review of  
7 literature, in light of the ongoing impacts that are now  
8 occurring and have been occurring with respect -- that  
9 affect the biological status of the ENP gray whales,  
10 understanding that there are impacts and that those will  
11 continue, is it your professional opinion that the killing  
12 of a single ENP gray whale by the Makah Tribe would affect  
13 the biological status of that stock?

14 A. In combination with the other threats, I am  
15 concerned about the status of gray whales. And I think,  
16 again, this issue is more complex than I think most people  
17 have considered it to be. I mean, the changes in the  
18 Arctic are fundamental. And while I understand that the  
19 population has been increasing, I question how much longer  
20 the population will increase. I don't know what the long-  
21 term prospects are for gray whales in the Arctic because  
22 of the fundamental changes. I mean, last week,  
23 Geophysical Research Letters published a paper about sea  
24 ice loss, and that may -- I haven't read it, so I don't  
25 know if it says anything about gray whales. But the

1 conclusions in that paper about the extent of sea ice loss  
2 is startling.

3 Q. I understand your concerns, Mr. Schubert, and  
4 you do have opportunities to get your direct testimony in.  
5 With all due respect, I would ask that we try to just  
6 focus on a few questions. I really don't have that many  
7 and don't anticipate this will take any significant period  
8 of time.

9 A. Yeah, no, I appreciate that, and I'm not trying  
10 to ignore your question. I'm not trying to circumvent  
11 your question. I'm just saying that it's more complicated  
12 than --

13 Q. I understand.

14 A. -- if you kill one gray whale, is it  
15 biologically meaningful.

16 Q. Okay.

17 A. And if I could add just one thing, and this may  
18 -- some of the other scientists in the room may not, may -  
19 - what's the word -- may question my credentials by saying  
20 this. But when I was studying wildlife management, my  
21 professors did their best to convince me that you must  
22 look at things at a population level. I never bought into  
23 that. I care about populations, but I also care about  
24 individuals. And so for the Animal Welfare Institute,  
25 which also cares about individuals as an animal welfare

1 organization, you know, the killing of one whale is a  
2 consequence to that whale. There's suffering involved.  
3 And I just find it so odd within the scientific community,  
4 within even the National Marine Fisheries Service, that  
5 you know, when a stock is abundant, we consider -- we care  
6 about its population. But when a stock becomes imperiled,  
7 we start caring about individuals. And I've never  
8 understood why that is. Why is there that distinction?

9           The National Marine Fisheries Service is  
10 immensely concerned about every individual vaquita left in  
11 the Gulf of California. The National Marine Fisheries  
12 Service is immensely concerned about every North Atlantic  
13 right whale in -- given the impact to that population. So  
14 it just baffles me as to why for some stocks that are  
15 imperiled we care about the individual, where other stocks  
16 that are not imperiled, it's all about the population.

17           Q. Thank you, Mr. Schubert. With all due respect  
18 to the vast amount of reading and literature that you  
19 undertook for this proceeding and that you discussed  
20 earlier, I would just like to ask if you have ever  
21 personally conducted or participated in any research  
22 regarding gray whales?

23           A. I have not.

24           Q. Or regarding the effects of climate change on  
25 the marine environments?

1           A.    I have not.  When I chose my career path, I  
2 chose a career path of -- that sort of was focused on  
3 protecting wildlife.  I didn't choose a career path, as  
4 some have in this room, of doing field work, research and,  
5 you know, sort of hands on and publishing papers.  You  
6 know, publish or perish, academia, so on and so forth.  So  
7 that -- I completely respect those that choose that path,  
8 but I also completely respect those that choose the path  
9 that I chose.

10          Q.    Thank you.  I believe you just answered this,  
11 but to clarify, have you published any peer-reviewed  
12 scientific articles on gray whales or anything related to  
13 marine ecology?

14          A.    I don't believe so.  Not peer-reviewed, no.

15          Q.    Okay.  I wanted to follow up on a couple of the  
16 questions that Mr. Eubanks asked.  In your direct  
17 testimony, you stated you contacted two scientists who are  
18 experts to get information for your testimony.  Who did  
19 you contact?

20          A.    Yeah, I think that was -- since that was in that  
21 direct testimony, that means I contacted them before May  
22 20th, and I actually think the number is three.  And I  
23 apologize for getting that wrong.  The two -- the three  
24 scientists that I contacted, as I recall, before that May  
25 20th deadline were John Calambokidis, Jim Darling, and

1 | Jacqueline Grebmeier.

2 |       Q.    I'm familiar with Mr. Calambokidis and Darling,  
3 | but who is the last one?

4 |       A.    Jacqueline Grebmeier is a scientist who studies  
5 | -- I'm not sure exactly all of her fields of study, but I  
6 | know she studies benthic invertebrates in the Arctic and  
7 | changing Arctic ecology. She was at the University of  
8 | Tennessee, but now she's affiliated with the University of  
9 | Maryland, some marine research station that the University  
10 | of Maryland supports.

11 |       Q.    Did they -- those three experts provide you with  
12 | information that helped you write your direct testimony?

13 |       A.    As I said earlier -- I'm trying to remember.  
14 | John Calambokidis and Jim Darling, we had discussions  
15 | about their current research. We had discussions about  
16 | Pacific Coast Feeding Group stock dynamics. We had  
17 | discussions about, I think, Western North Pacific gray  
18 | whales to some extent. And I -- much of that, as I  
19 | recall, reaffirmed what I had read in some of their  
20 | literature and the other literature. And then  
21 | Dr. Grebmeier updated me on some of her Arctic research  
22 | because I had not spoken to her in probably 15 years or  
23 | so, and explained to me some of the research she was doing  
24 | over the course of this last summer. And then she  
25 | provided me two papers, including one that I attached to

1 | one of my declarations.

2 |       Q.    Did you disagree with any of the information  
3 | communicated to you by those three scientists?

4 |       A.    I did not.

5 |       Q.    Okay.  Also, I wanted to just get that same  
6 | information so we can all be clear with respect to your  
7 | rebuttal declaration.  I believe you stated that that  
8 | testimony included views on key issues of independent  
9 | experts that you contacted.  Which independent experts did  
10 | you contact to help with your rebuttal testimony?

11 |       A.    Okay, well, I'll go through the list.  I can't  
12 | remember who provided the information for my rebuttal  
13 | testimony versus people I just spoke to, but let's see.  
14 | At the urging of Dr. Grebmeier, I contacted Phyllis  
15 | Stabeno, who I believe works for NMFS.  I contacted  
16 | Dr. Sarah Hardy, who is with the University of Alaska  
17 | Fairbanks.  Both of those people study different elements  
18 | of Arctic ecosystem, benthic invertebrates, sort of the  
19 | physics of, sort of, the Arctic and the various  
20 | complicated factors that influence Arctic ecology.

21 |               I contacted via email -- I think it's  
22 | Dr. Quakenbush, who works for the Alaska Department of  
23 | Fish and Game, again at the urging of Dr. Grebmeier.  I  
24 | contacted Dr. Tim Frasier, who is in Canada, and he's at  
25 | the University of Nova Scotia.  In fact, now that I think

1 | about it, I think I spoke to him one week before that May  
2 | 20 deadline. And then I spoke to Lorenzo Rojas-Bracho,  
3 | who's a scientist in Mexico, Dr. Bracho. And I spoke to  
4 | Dr. Urbán in Mexico.

5 |       Those were the experts I spoke to. I also spoke to  
6 | some -- I spoke to a person that works for the Department  
7 | of Fisheries and Oceans in Canada. I don't know if he's  
8 | per se an expert. And I spoke to -- extensively to a  
9 | colleague of mine with a non-governmental organization in  
10 | Mexico.

11 |       Q.    Okay, thank you. Mr. Eubanks had asked you, and  
12 | I believe you mentioned, that there could have been a few  
13 | errors in your written testimony inadvertently. Would you  
14 | like to identify the areas of your testimony that you now  
15 | believe maybe were not entirely correct?

16 |       A.    Yeah, I actually pulled out the different  
17 | criticisms, and I looked at them on my computer. Whether  
18 | I can remember every one and how I responded to them, I  
19 | don't think I can do that here unless I can grab my  
20 | computer. But the ones where I believe I was incorrect  
21 | included -- I had said in my direct testimony that I  
22 | didn't think that NMFS provided information about the  
23 | forecasting model and including, you know, who developed  
24 | it, who was going to use it, who would announce the  
25 | results, those types of things. And Dr. Moore in his



1 | rebuttal testimony identified paragraphs where he  
2 | specified or answered those questions in his direct  
3 | testimony. And I went back and looked, and I confirmed  
4 | that he did and I simply missed it.

5 |           Dr. Weller in his UME rebuttal testimony  
6 | criticized me for indicating in my UME testimony that the  
7 | Gulland, et al. report failed to consider the impact of  
8 | the previous UME on Western North Pacific gray whales,  
9 | which weren't even -- it wasn't known at the time that  
10 | Western North Pacific gray whales migrated to the Eastern  
11 | North Pacific. So that was a clear mistake. My  
12 | oversight.

13 |           Dr. Weller in his rebuttal testimony -- there's  
14 | one more -- there was another thing that he provided in  
15 | his rebuttal testimony, and without accessing my computer,  
16 | I'm not sure I could remember what it was. But he  
17 | provided an explanation that I thought was -- that  
18 | clarified things for me and made me recognize that what I  
19 | wrote was not correct.

20 |           Some of the other things that Dr. Weller or  
21 | other people that submitted rebuttal testimony disagree  
22 | with me on or claim that I was incorrect, again, those  
23 | fall into those other categories of things that I  
24 | mentioned where maybe I wasn't entirely clear on what I  
25 | was saying. Maybe I didn't sufficiently explain what I

1 | meant, or maybe it was an interpretation difference using  
2 | the same -- interpreting the same information differently.

3 |       Q.    Okay, thank you.  Mr. Schubert, I understand  
4 | your testimony that you felt you didn't have sufficient  
5 | time to prepare your direct testimony.  You expressed that  
6 | concern.  Your rebuttal testimony was submitted August  
7 | 6th; is that correct?

8 |       A.    If that was the deadline, yes.

9 |       Q.    Were there any subjects that you were unable to  
10 | address in your rebuttal testimony that you would have  
11 | liked to include in the record for this matter?

12 |       A.    I think I -- let me think about this.  There are  
13 | -- had I had more time, I would have used that additional  
14 | time to further support information that I provided,  
15 | information that I addressed in my rebuttal testimony  
16 | where I was providing new information related to my direct  
17 | testimony.  I hope that makes sense.  And that would  
18 | include more information on the Arctic and changes in the  
19 | Arctic, including new science that I wasn't aware of that  
20 | the time that I submitted the rebuttal testimony.  It  
21 | would have included information about sort of the  
22 | ecosystem services of gray whales, the benefits -- more  
23 | information about the ecosystem services or benefits of  
24 | gray whales, including more information about the  
25 | economics of gray whales not related to whale watching,

1 | but in terms of the services they provide to ecosystems.

2 |       Q.    Thank you.  I just have a couple more questions.

3 |       A.    Absolutely.

4 |       Q.    Mr. Schubert, you heard from several of the  
5 | experts who testified earlier that the IWC Scientific  
6 | Committee extensively reviewed the proposed hunt  
7 | management and concluded that it would meet the IWC  
8 | objectives for ENP, PCFG and WNP gray whales.  Do you  
9 | disagree with the conclusion of the IWC Scientific  
10 | Committee?

11 |       A.    AWI has great respect for the work of the  
12 | Scientific Committee.  I unfortunately have never attended  
13 | a Scientific Committee meeting, and I have -- did not  
14 | attend any of the Rangewide -- Gray Whale Rangewide Review  
15 | Workshops, the five -- any of the five of them.  I've  
16 | reviewed those reports from those five different rangewide  
17 | review meetings.  I've reviewed the reports from several  
18 | of the past IWC Scientific Committee meetings, including  
19 | the relevant annexes.  And I've looked at the model.  I've  
20 | looked at the model.  I'm not a modeler.  I can't -- with  
21 | time, I'd be able to understand the model, but I'm not  
22 | like, perhaps, Dr. Moore or Dr. Brandon where they can --  
23 | it just makes sense to them.

24 |               And so I would have to take more time to really  
25 | study the model to see -- to really understand what the

1 different assumptions were that were built into the model,  
2 to understand how they came up with what I think they call  
3 the base trials versus the sensitivity trials, and how  
4 that process works, how certain variables or -- I'm not  
5 sure that's the right word, but how certain of the model -  
6 - what do they call them -- model descriptors of the  
7 different potential scenarios, how they were developed,  
8 how they were either prioritized or deprioritized. And I  
9 would have to, you know, better understand some of the  
10 various factors that were built into the model. I mean, I  
11 -- in my view of it, there are certainly some -- it's  
12 clear that they were conservative in how they constructed  
13 many elements of that model. But whether or not it  
14 captures everything that I think should be captured is not  
15 clear to me, simply because I haven't had enough time to  
16 really delve into it.

17 Q. Okay. Mr. Yates stated in his testimony -- and  
18 this is also in the record, the written record, that the  
19 Marine Mammal Commission provided advice stating that the  
20 proposed waiver by NMFS is based on the best available  
21 scientific evidence and, in their view, appropriately  
22 precautionary. Do you disagree with the opinions provided  
23 by the Marine Mammal Commission?

24 A. It's been some time since I've read the two -- I  
25 think there were two different letters from the Marine

1 Mammal Commission to NMFS on this issue, at least  
2 recently. I'd have to read those letters again, but I  
3 would just restate what I said before that I think it's  
4 more complicated than anybody makes it out to be. And I  
5 don't know what the Marine Mammal Commission considered in  
6 the context of their preparing those letters and what kind  
7 of data and other information they reviewed. So again,  
8 I'd have to review those letters again and really sort of  
9 maybe speak to Mike Gosliner and better understand what  
10 evidence, best available evidence, they relied on in  
11 making those determinations.

12 MS. BEALE: Okay, thank you, Mr. Schubert. I  
13 have no further questions.

14 THE WITNESS: You're most welcome.

15 **CROSS-EXAMINATION**

16 BY MR. GRUBER:

17 Q. Good morning, Mr. Schubert.

18 A. Good morning, Mr. Gruber. So you're AWI's only  
19 witness in this proceeding; is that correct?

20 A. That is correct.

21 Q. And this may overlap with the previous question,  
22 but I'll see if you can say anything more about it. Are  
23 you testifying as an expert in any subject in this  
24 proceeding?

25 A. I'm testifying as an expert in gray whales.

1 Again, not the same type of expert as Dr. Weller. But  
2 given my familiarity with the literature, I believe I  
3 qualify as an expert.

4 Q. Besides gray whales, are there any other  
5 subjects you are testifying as -- in regards as an expert?

6 A. I feel like I've read a fairly significant  
7 amount of the climate change literature, and the  
8 literature on benthic invertebrates and the impacts of  
9 ocean warming and other threats or other factors on the  
10 benthos in the Arctic. Again, so I'm testifying as an  
11 expert to the extent that I've read a fair amount of the  
12 literature. I would never say I can compete with  
13 Dr. Grebmeier, Dr. Stabeno or anybody else as an expert in  
14 those areas.

15 Q. Okay. Any other topics that you're asserting  
16 you have expertise to testify about?

17 A. Not that I can think of.

18 Q. Okay. You didn't submit a curriculum vitae with  
19 your testimony, did you?

20 A. I did not.

21 Q. Do you understand that it's customary for a  
22 witness testifying as an expert to provide a CV in advance  
23 of testimony at a hearing?

24 A. I don't think I knew that that was expected. I  
25 will. That question did come up with my discussions with

1 | my own counsel, and I told them that I have a CV but it's  
2 | -- last time I looked at it was in the late '90s.

3 |       Q.     And you didn't think it was worth updating to  
4 | provide to the parties --

5 |             THE COURT:   We have an objection.

6 |             MR. EUBANKS:  Just to complete for the record,  
7 | at the time that the initial testimony was submitted, AWI  
8 | was not -- had not yet retained counsel.

9 |             THE WITNESS:  This was after the original  
10 | declaration was submitted.

11 |            BY MR. GRUBER:

12 |       Q.     But you in -- prior to your initial declaration,  
13 | you didn't consider updating the CV in order to provide it  
14 | to the parties, did you?

15 |       A.     I did not.  I did not know, since I'm not an  
16 | attorney, that I was expected to submit a CV in this  
17 | proceeding.

18 |       Q.     And you received a Bachelor's degree in wildlife  
19 | management from Arizona State University; is that right?

20 |       A.     That's correct.

21 |       Q.     And you did not earn a Master's or Ph.D.; is  
22 | that correct?

23 |       A.     That's correct.

24 |       Q.     I believe you answered this, but just to  
25 | confirm, you've never attended an annual meeting of the

1 IWC Scientific Committee; is that right?

2 A. That's correct.

3 Q. And you've never attended IWC Scientific  
4 Committee intercessional meeting of any kind.

5 A. That is correct.

6 Q. Have you ever submitted a paper to the IWC  
7 Scientific Committee?

8 A. I have not.

9 Q. Do you typically review the report of the  
10 Scientific Committee that is prepared for each annual  
11 meeting?

12 A. That is correct, yeah.

13 Q. And you also review, in addition to the main  
14 Scientific Committee report, the various subcommittee  
15 reports that are usually attached as annexes to that  
16 report.

17 A. The ones for the subjects I'm -- that cover the  
18 subjects I'm most interested in.

19 Q. And does that -- do those subjects include  
20 aboriginal subsistence whaling?

21 A. Yes.

22 Q. And gray whales?

23 A. Yes.

24 Q. Since your graduation from college, in addition  
25 to approximately 14 years at AWI, you have been employed



1 | by the Humane Society and the Fund for Animals; is that  
2 | right?

3 |       A.    That is correct.  I've also been employed by --  
4 | I've also been self-employed.  I've been employed by Meyer  
5 | & Glitzenstein.  I've been employed by the U.S. Fish and  
6 | Wildlife Service and People for the Ethical Treatment of  
7 | Animals.

8 |       Q.    But specific to AWI, Humane Society and the Fund  
9 | for Animals, all three of those organizations have opposed  
10 | the Tribe's whaling; is that right?

11 |       A.    That is correct.

12 |       Q.    And you referenced your employment at Meyer &  
13 | Glitzenstein.  That was for about -- from about the period  
14 | 1995 through 1998?

15 |       A.    That's correct.

16 |       Q.    And Meyer & Glitzenstein is a law firm that has  
17 | litigated the *Metcalf v. Daley* and *Anderson v. Evans* cases  
18 | on behalf of plaintiffs challenging the Tribe's whaling;  
19 | is that right?

20 |       A.    That is correct.  Meyer & Glitzenstein as a firm  
21 | is no longer in existence.

22 |       Q.    But Mr. Eubanks and Ms. Lewis were formerly  
23 | attorneys at Meyer & Glitzenstein; is that right?

24 |       A.    That's correct.

25 |       Q.    You've testified that after leaving Meyer &

1 | Glitzenstein, you worked closely with Meyer & Glitzenstein  
2 | attorneys in the preparation and pursuit of litigation.

3 | Did that include the *Metcalf* and *Anderson* cases?

4 |       A.    Yes.

5 |       Q.    You state in your declarations -- this is  
6 | paragraph 4 of your initial declaration -- that you have  
7 | published studies on the history of the Makah Tribe, its  
8 | relationship with the other tribes in the Northwest, and  
9 | its cultural practices. Did you state that? Paragraph 4.

10 |       A.    So that may have been not worded correctly.  
11 | What I meant to say --

12 |       Q.    But did I read it correctly, Mr. Schubert?

13 |       A.    I'm sorry?

14 |       Q.    Did I read it correctly?

15 |       A.    Well, you read it correctly, but that's not --

16 |       Q.    Okay, so I have another question.

17 |       A.    Okay, so --

18 |       Q.    You're not a historian, are you?

19 |       A.    No, no, no. And you read it correctly, but it  
20 | could be interpreted multiple ways. I've also reviewed  
21 | reports and published studies. So I've reviewed published  
22 | studies. I haven't published studies. That's what I  
23 | meant in that statement. I have not published studies on  
24 | the history of the Makah Tribe.

25 |       Q.    Okay, thank you for that.

1           A.    I don't have those, I don't have those  
2 qualifications.

3           Q.    You're not an expert on the Makah Tribe's  
4 culture, are you?

5           A.    I am not.  Interested in it, but no expert in  
6 it.  But not an expert in it.

7           Q.    In your declaration, you state that -- this is  
8 paragraph 5 -- "Since my involvement in this issue, I have  
9 prepared many letters, reports, action alerts, factsheets,  
10 briefing documents, comments and other written materials  
11 on this subject."  Is that right?

12          A.    That's correct.  Yes.  Yes.

13          Q.    So this is more than 20 years of work related to  
14 Makah whaling.

15          A.    Yes, there were fairly lengthy periods of time  
16 when very little was happening.  So it wasn't sort of that  
17 I was constantly preparing letters, action alerts, et  
18 cetera.  It's just sort of when issues came up.

19          Q.    So about how many of these documents on the  
20 subject of Makah whaling have you prepared over the 20  
21 years?

22          A.    I couldn't possibly know.

23          Q.    Is it too many to remember?

24          A.    I wouldn't say it's too many to remember.  It's  
25 simply that I don't remember.

1 Q. Did you attach any of these documents to your  
2 testimony? And I'll say with one exception. I believe  
3 you did attach the comments on the 2015 draft EIS. So  
4 with the exception of that, did you attach any of those  
5 documents to your testimony?

6 A. I did not. With the exception of the one you  
7 mentioned, yes.

8 Q. In any of these documents, did you express  
9 support for the Makah Tribe hunting whales?

10 A. I don't think so.

11 Q. Is it true that many of these documents,  
12 including the letters providing comments to NOAA or NMFS,  
13 are submitted on behalf of AWI and other organizations?

14 A. Yes, absolutely.

15 Q. And is that one of your roles at AWI in terms of  
16 domestic legal matters related to the Tribe's whaling,  
17 that you coordinate non-governmental organizations in  
18 their opposition to Makah whaling?

19 A. Interesting question. To coordinate non-  
20 governmental organizations in their opposition to Makah  
21 whaling. So there's a fair number of organizations in the  
22 United States that work on whaling issues. Only a handful  
23 of those are interested in or involved in aboriginal  
24 subsistence whaling issues. I don't in the -- and perhaps  
25 this is -- I don't know if you've ever worked for a non-

1 governmental organization, Mr. Gruber, but just to sort of  
2 explain the process, so --

3 Q. Maybe I'll just move on to a question. I'm not  
4 sure that --

5 A. You can. I just wanted to explain that it's not  
6 like I try to coordinate. I don't try to reach out to  
7 organizations and say, do you know what the Makah are  
8 doing, and don't you want to join us? But in the context,  
9 for example, of those 2015 comments, I had a draft of the  
10 comments. I circulated them to organizations that I knew  
11 might be interested in signing on, and I simply asked if  
12 they wanted to sign on.

13 Q. So would it be fair to say that one of your  
14 roles is informing other organizations about current  
15 status of Makah whaling?

16 A. Other organizations and AWI members and the  
17 public.

18 Q. And providing information from AWI's perspective  
19 on the current status of the Tribe's whaling efforts?

20 A. I provide them with -- in that case, I provided  
21 them with the comments. A draft of the comments.

22 Q. Okay. I'd like to ask you about the 2015 draft  
23 EIS comments, and I believe that is Exhibit 1 to your  
24 first declaration; is that correct?

25 A. Yes. Yes.

1 Q. Fairly lengthy letter. I believe it's 131 pages  
2 long; is that about right?

3 A. It's a lot of work. Yes.

4 Q. Do you recall a statement in the letter that,  
5 quote, "For decades, AWI has been opposed to the Makah  
6 Tribe resuming its hunt of gray whales, and for the  
7 reasons stated herein, we remain strongly opposed to this  
8 day?"

9 A. I did not reread these comments prior to this  
10 proceeding.

11 Q. If you look --

12 A. But it does sound like something that I would  
13 include in these comments, yes.

14 Q. Okay. I tried to highlight this on the first  
15 page of the letter. Can you see that faint highlighting?

16 A. Oh, the faint highlight. Yeah, okay. Yes, I  
17 see that.

18 Q. Did I read it correctly?

19 A. Yes.

20 Q. Has AWI's opposition to Makah hunting of gray  
21 whales changed since you wrote this letter?

22 A. No.

23 Q. You drafted the letter more than 3 years before  
24 NMFS published the proposed waiver and regulations, didn't  
25 you?

1           A.    That is correct.  I think it's 3-3/4 years,  
2 approximately.

3           Q.    The time adds up quickly, doesn't it?

4           A.    What's that?

5           Q.    The time adds up quickly.

6           A.    It does.

7           Q.    Your testimony summarizes the many points of the  
8 comment letter.  And I'm referring to page 4 of your  
9 declaration, paragraph 7.

10          A.    Correct.  I perhaps didn't cover -- perhaps in  
11 my testimony I didn't cover every issue that I raised in  
12 my comment letter, but I tried to capture it broadly.

13          Q.    And in your summary within your testimony, you  
14 didn't refer to AWI's decades-long opposition to the hunt,  
15 did you?

16          A.    I did not.

17          Q.    Do you recall stating in the draft EIS comment  
18 letter that the Tribe should not be allowed to potentially  
19 kill a single whale?  I'm going to refer you to page 3.

20          A.    If you show it to me, then I can tell you.

21          Q.    The sentence I'm referring to, which is  
22 highlighted, "This is not to suggest that the Makah Tribe  
23 cannot 'use'" -- and use is in quotation marks -- "gray  
24 whales, but such use must not involve the intentional  
25 lethal take of a single whale."

1           A.    That is a sentence in my comments and you read  
2 it correctly.

3           Q.    Those are AWI's comments, are they not?

4           A.    AWI's comments.

5           Q.    In a letter you authored.

6           A.    In a letter I authored.  Correct.

7           Q.    So it's AWI's position that the waiver may not  
8 allow the Tribe to intentionally kill a single whale; is  
9 that right?

10          A.    The waiver may not allow -- I'm not sure what  
11 the purpose would be of issuing a waiver if it wasn't to  
12 allow the Makah to kill whales.

13          Q.    And you didn't include this statement in your  
14 testimony when you summarized the draft EIS letter, did  
15 you?

16          A.    The statement that you just read.

17          Q.    The statement from your draft EIS letter was not  
18 included in your testimony, was it?

19          A.    That is correct.  I should note that I did not  
20 review that lengthy comment letter again when I prepared  
21 my first declaration or direct testimony for this  
22 proceeding.

23          Q.    Okay, but you did attach it to your written  
24 testimony.

25          A.    I did attach it.  I just did not read it again.



1           Q.    Isn't it AWI's purpose in this proceeding to  
2 demonstrate that the Makah whale hunt cannot be  
3 authorized?

4           A.    Can you, can you repeat that?

5           Q.    Yes.  Isn't it AWI's purpose in this proceeding  
6 to demonstrate that the Makah whale hunt cannot be  
7 authorized?

8           A.    That is correct.  Using the best available  
9 scientific evidence.

10          Q.    And did you make that statement in your 2015  
11 draft EIS letter?  Cara, if you could go to page 130,  
12 please.  So is this the conclusion of your letter?  Is  
13 that your signature there at the bottom?

14          A.    That is a statement in the AWI comments on the  
15 draft EIS, and that is my signature.

16          Q.    So the coalition is -- includes AWI; is that  
17 right?

18          A.    The coalition includes AWI, and if you scroll to  
19 the top, you can see the other organizations.

20          Q.    You didn't include that statement in your  
21 testimony, did you?

22          A.    I did not.

23          Q.    I'm going to ask you about some of your work at  
24 the IWC.  Since 2002, AWI has opposed every United States  
25 catch limit request of gray whales for the Makah Tribe's

1 | hunt; is that right?

2 |       A.    I wasn't with AWI in 2002.  That's my  
3 | understanding, and I would extend it back to 1996 and 1997  
4 | as well.

5 |       Q.    So in your testimony, you're describing your  
6 | history at IWC.  And in paragraph 8, you state that, "At  
7 | the 2012 meeting, I served as the non-governmental  
8 | representative on the U.S. delegation to the IWC, and  
9 | pursuant to delegation rules, was unable to advocate  
10 | against the position of the U.S. government."  Is that  
11 | what the testimony says?

12 |       A.    That is -- I remember writing that, yes.  That  
13 | was correct.

14 |       Q.    Was it your understanding that the position of  
15 | the U.S. government at that meeting was to support the  
16 | gray whale catch limit request on behalf of the Makahs and  
17 | the Chukotka natives?

18 |       A.    Yes.

19 |       Q.    At that 2012 meeting, did you advocate to  
20 | members of the U.S. delegation that it should not support  
21 | the gray whale catch limit request on behalf of the Makahs  
22 | and the Chukotkans?

23 |       A.    Within closed meetings of the delegation, yes.

24 |       Q.    Are you familiar with a June 20, 2012 letter  
25 | written by Howard Crystal (ph.) and Trevor Smith on behalf

1 of AWI and other organizations and individuals to Douglas  
2 DeMaster, who at the time was the acting U.S. commissioner  
3 to the IWC?

4 A. What was the date of the letter again?

5 Q. June 20, 2012.

6 A. I'm sure I've seen it. But I wouldn't remember  
7 it.

8 Q. Okay, I would like to show you that letter.

9 A. Okay.

10 Q. So we have this both in electronic form on the  
11 screen, and I'm -- Wyatt is passing out hard copies.

12 A. Thank you, Wyatt.

13 Q. So if you've had a chance to look at the first  
14 page or so, does this look -- letter look familiar?

15 A. Yeah, it looks familiar. I've looked at the  
16 first paragraph.

17 Q. Yeah, I think I might have misstated the date.  
18 It's dated June 22, 2012; is that right?

19 A. Okay.

20 Q. Do you recall if this was before the IWC meeting  
21 that year?

22 A. I don't remember the specific dates of the IWC  
23 meeting in 2012. But I believe this letter was submitted  
24 before the meeting.

25 Q. Okay, I highlighted some text. Sorry it's very

1 faint on that first page, but doesn't the letter urge Dr.  
2 DeMaster to remove the United States' request for an  
3 aboriginal subsistence whaling (ASW), quote, "of Eastern  
4 North Pacific (ENP) gray whales from the draft schedule  
5 amendment?"

6 A. Correct.

7 Q. And isn't this law firm -- sorry. Isn't this  
8 letter drafted by the law firm that you were previously  
9 employed by and also worked closely with in litigating  
10 against the Makah whaling?

11 A. Yes.

12 Q. Did you request for this letter to be drafted?

13 A. I don't recall.

14 Q. Did you participate in drafting it?

15 A. I don't explicitly recall participating in  
16 drafting it. I may have reviewed a draft, a version  
17 before it was submitted.

18 Q. Did you discuss or review this letter with any  
19 member of the U.S. delegation at the 2012 IWC meeting  
20 while you were a member of the delegation?

21 A. I'm sorry. My memory is not very good, and I do  
22 not recall if I discussed this specific letter with any  
23 member of the U.S. delegation at that particular meeting.

24 It may be that I -- if Dr. DeMaster attended that  
25 meeting, as I believe he did, it may have been that I did

1 mention this letter to him to make sure he had received  
2 it.

3 Q. I want to ask you about a more recent IWC  
4 meeting, then. Maybe that'll help with the -- your memory  
5 of it. I know these meetings do tend to blend together  
6 somewhat, don't they?

7 A. Yes, they do.

8 Q. You attended the 2018 IWC meeting and advocated  
9 against the U.S. request for a gray whale catch limit for  
10 the Makah Tribe, did you not?

11 A. That's correct.

12 Q. And AWI joined a statement with other non-  
13 governmental organizations which was read at the plenary  
14 session opposing the gray whale catch limit.

15 A. That's correct.

16 Q. Did you draft that statement?

17 A. I did not.

18 Q. Who drafted that statement?

19 A. Jeff Pantukhoff with the Whaleman Foundation.

20 Q. AWI joined it, however.

21 A. Yes.

22 Q. Do you recall that statement included the,  
23 included the following sentence: "Furthermore, while we  
24 recognize that the Makah Tribe and the U.S. government  
25 have developed a new management plan in an attempt to

1 | reduce the impact of a hunt on the critically endangered  
2 | Western North Pacific gray whale and the Pacific Coast  
3 | Feeding Aggregation gray whales, both of which number only  
4 | 200 animals, any hunt that may cause the loss of a whale  
5 | from either of these populations is not appropriate."

6 | Does that sound familiar?

7 |       A.    Sounds familiar.  Do you have a copy of the --

8 |       Q.    Yes, we do.  So Mr. Golding is passing around a  
9 | single-page copy of the statement.  And if you can look it  
10 | over, Mr. Schubert, and confirm that this is in fact the  
11 | statement that was read at plenary in 2018.

12 |       A.    Yes, that's the statement.  I believe I provided  
13 | it to you upon your request.

14 |       Q.    How did you become aware that the Makah Tribe  
15 | and the U.S. government had developed a new management  
16 | plan?

17 |       A.    Prior to the 2018 meeting, the IWC sort of  
18 | restructured how it dealt with aboriginal subsistence  
19 | whaling issues and elected to make available to the  
20 | members of the IWC various documents pertaining to each of  
21 | the ASW hunts prior to the meeting.  It was intended to  
22 | prevent surprises from being raised by government  
23 | delegations at the meeting.

24 |       As I recall, the U.S. submitted at least one or two  
25 | documents for both the Alaska Eskimo Whaling Commission

1 | hunt and the Makah hunt to the IWC, which was then posted  
2 | to the IWC website well -- I don't know, 60, 90 days in  
3 | advance of the meeting. And the IWC provided an  
4 | opportunity, as I recall, for governments, perhaps  
5 | observer organizations -- I don't remember -- to provide  
6 | input or to ask questions about those documents. If a  
7 | government submitted such information, then the idea was  
8 | for the aboriginal subsistence whaling country to be  
9 | provided that information and either respond prior to the  
10 | meeting or be prepared to respond at the meeting.

11 |       Q.    So that posting online would have been  
12 | approximately June of 2018. Does that sound about right?

13 |       A.    The meeting was in October, I believe, or  
14 | September. Yeah, that sounds about right. Yes.

15 |       Q.    And does it sound familiar that online the  
16 | posting about the hunts would have been something called  
17 | the description of the hunt?

18 |       A.    That's the new terminology used by the IWC.

19 |       Q.    And did the United States also not post -- or  
20 | did they -- did the U.S. also post a needs statement?

21 |       A.    Yes, they did.

22 |       Q.    That would have been available back in June of  
23 | 2018, correct?

24 |       A.    Yes.

25 |       Q.    You didn't mention this 2018 statement by AWI in

1 | your testimony, did you?

2 |       A.    I did not.  Anyway, I signed onto the statement,  
3 | as you noted earlier.  It wasn't technically an AWI  
4 | statement.

5 |       Q.    But AWI did join it, so --

6 |       A.    We did join it, yes.

7 |       Q.    -- it's jointly your statement, correct?

8 |       A.    Well, the statement was written by Jeff  
9 | Pantukhoff.  I'm sure -- I believe I provided him edits.  I  
10 | think other people provided him edits.  AWI did sign on,  
11 | so we support what's in it.

12 |       Q.    You are familiar with the other -- all of the  
13 | aboriginal subsistence whaling hunts that currently have  
14 | catch limits approved by the IWC.

15 |       A.    I am.

16 |       Q.    And this includes hunts in Russia, Greenland,  
17 | the United States, and St. Vincent and the Grenadines.

18 |       A.    That is correct, yes.

19 |       Q.    Makah hunt is the only ASW hunt where domestic  
20 | law requires an on-the-record hearing in front of a judge  
21 | before the native community can hunt whales; is that  
22 | right?

23 |       A.    That's correct, yes.

24 |       Q.    So even the bowhead hunt by Alaska Natives on  
25 | the north slope of Alaska does not require this type of



1 hearing; is that right?

2 A. Due to language in the MMPA that exempts them  
3 from this proceeding or from getting -- from having to get  
4 a waiver.

5 Q. Are you aware of any aboriginal subsistence  
6 whaling hunts that have been delayed even one season by  
7 domestic litigation or domestic administrative processes?

8 A. Within the U.S.? Or are you asking me about --

9 Q. Any of the aboriginal subsistence whaling hunts.

10 A. One season. I am not.

11 Q. If the proposed waiver and regulations are  
12 approved, Makah would be limited to an average of two and  
13 a half strikes per year; is that right?

14 A. An average of two and a half strikes per year.  
15 Yes, that's correct.

16 Q. Now each of the other aboriginal subsistence  
17 whaling hunts allows more whales to be struck than this;  
18 is that right?

19 A. So it's a tricky -- well, I know you probably  
20 think it shouldn't be a tricky question, but the IWC  
21 schedule that lays out the various catch limits for  
22 aboriginal subsistence whaling countries does not specify  
23 the number of strike limits permitted by year. So the 2.5  
24 average that you're referring to is from the proposed  
25 regulations that were submitted in this case. You know,

1 | for example, in the -- for the St. Vincent and the  
2 | Grenadines, I don't know if domestically the St. Vincent  
3 | and the Grenadines has some limit on the number of strikes  
4 | that their aboriginal whalers can use per year to hunt the  
5 | humpback whales.

6 |       Q.    Does it sound right that, in St. Vincent and the  
7 | Grenadines, they are authorized under the IWC to hunt up  
8 | to four humpbacks per year?

9 |       A.    I believe that's the quota, yes.

10 |       Q.    Are you aware of any other aboriginal  
11 | subsistence whaling hunts that allow fewer whales to be  
12 | hunted than the St. Vincent and the Grenadines hunt, other  
13 | than the Makah -- proposed Makah hunt?

14 |       A.    I am not aware of any that are less.

15 |       Q.    In your testimony, you -- in your testimony, you  
16 | state that you had assistance from colleagues at AWI to  
17 | conduct a literature survey; is that right?

18 |       A.    Yes.

19 |       Q.    Was one of those colleagues Dr. Naomi Rose?

20 |       A.    No.

21 |       Q.    Who conducted the literature searches for you?

22 |       A.    My mother-in-law.

23 |       Q.    And is she an AWI employee?

24 |       A.    She works 10 hours a week for AWI under my  
25 | direction.

1 Q. Is she a scientist?

2 A. She is not. She is a -- by training, I believe  
3 she is a tax accountant, but I ask her to do literature  
4 searches using various -- Google Scholar, ResearchGate,  
5 other means, and I provide her with the search terms to  
6 use.

7 Q. So Dr. Naomi Rose is an AWI employee; is that  
8 right?

9 A. She is.

10 Q. And is she AWI's marine mammal scientist?

11 A. She is.

12 Q. And she's had that role since -- position since  
13 about 2013 at AWI.

14 A. I believe that's when she was employed, yes.

15 Q. Did you ask her to conduct any literature  
16 searches for you?

17 A. I did not. She was involved in some of the  
18 early discussions after the Federal Register notices were  
19 published on April 5 regarding how AWI should proceed in  
20 regards to this proceeding. But I did not ask her to do  
21 any literature searches for me.

22 Q. Is Dr. Rose a biologist with a Ph.D. degree  
23 whose work focuses on cetaceans?

24 A. Yes. She is -- I believe her Ph.D. had to do  
25 with the study of some -- study regarding orcas, I think

1 | in the Northwest. And most of her work at present is on  
2 | captive marine cetaceans.

3 | Q. And she has attended the Scientific Committee  
4 | meetings, their annual meetings, since about 2000; is that  
5 | right?

6 | A. I know she's attended them for quite some time,  
7 | yes.

8 | Q. Do you recall what declaration she filed in this  
9 | proceeding?

10 | A. Vaguely.

11 | Q. That was -- and Dr. Rose did not submit  
12 | testimony in this proceeding; is that right?

13 | A. That is correct.

14 | Q. So you referred, and Ms. Beale asked you about,  
15 | the scientists you referenced in your testimony that you  
16 | had reached out to as experts. Did you cite any of your  
17 | communications with them in your testimony?

18 | A. I think, I think in my rebuttal testimony I have  
19 | a citation of personal communication with Tim Frasier, Dr.  
20 | Tim Frasier. But otherwise, I didn't cite to the  
21 | communications I had with any of the other experts.

22 | Q. And none of those experts have submitted  
23 | testimony in this proceeding on behalf of AWI or any other  
24 | party; is that right?

25 | A. That's correct.

1 Q. Sorry. I'm trying to avoid repeating questions  
2 that were already asked.

3 A. It's okay. Take your time.

4 THE COURT: Do you want to -- we're reaching a  
5 point where we'd normally be taking a break at this time.

6 MR. GRUBER: That would be fine, Your Honor.

7 THE COURT: Then we're going to take a brief 10-  
8 minute recess, okay? Thank you. We're in recess.

9 (Off the record from 10:44 a.m. to 11:00 a.m.)

10 THE COURT: Okay, we're back in session.

11 BY MR. GRUBER:

12 Q. Mr. Schubert, the footnote of your rebuttal  
13 testimony explains the contact and outreach you did to  
14 various experts. And Ms. Beale asked you about that; is  
15 that correct?

16 A. Yes, that's correct.

17 Q. And it says that, "In preparing -- preparation  
18 of this rebuttal testimony, AWI approached a number of  
19 gray whale and other experts regarding the submission of  
20 rebuttal testimony. None of the experts were able to  
21 submit rebuttal testimony." Did those experts include --  
22 that you consulted with regarding your rebuttal testimony,  
23 did they include Naomi Rose?

24 A. Yes, we considered having Dr. Rose submit  
25 rebuttal testimony.

1           Q.    Did you consult with her about your actual  
2 testimony on rebuttal?

3           A.    If I'm not mistaken, I believe she may have  
4 reviewed it. I'm not certain, so I shouldn't say it.

5           Q.    She might, she might have reviewed a draft?

6           A.    She might have reviewed a draft.

7           Q.    Of those experts, did you encourage any of them  
8 to submit public comments after the hearing?

9           A.    There were five. So of the experts that I  
10 discussed that I talked to, I advised five of them that  
11 there would be a public comment period. And I have  
12 subsequently provided four of those five with an update on  
13 the timing of the hearing and my speculation as to when  
14 the public comment period might start.

15          Q.    Okay. I'd like you to look at that footnote,  
16 just so we're clear about what you testified that AWI had  
17 done. So this is the footnote on, I believe, the first  
18 page of your rebuttal declaration. And close to the end,  
19 I believe it says, "AWI has encouraged them to consider  
20 submitting written comments at the appropriate juncture."

21          Is that correct?

22          A.    Yeah, that's correct. So I advised them of --  
23 that there would be an opportunity for public comment. I  
24 provided them with my best guess as to when the comment  
25 period would be, and I encouraged them, if they had the

1 | time and had the interest, to submit comments during that  
2 | period of time.

3 |       Q.    And if any of those experts, or if others submit  
4 | comments in that timeframe, they won't be doing so under  
5 | oath, would they?

6 |       A.    They would not be.

7 |       Q.    And there won't be an opportunity for rebuttal  
8 | of that comment, would there be?

9 |       A.    I don't believe the regulations provide for  
10 | that, no.

11 |       Q.    And these experts, if they submit comments,  
12 | would not be subject to cross-examination under oath,  
13 | would they?

14 |       A.    No, they wouldn't be.

15 |            MR. EUBANKS:  And Your Honor, for completeness  
16 | of the record, I would like to point out that Mr.  
17 | Schubert's testimony makes clear the reason that they're  
18 | not here.  It's because of the time constraints that were  
19 | involved.

20 |            BY MR. GRUBER:

21 |       Q.    Did you review the 2018 Scientific Committee  
22 | report?

23 |       A.    I did.

24 |       Q.    And did you review the annexes of the report  
25 | that relate to aboriginal subsistence whaling and gray

1 | whales?

2 |       A.    I went through each of the annexes to the report  
3 | and the report itself, and did various word searches and  
4 | read the relevant sections that referenced gray whales,  
5 | aboriginal subsistence whaling, et cetera.

6 |       Q.    Do you recall when you did that review?  
7 | Approximately when.

8 |       A.    Well, given when the -- it would have been  
9 | sometime in late June, I want to say.  Because I believe  
10 | it was some time in the second or third week of June that  
11 | the Scientific Committee report was published.

12 |       Q.    So that's late June of 2018, correct?  For the  
13 | 2018 report.

14 |       A.    Oh, I'm sorry.  I thought you were referring to  
15 | the 2019 report.  No.

16 |       Q.    I'm referring to the 2018 Scientific Committee  
17 | report.

18 |       A.    Okay.  I don't remember when I would have  
19 | reviewed that, no.

20 |       Q.    You did review it, though.

21 |       A.    I did review it.

22 |       Q.    And did you recall reviewing the 2017 Scientific  
23 | Committee report?

24 |       A.    Yeah, I believe I did the same exercise.  I went  
25 | through and did a word search and read the relevant



1 | sections.

2 |       Q.    You recall when you did that?

3 |       A.    I do not.

4 |       Q.    Did any of the results of the literature search  
5 | that you said that a colleague helped you conduct provide  
6 | you with any new Scientific Committee papers or reports?

7 |       A.    I don't, I don't recall what my colleague found  
8 | in her literature search. I do recall her completing that  
9 | task and emailing me several emails with attachments. And  
10 | then I went through them and determined which ones I had  
11 | seen before and which ones I hadn't seen before. She  
12 | typically -- I did not ask her to do any type of search on  
13 | the IWC website because, frankly, I find the IWC website a  
14 | little difficult to navigate.

15 |       Q.    So in preparing your testimony -- again, I'm  
16 | going to ask you about the timeframe in which you may have  
17 | reviewed -- you said you reviewed these reports. Prior to  
18 | submitting your initial testimony on May 20, did you  
19 | review either the 2017 or the 2018 Scientific Committee  
20 | reports?

21 |       A.    I believe I would have gone back and reviewed  
22 | them --

23 |       Q.    Prior to that testimony.

24 |       A.    -- a second time, yes.

25 |       Q.    In preparing your testimony, did you review any

1 of the five rangewide review reports?

2 A. I know I reviewed the fifth, and I believe I  
3 reviewed, I believe I -- can't say I reviewed all of them,  
4 but I believe I reviewed at least three, four and five.

5 Q. Would the -- okay, so the fifth one would have  
6 been from the 2018 Rangewide Review?

7 A. I believe that's correct, yes.

8 Q. Do you recall when you reviewed that?

9 A. Prior to May 20.

10 Q. Did you attend any of the Rangewide Review  
11 workshops?

12 A. I did not.

13 Q. Did Naomi Rose or anyone else from AWI attend  
14 those workshops?

15 A. I do not believe so.

16 Q. Are you aware that John Calambokidis attended at  
17 least a couple of those workshops?

18 A. I think I recall seeing his name on the  
19 participants' lists in those workshops, yes.

20 Q. Did you ever discuss those workshops with Mr.  
21 Calambokidis?

22 A. I did not.

23 Q. Were you aware those workshops were occurring?

24 A. I was. Yeah, I was aware. Certainly three,  
25 four and five. I may not have been paying enough

1 attention to realize that the first and the second were  
2 occurring.

3 Q. You filed a Freedom of Information Act request  
4 to NMFS on May 6, 2019 regarding the proposed waiver and  
5 regulations, didn't you?

6 A. I did.

7 Q. At any time between July 31, 2015 when AWI  
8 submitted its comments on the 2015 draft EIS and the May  
9 6, 2019 FOIA letter request, did AWI submit a FOIA request  
10 to NMFS regarding Makah whaling?

11 A. I don't believe so.

12 Q. Okay. Page 17 of your May 20 declaration,  
13 paragraph 26. You testified that, "It is unlikely that  
14 the carrying capacity of gray whale habitat has increased  
15 in the past 19 years. If anything, it is more likely that  
16 it has decreased, given the myriad threats facing the  
17 species." Is that what you said in your testimony?

18 A. Yeah, I remember that statement because it was  
19 one of the ones that Dave Weller included in his rebuttal  
20 testimony, suggesting I was -- indicating that he thought  
21 I was inaccurate.

22 Q. Do you believe it was inaccurate?

23 A. I believe I didn't explain what I meant  
24 sufficiently.

25 Q. Can you -- did you cite any peer-reviewed,

1 | published sources for that statement?

2 |       A.    I did not.

3 |       Q.    Now didn't the ENP gray whale population rebound  
4 | after the 1999 to 2000 UME to its highest level ever?

5 |       A.    That is correct.

6 |       Q.    Given that fact, isn't it possible that the  
7 | carrying capacity for ENP gray whales is about the same as  
8 | it was 20 years ago, prior to that UME?

9 |       A.    So I think it's unclear what the carrying  
10 | capacity is.

11 |       Q.    I'm asking you, is it possible that it's about  
12 | the same as it was prior to that UME, given the changes  
13 | that we have observed in abundance of that stock?

14 |       A.    Again, I'm not sure I know what the carrying  
15 | capacity is. I know what NMFS thinks it is. I know what  
16 | NMFS thought it was in 1994 when they delisted the gray  
17 | whale. But again, that -- the statement that I wrote  
18 | there, I didn't explain sufficiently what I meant. I'm  
19 | happy to do that if you'd like me to.

20 |       Q.    I'm asking you if it's possible that the  
21 | carrying capacity has remained about the same over those  
22 | 20 years. Do you think that's possible?

23 |       A.    I think it's, I think it's possible. I think it  
24 | also may have gone up. I think it may have gone down. It  
25 | depends, again, on the scale that you're looking at.

1 Q. In that same paragraph, you testified that,  
2 "Therefore, the spikes in gray whale mortality are most  
3 likely tied to changing ecosystem conditions in their  
4 summer feeding areas linked to climate change." Now you  
5 formed this opinion prior to NMFS declaring that gray  
6 whales were experiencing a UME; is that right?

7 A. Yeah. I've been collecting and reading  
8 scientific literature on Arctic ecosystems and changes in  
9 the Arctic ecosystem and the benthic invertebrates for a  
10 number of years.

11 Q. Could it -- could the UME also be tied to  
12 increases in gray whale abundances? The end of 1999 to  
13 2000 UME.

14 A. I think in my -- one of my declarations, I do  
15 indicate that it could be both a combination of an  
16 increase in abundance, and it could be due to changes in  
17 the Arctic ecosystem. I think, again, as I indicated in  
18 response to one of the questions asked by Ms. Beale, this  
19 is far more complex than I think anybody, you know, really  
20 recognizes.

21 Q. So did you acknowledge those other potential  
22 causes in this declaration?

23 A. Did I acknowledge whether it could be the  
24 increase of gray whales causing the issue in this  
25 particular declaration?

1 Q. Any cause other than ecosystem regime change.

2 A. I don't recall, you know. It was 71 pages, so I  
3 don't know if I revisited this issue later on. I may  
4 have. I may not have.

5 Q. But in this specific paragraph, you didn't cite  
6 any potential causes other than climate change; is that  
7 right?

8 A. Can you scroll up? I'm sorry. Can you scroll  
9 down? Yeah. That is correct.

10 Q. For those scientists who are investigating and  
11 reviewing information about the current unusual mortality  
12 event, do you think it is appropriate to look at other  
13 potential causes besides global warming or ecosystem  
14 regime change in the Arctic?

15 A. I suspect they will look at all the same factors  
16 that they looked at during the last UME in 1999 and 2000.

17 Q. And do you think it's appropriate for them to do  
18 so?

19 A. I do.

20 Q. Now on paragraph 30, same declaration, you state  
21 that, "The current evidence of declining gray whale body  
22 conditions and increase in gray whale mortality, ecosystem  
23 regime shift in the Arctic, and the expansion of the  
24 species' summer feeding range to the north may foreshadow  
25 more severe and broader impacts to the future." It's the

1 | last -- the end of that paragraph.

2 |       A.    Okay.  Thank you for that.  Yes, that is  
3 | correct.

4 |       Q.    Now weren't all four of these phenomena observed  
5 | to some degree around the time of the 1999 to 2000 UME?

6 |       A.    To some degree, yes.  I would -- based on the  
7 | scientific literature, I would say that the health of the  
8 | Arctic has declined significantly since 1999.

9 |       Q.    But that was an issue of scientific concern  
10 | around the time of the 1999 to 2000 UME, was it not?

11 |       A.    That was?

12 |       Q.    That was an issue of concern at that time.

13 |       A.    Yeah, I -- that was an issue of concern.  I  
14 | don't know how that particular UME team or investigation  
15 | team -- I'm not sure how deeply they delved into that.

16 |       Q.    Prior to the comments you submitted on the 2015  
17 | draft EIS, have you ever submitted comments on behalf of  
18 | AWI or any other party that climate change presented a  
19 | threat to gray whales?

20 |       A.    Within this issue or on any issue?

21 |       Q.    Have you ever submitted comments that climate  
22 | change presented a threat to gray whales prior to the 2015  
23 | draft EIS comment letter?

24 |       A.    I submitted extensive comments in 2008.  I don't  
25 | recall if I raised the issue of climate change in those

1 | comments or not.

2 |       Q.    Can you think of any other comment letters where  
3 | you might have raised climate change as a concern  
4 | regarding long-term health of gray whales?

5 |       A.    I cannot recall any at this time.

6 |       Q.    Do you -- I'll try to help you with that.  Do  
7 | you recall a 2001 petition you drafted to relist the ENP  
8 | gray whale stock under the Endangered Species Act?

9 |       A.    I recall assisting in the drafting of that  
10 | petition.  That's correct.  I'm sorry, Mr. Gruber, is that  
11 | a petition to relist the gray whales under the Endangered  
12 | Species Act, or was it a petition to designate PCFG gray  
13 | whales as depleted under the Marine Mammal Protection Act?

14 |       Q.    It relates to the ENP stock under the Endangered  
15 | Species Act.

16 |       A.    Okay.  Yes.

17 |       Q.    Do you recall that petition?

18 |       A.    I do.

19 |       Q.    I'm going to ask for Mr. Golding to pass a copy  
20 | of that around.  I'd like to ask you some questions for  
21 | it.  Do you recall that that petition was submitted on  
22 | behalf of Australians for Animals, the Fund for Animals  
23 | and other organizations?

24 |       A.    I believe that's correct, yes.

25 |       Q.    And you didn't reference this petition or attach



1 | it to your testimony, did you?

2 |       A.    So, funny story.

3 |       Q.    Keep it short.

4 |       A.    Okay.  As I was preparing my direct testimony, I  
5 | kept telling myself that I knew there was something else  
6 | that I had submitted on gray whales.  And I found a  
7 | petition that I believe I had a role in regarding  
8 | petitioning NMFS to designate PCFG gray whales as depleted  
9 | under the MMPA, I think.  And when I found that, I said,  
10 | oh, that's it.  It wasn't -- it was only after I submitted  
11 | my direct testimony out, as I was looking through some old  
12 | hard copies of records from my long history or involvement  
13 | in this case, where I came across this petition.  And it  
14 | dawned on me that, sure enough, my recollection was right  
15 | that there was something else.

16 |       Q.    So at the top of the petition, first page,  
17 | section.  Your first two pages are a letter.  It says,  
18 | "Schubert and Associates".  Is this from the time that you  
19 | were a private consultant on wildlife issues?

20 |       A.    Yes.  From 1998 to late 2002, as I recall.

21 |       Q.    You think that this document is appropriate to  
22 | include in your testimony as an exhibit?

23 |       A.    Had I remembered it, I would have included it.

24 |       Q.    Would you have a concern if it were included as  
25 | an exhibit in this proceeding?

1           A.    Perhaps I spoke too soon.  I perhaps would like  
2 to read it first.

3           Q.    Okay.  We'd like to come back to that issue.

4           A.    Okay.

5           Q.    Thank you.  I do have some questions for you  
6 about it, however.  On page 1 of the letter -- so there's  
7 a two-page letter and then other documents attached to the  
8 letter.  It says that, "The listing is essential to  
9 provide protection supported by the Endangered Species Act  
10 to the gray whale and its habitat, both of which are  
11 subject to substantial threats.  These threats include but  
12 are not limited to a significant decline in benthic  
13 amphipods, the gray whale's primary food supply, due to  
14 the direct, indirect and cumulative impacts of global  
15 warming and El Niño."  That's -- and later in that  
16 paragraph, it states that, "Given the cumulative impacts  
17 of these threats, the current aboriginal slaughter of gray  
18 whales also threatens the population's survival and  
19 viability."  Is that right?

20          A.    That is correct.  And thank you for reminding me  
21 about this petition.

22          Q.    Okay.  Moving on to page 2 of the letter, in the  
23 first full paragraph -- didn't highlight this one.  
24 There's a statement that, quote, "because the massive  
25 changes to the Bering and Chukchi Sea ecosystems primarily

1 | attributable to global warming, the gray whale population  
2 | will continue to decline." Is that -- did I read that  
3 | correctly?

4 | A. You read that correctly.

5 | Q. And the timing of this letter -- the letter is  
6 | dated March 28, 2001; is that correct?

7 | A. Yes, that's correct.

8 | Q. And that was somewhat after -- shortly after the  
9 | 1999 to 2000 UME event?

10 | A. That's correct.

11 | Q. Can we turn to the petition, page 44, which is -  
12 | - I believe also is PDF page 44. It's 44 of the  
13 | pagination. Let's just stop for a minute. There it is.  
14 | Okay. Okay, and is that the conclusion paragraph of the  
15 | petition? Does that appear to be the conclusion  
16 | paragraph?

17 | A. Yes.

18 | Q. Okay. And in that paragraph, it states that,  
19 | quote, "The impact of failing to prevent the gray whale is  
20 | clearly evident in the substantial increase in gray whale  
21 | mortality and decrease in gray whale production documented  
22 | since 1999." Did I read that correctly?

23 | A. You did.

24 | Q. And you go on to state that, "These changes are  
25 | not anomalous." Is that right?

1           A.    Correct.

2           Q.    And that in fact they are, quote, "indicative of  
3 significant ecosystem-wide changes in the Arctic primarily  
4 caused by global warming that will likely continue in the  
5 future."

6           A.    Yeah, that is correct.

7           Q.    So at the end of that paragraph, you also state,  
8 "Failure to provide protection of the ESA to the gray  
9 whale will decimate the population, mandating far more  
10 intrusive, costly and complex recovery strategies as the  
11 population continues to decline."

12          A.    That is, that is correct.

13          Q.    Is that what it says?  And isn't it true that  
14 the risks you identified in this letter did not decimate  
15 the gray whale population, at least through the 20 or so  
16 years after you wrote it?

17          A.    That is correct.  And I would note that at the  
18 time that this was prepared, the colleagues, the  
19 colleagues that I worked on in regards to preparing this  
20 petition, we were basing our statements on the best  
21 available scientific evidence at the time.  And we clearly  
22 as a result -- as indicated by current population  
23 estimates, we were incorrect.  But I don't think it's  
24 unusual for scientists to -- or for scientists to reach,  
25 to reach a conclusion that over time may be proved to be

1 | incorrect. I'm sure that's happened to many scientists,  
2 | including scientists in this room.

3 |       Q.    But here you're incorrect because -- and  
4 | specifically point out that you predicted that there would  
5 | be a continued decline of gray whales when in fact the  
6 | population increased to its highest level ever following  
7 | this letter and the 1999 to 2000 UME.

8 |       A.    Based on the evidence, scientific evidence,  
9 | available to us at the time, much of which is cited or all  
10 | of which is cited in the literature cited section, the  
11 | bibliography of this letter, it was my -- it was the  
12 | conclusion of my colleagues and I that the gray whale  
13 | population would continue to decline due to the ongoing  
14 | changes in the Arctic.

15 |       Q.    And NMFS rejected this petition, did they not?

16 |       A.    They did.

17 |       Q.    Did you tie the petition to -- for relisting  
18 | with NOAA's then-evaluation of Makah whaling at --

19 |       A.    I'm sorry, can you ask that again?

20 |       Q.    Yes. Did you tie the petition for relisting  
21 | with NOAA's evaluation of Makah whaling at the time? I'll  
22 | refer you to page 2 of the letter, which is page 2 of the  
23 | document. The last, the last --

24 |       A.    The letter or the petition?

25 |       Q.    Letter.

1           A.    Letter?

2           Q.    The last paragraph where I believe it says, "In  
3 the interim, we" -- essentially is asking for NOAA to  
4 prepare a new environmental analysis -- "new environmental  
5 analysis on Makah whaling in order to consider and  
6 evaluate the full gamut of threats to the gray whale and  
7 its habitat."

8           A.    Yeah, so I don't recall, I don't recall the date  
9 that the second environmental assessment prepared by NMFS  
10 was released. So I don't know if this is before or after  
11 that environmental assessment, or if this was submitted  
12 during the comment period on that environmental  
13 assessment. But without question, it was our belief that  
14 the contents of this petition were -- raised issues that  
15 NMFS should have considered or should have considered in  
16 an appropriate analysis.

17          Q.    And didn't the petition include a statement that  
18 the requested listing would eliminate any intentional  
19 killing of gray whales authorized by the U.S government  
20 and would increase protection to gray whale habitat? Do  
21 you recall a statement to that effect in your petition?

22          A.    Do you have a page number?

23          Q.    Yes. PDF page 7. It's the first page of --  
24 well, pagination is the first page of the petition,  
25 although it's several pages into the petition.

1 A. First page of the petition?

2 Q. Sorry, it's number -- it has a number 1 at the  
3 bottom. There's an introduction, caption and a background  
4 caption. And the text I read from was the last sentence  
5 of the introduction.

6 A. Okay. I'm with you now. Yes, that's accurate.

7 Q. So in your view and the view of the petition  
8 which you drafted, if it were approved and the ENP stock  
9 were relisted, it would have eliminated the potential for  
10 a Makah whale hunt; is that right?

11 A. Yeah, that's correct.

12 Q. I have a few questions. We'll start off asking  
13 you some questions about your rebuttal testimony. In your  
14 rebuttal testimony -- this is page 5, paragraph 9 -- you  
15 state that, "Fundamentally, an ecosystem regime shift is  
16 underway." And that "this has resulted, for example, in a  
17 significant decline in the density, abundance and  
18 productivity of amphipods and other benthic prey within  
19 traditional gray whale feeding areas." Is that right? It  
20 overlaps two pages.

21 A. Yeah, that is correct.

22 Q. Okay. In your opinion, when did this ecosystem  
23 regime shift begin?

24 A. I don't know when it began, but it's ongoing and  
25 it's becoming worse, in my opinion.

1 Q. Has it begun in recent years? For example,  
2 since the 1999/2000 UME? Or does it predate that?

3 A. No, it -- certainly the scientific evidence  
4 suggests that the abundance, composition, diversity of  
5 benthic invertebrates in the traditional feeding grounds  
6 of the gray whales and the decline in those benthic  
7 invertebrates dates back to, I believe, the 1980s.

8 Q. And since the 1980s, the gray whale population  
9 has continued generally to increase and a few years ago  
10 reached its highest ever level; is that right?

11 A. That is correct. And it's -- if I might explain  
12 --

13 Q. I have another question for you.

14 A. Okay. Fair enough.

15 Q. I'd like to ask you some questions about the  
16 COSEWIC document. This is Exhibit 8 to your rebuttal  
17 testimony. Again, the COSEWIC is an acronym that stands  
18 for the Committee on the Status of Endangered Wildlife in  
19 Canada; is that right?

20 A. That's correct.

21 Q. And this is referenced -- you devote several  
22 pages of your testimony, your rebuttal testimony, to this  
23 document, do you not?

24 A. That's correct.

25 Q. And on page 38, paragraph 46, you quote the



1 COSEWIC document. Maybe we can just turn to that to see  
2 that. It's a fairly long quote. Regarding the first  
3 block quote, in paragraph 46, that's a direct quote from  
4 the Frasier et al. (2001) [sic] paper; is that correct?

5 A. That is how it was presented in the COSEWIC  
6 document, yes.

7 Q. Okay. And it says that -- basically it seems to  
8 -- it is describing COSEWIC summary of that paper, and the  
9 COSEWIC authors say that an argument made in the Frasier  
10 paper, Frasier paper -- the authors there, they were led  
11 to make the following argument; is that right? Okay, it  
12 doesn't --

13 A. Okay. So now that I'm looking at this more  
14 closely, I'd actually have to go back to the COSEWIC  
15 document and Frasier et al. (2011), because of the way I  
16 worded this, to figure out if that's from Frasier et al.  
17 (2011) or if that's from the COSEWIC report.

18 Q. Okay. So I just want to -- the way you  
19 described this and used the text from the COSEWIC, you  
20 have a statement that says, "Based on this, COSEWIC  
21 concluded that" and then you have another block quote; is  
22 that right?

23 A. Yes.

24 Q. Okay. Can we turn to the document? It's  
25 Exhibit 8 of your rebuttal, and I believe it's -- it has a

1 | different PDF number, but it's page 13 at the bottom.

2 | Okay. Does this look like the right spot? It's the top  
3 | of that page. Does that look like the area you were  
4 | quoting from?

5 |       A. In terms of that first quote in my rebuttal  
6 | testimony --

7 |       Q. Yeah, I really wanted to ask you about the  
8 | second quote. And if you look at the last sentence of  
9 | that first paragraph, it begins, "This argument could be  
10 | extended to suggest that" and then there's more text. If  
11 | we could go back to the declaration, I believe the text  
12 | that follows that is what you quoted in your declaration.  
13 | The second block quote.

14 |       A. Yeah, okay. I see what you're saying. Yeah.

15 |       Q. But you characterize that text as a conclusion  
16 | of COSEWIC, did you not?

17 |       A. It appears I used "would" instead of "could." I  
18 | believe I copied and pasted that, so I'd be curious as to  
19 | whether or not --

20 |       Q. I'm asking about the text you wrote to introduce  
21 | that block quote. You describe it as a COSEWIC  
22 | conclusion.

23 |       A. That's correct. I did.

24 |       Q. Yeah. But in fact, what the COSEWIC author  
25 | stated was that "this argument could be extended to

1 suggest." Do you think that's the kind of wording you  
2 would use if it was a conclusion of COSEWIC?

3 A. I'm not -- I can't, I can't get into the minds  
4 of those who wrote this report. I mean, they could  
5 certainly believe that a conclusion could include the word  
6 "could."

7 Q. They didn't use the word "conclusion" in their  
8 paragraph, did they?

9 A. They did not use the word conclusion, no.

10 Q. In your opinion, could the Makah hunt extirpate  
11 the PCFG, as the argument that's described in this  
12 paragraph hypothesizes?

13 A. In my opinion, the Makah hunt on its own could  
14 not extirpate the PCFG, certainly. But there's more to it  
15 than that, as I explained when Ms. Beale asked me a  
16 related question. There are other factors involved that I  
17 think are a cause for concern in regards to the health and  
18 condition of the gray whales within the PCFG.

19 Q. And the reason the Makah hunt could not cause  
20 the extirpation is that there is a minimum abundance  
21 threshold of 192 PCFG whales that would prevent the hunt  
22 from continuing if that abundance threshold is triggered.

23 A. That is in the regulations. I'm not saying I  
24 agree with that threshold, but it's in the regulations.

25 Q. But you acknowledge the threshold would stop the

1 | hunt.

2 |       A.    I acknowledge that if the direct count or  
3 | projected count is below 192 or 171 respectively, the hunt  
4 | would not be allowed to go forward.

5 |       Q.    Now in your testimony, you stated that NMFS  
6 | should explain why it reached a different conclusion from  
7 | COSEWIC regarding the PCFG; is that right?

8 |       A.    That's correct.

9 |       Q.    And this is in part, you testified, because  
10 | COSEWIC is, quote, "an authoritative body with  
11 | jurisdiction over the same species."

12 |       A.    That is correct.

13 |       Q.    Do you consider NMFS to be an authoritative body  
14 | with jurisdiction over gray whales?

15 |       A.    Yes, I do.  Certainly they have jurisdiction  
16 | over gray whales.  No question.

17 |       Q.    Do you consider them to be an authoritative  
18 | body?

19 |       A.    I believe that they are an authoritative body,  
20 | but they are not always correct.

21 |       Q.    And wasn't the Frasier (2011) paper that the  
22 | COSEWIC authors are discussing available to and considered  
23 | by NMFS in their task force that evaluated stock questions  
24 | related to the PCFG and other gray whales?

25 |       A.    It was.

1 Q. Didn't the task force consider that in addition  
2 to other gray whale genetic papers in determining that the  
3 PCFG was not a separate stock?

4 A. They did. I disagree with the conclusion, but  
5 that is the conclusion they reached.

6 Q. Are you aware of any studies that have shown  
7 significant differences in nuclear DNA between PCFG whales  
8 and the larger ENP stock?

9 A. I am not.

10 Q. Doesn't this demonstrate insufficient  
11 interbreeding by PCFG whales?

12 A. I don't believe so. It demonstrates that there  
13 is some breeding between PCFG gray whales and Eastern  
14 North Pacific gray whales, but the standard for  
15 designating the stock -- well, there's multiple factors  
16 that NMFS can consider in designating a stock, but the  
17 standard regarding recruitment only requires that internal  
18 recruitment be more predominant than external recruitment.

19 Q. So regarding the question of internal versus  
20 external recruitment, did NMFS evaluate that issue in  
21 making its stock in that gray whale task force meeting?

22 A. They did.

23 Q. Are you aware of any contrary evidence regarding  
24 internal and external recruitment than what was evaluated  
25 in the task force meeting?

1           A.    I believe there has been -- can't remember the  
2 number, but certainly three, maybe four, maybe five papers  
3 published since that meeting that addressed this very  
4 issue that suggest that internal recruitment is higher  
5 than what was portrayed or what was concluded at that --  
6 as a result of that task force.

7           Q.    So is one of those papers Calambokidis and Pérez  
8 in (2017a)? Does that sound right?

9           A.    Yeah, that sounds right.

10          Q.    Did that paper evaluate -- now that paper  
11 evaluated the recruitment of calves into the PCFG, didn't  
12 it?

13          A.    There were several Calambokidis et al. papers in  
14 2017, and they get mixed up in my head. So I might need  
15 more detail.

16          Q.    Okay, but I want to ask you about the calf  
17 recruitment paper. Do you recall that one?

18          A.    I do.

19          Q.    Did you cite it in your paper -- in your  
20 testimony?

21          A.    Yes, I did.

22          Q.    Now in that paper, there's a statement, and I'll  
23 quote it. See if you recall it. The authors are saying  
24 that there was, quote, "higher degree of internal  
25 recruitment to the PCFG than had been suggested by

1 previous, less complete data."

2 A. I remember that quote, yes.

3 Q. Now that paper did not examine external  
4 recruitment, did it?

5 A. I'd have to look at the paper to confirm that.

6 Q. Do you recall if it evaluated relative levels of  
7 internal and external recruitment into the PCFG?

8 A. I don't recall.

9 Q. Now on page 21 of your testimony, paragraph 26,  
10 you state that, "Significantly, such external recruitment,  
11 if it is occurring, does not prevent the PCFG gray whales  
12 from being designated as a population stock." Does that  
13 sound familiar? And I don't think it's as critical to get  
14 to the actual text as the last --

15 A. That does sound --

16 Q. That does sound familiar?

17 A. That does sound familiar.

18 Q. Is it your opinion there is no evidence of  
19 external recruitment into the PCFG?

20 A. No.

21 Q. You believe there is evidence?

22 A. Yes.

23 Q. Does the Lang and Martien (2012) paper support  
24 evidence, provide evidence of external recruitment into  
25 the PCFG?

1 A. Yes.

2 Q. Do you have any reason to disagree with the  
3 conclusion in that paper?

4 A. It was a modeling exercise, as I recall. And  
5 so, you know, from what I know about models, it's -- the  
6 integrity or the value of the model is based on the  
7 parameters that are used and the data that are used to run  
8 the model.

9 Q. Did that paper --

10 A. But based on, based on my review of the paper, I  
11 believe the model that they put together and ran is  
12 sufficient.

13 Q. They estimated about four external recruits, was  
14 the most likely number per year?

15 A. Yeah, I believe that is correct, yes.

16 Q. Doesn't the annual migration of thousands of ENP  
17 whales through the PCFG feeding range provide an  
18 opportunity for external recruitment into the PCFG?

19 A. It provides an opportunity.

20 Q. And doesn't that same migration provide an  
21 opportunity to replace whales removed from the PCFG?

22 A. Provides an opportunity. Doesn't mean it's  
23 happening, but it provides an opportunity.

24 Q. Do you have any evidence to believe that it is  
25 not happening? That non-PCFG whales recruit into the PCFG



1 population?

2 A. Do I have any evidence that that's not  
3 happening?

4 Q. Correct.

5 A. I do not have. I believe it is happening, but  
6 again, I believe internal recruitment is higher than  
7 external recruitment.

8 Q. And what's your basis for that last statement,  
9 that internal recruitment is higher than external?

10 A. The studies that I mentioned earlier. The four  
11 or five that have been published since 2013.

12 Q. Didn't you -- when I asked you about the  
13 Calambokidis and Pérez (2017a), whether that evaluated  
14 that relative level of internal/external recruitment, you  
15 didn't remember if it did or not.

16 A. Correct. But there are other papers.

17 Q. That you've cited.

18 A. That I've cited, yes.

19 Q. Do you consider IWC and its Scientific Committee  
20 to be an authoritative body with jurisdiction over gray  
21 whales?

22 A. They're an authoritative body that provides --  
23 runs, you know, various simulation trials and  
24 implementation reviews and so on and so forth that involve  
25 gray whales. Whether they have jurisdiction over gray

1 | whales, I don't believe so, if that's what you asked.

2 |       Q.    You don't think the IWC has jurisdiction over  
3 | gray whale management?

4 |       A.    They can't.  They can make scientific  
5 | determination.  They can produce those scientific  
6 | determinations, but it's up to independent governments to  
7 | use those scientific determinations as they deem fit under  
8 | their domestic legislation.

9 |       Q.    Now doesn't the IWC consider and approve catch  
10 | limits regarding gray whale harvests by Native  
11 | communities?

12 |       A.    That's correct.  I thought you were referring to  
13 | the IWC Scientific Committee.

14 |       Q.    That's right.  Okay, that's a good point.  Now  
15 | the IWC tends to rely on the advice of the Scientific  
16 | Committee; is that right?

17 |       A.    That is correct.

18 |       Q.    Now you said you had reviewed some of the  
19 | Rangewide Review reports, correct?

20 |       A.    Correct.

21 |       Q.    And that -- those reports, as well as the  
22 | decisions, the information reviewed in the Rangewide  
23 | Review were discussed in the testimony of Jonathan  
24 | Scordino, John Bickham and John Brandon, correct?

25 |       A.    Correct.

1           Q.    Didn't the Rangewide Review develop a number of  
2 stock structure hypotheses for gray whales?

3           A.    That's what they're called.  Thank you for that.  
4    Yes.

5           Q.    In each of those hypotheses deemed to be  
6 plausible by the Rangewide Review, wasn't the PCFG  
7 considered to be a feeding stock of the Eastern breeding  
8 stock rather than a separate breeding stock?

9           A.    Yes, that is correct.

10          Q.    Your testimony didn't discuss that aspect of the  
11 Rangewide Review, correct?

12          A.    I don't believe so.

13          Q.    And it didn't discuss the Rangewide Review at  
14 all, did it?

15          A.    I would, I -- I reviewed the Rangewide Review,  
16 but I do not believe I cited it in my testimony.

17          Q.    And you did not, you did not include in your  
18 testimony anything about Rangewide Review's modeling of  
19 impacts to gray whales based on those stock structure  
20 hypotheses or the Scientific Committee's conclusions  
21 related to that modeling, did you?

22          A.    That is correct.  As I indicated earlier -- I  
23 believe I indicated earlier -- I am not a modeler.  And  
24 consequently, reviewing those papers related to modeling  
25 takes me more time than someone that's more familiar with

1 that type of analysis.

2 Q. Did you consult any experts on modeling in  
3 preparing your testimony?

4 A. I recall I wanted to consult -- I wanted to  
5 reach out -- I believe I was thinking of reaching out to  
6 one expert I know, but I simply ran out of time and I  
7 didn't consult with him.

8 Q. One last question about the COSEWIC document.  
9 Now this is -- so this is page 37 of another very long  
10 document. Do you recall if the COSEWIC document discusses  
11 U.S. and IWC management of the proposed Makah hunt?

12 A. I don't recall.

13 Q. And if you look at the paragraph at the top of  
14 the page, second part of that, is it not discussing U.S.  
15 management of a potential Makah hunt?

16 A. Yes, that is correct. It's in there.

17 Q. And it's referring to the IWC Scientific  
18 Committee's simulation analysis?

19 A. At the very last sentence, correct.

20 Q. And that's modeling analyses, correct?

21 A. Correct.

22 Q. You didn't -- in your seven pages of testimony  
23 about this document, you didn't mention this, did you?

24 A. I did not include that in my testimony, no.

25 MR. GRUBER: Thank you. I have no further

1 | questions.

2 |           THE COURT: Okay. I'm trying to figure -- who  
3 | is there -- again, the rules basically say, you know,  
4 | further -- other parties? Does MMC wish to cross-examine?

5 |           MR. GOSLINER: No questions at this time.

6 |           THE COURT: All right. Again, Sea Shepherd and  
7 | Peninsula, you should have common interest. Do you have  
8 | any --

9 |           MR. SOMMERMEYER: No questions.

10 |           MS. OWENS: No questions.

11 |           THE COURT: All right.

12 |           MR. EUBANKS: Your Honor, I have about 10  
13 | redirect questions. I don't know if you want to do those  
14 | before or after.

15 |           THE COURT: Would you -- well, the biggest --  
16 | how much further beyond lunch will it bring people? So  
17 | would you rather be -- do that after lunch?

18 |           MR. EUBANKS: I can do whatever Your Honor would  
19 | prefer.

20 |           THE COURT: Why don't we do that? Why don't we  
21 | break for lunch, and then we'll start up at 1:00 and we'll  
22 | go through your questions. And then if there's any need  
23 | for redirect -- or recross, we will deal with it then.  
24 | Thank you. We're in recess.

25 | (Off the record from 11:50 a.m. to 1:01 p.m.)

1                   THE COURT: Everyone seems to be here, so I  
2 guess we can go back on the record.

3                   MR. EUBANKS: All right, William Eubanks for AWI  
4 on redirect of DJ Schubert. I have about 10 or so  
5 questions for you, Mr. Schubert.

6                   THE WITNESS: Okay.

7                                   **REDIRECT EXAMINATION**

8                   BY MR. EUBANKS:

9                   Q. Earlier, you testified you were not aware of any  
10 other aboriginal hunts subject to similar regulation under  
11 the MMPA that have resulted in missed hunting seasons.  
12 Would you like to clarify your position on that point?

13                  A. Yeah, I subsequently learned that there is a  
14 hunt, aboriginal hunt, of Cook Inlet beluga whales that  
15 was permitted for some time despite declining populations.  
16 But ultimately, as I understand it, several years ago,  
17 the National Marine Fisheries Service determined that the  
18 hunt should not continue because they wanted to ensure  
19 that the population has a chance at recovery.

20                  Q. And would you like to clarify your position as  
21 to whether you are aware of any whale hunts with lower  
22 annual strike limits than those proposed here by NMFS?

23                  A. Yes. I checked the International Whaling  
24 Commission's schedule that resulted from its last plenary  
25 meeting during the lunch break, and the bowhead hunt in

1 Greenland is subject to a two strike per year limit. When  
2 that question was asked of me, I didn't -- I was thinking  
3 of Greenland as a single entity, and I wasn't thinking of  
4 the individual hunts within Greenland.

5 Q. And did you advise any expert not to submit a  
6 declaration for the purpose of evading cross-examination  
7 by government counsel or the Tribe's counsel?

8 A. I did not. I wanted experts to submit  
9 declarations. I wanted them to have an opportunity to, as  
10 uncomfortable as this may be, come to this proceeding and  
11 provide information regarding whatever testimony they  
12 could have submitted and be subject to cross-examination.  
13 Because I felt like the experts I spoke to, at least the  
14 ones I -- that I talked to about potentially submitting  
15 testimony, had valuable scientific information that --  
16 regarding gray whales and specifically Pacific Coast  
17 Feeding Group gray whales that would have been valuable to  
18 all parties in this proceeding.

19 Q. And had such testimony been submitted by the  
20 experts you referenced, would that have been their own  
21 independent testimony or testimony in support of AWI?

22 A. That would have been their independent  
23 testimony. I was simply providing them with information  
24 about the process, deadlines. I provided them with copies  
25 of the declarations that were submitted by the -- that

1 NMFS submitted for the record. But if they had chosen to  
2 submit testimony, that would have been their testimony,  
3 not mine and not AWI's.

4 Q. And had there been more time to prepare written  
5 testimony, in your understanding, which experts do you  
6 believe might have submitted testimony in this proceeding?

7 A. Of the experts that I spoke to that I  
8 specifically discussed the possibility of submitting  
9 testimony, I think Dr. Jim Darling may have submitted  
10 testimony.

11 Q. And do you --

12 A. Just to clarify, that would have been during the  
13 rebuttal phase.

14 Q. And do you think that Judge Jordan and the  
15 parties would substantially benefit from public comments  
16 from relevant experts who have not yet weighed in in this  
17 proceeding?

18 A. Can I go back and just revisit what I just said?

19 Q. Sure.

20 A. I just recalled that, for Dr. Darling, I  
21 encouraged -- I did have discussions with him about  
22 submitting testimony during -- prior to the May 20  
23 deadline. He considered it. I believe he may have  
24 started writing testimony, but he simply didn't have time.  
25 So not just related to rebuttal testimony. It was also



1 direct testimony, as I recall. Sometimes these dates get  
2 confused in my head.

3 Can you repeat your last question?

4 Q. In the event that any relevant experts file or  
5 submit public comments at a later date during this  
6 proceeding, do you think it would benefit Judge Jordan and  
7 the parties?

8 A. I think it would benefit everyone.

9 Q. Does AWI have a written policy regarding its  
10 position on hunting?

11 A. We do not.

12 Q. Is it AWI's position to oppose every whale hunt?

13 A. It is not AWI's position to oppose every whale  
14 hunt or, frankly, to oppose every hunt of any species. We  
15 deal with the hunting issue, whether it be on deer or  
16 whales or bison on a case-by-case basis.

17 Q. And you were asked earlier about your  
18 involvement in two prior lawsuits concerning the Makah  
19 Tribe and its wish to hunt gray whales. In your opinion,  
20 did the best scientific evidence available in the late  
21 1990s counsel in favor of authorizing the Makah hunt?

22 A. No.

23 Q. Were NMFS and the Makah Tribe parties to those  
24 two lawsuits?

25 A. NMFS was the defendant in the lawsuit. I don't



1 BY MR. GRUBER:

2 Q. You mentioned the Cook Inlet beluga situation.

3 A. Yes.

4 Q. That's not an aboriginal subsistence whaling  
5 hunt authorized by the IWC, is it?

6 A. No. It is not.

7 Q. And you mentioned the Greenland hunt of bowhead  
8 whales.

9 A. Correct.

10 Q. About how many whales of other species do  
11 Greenland natives hunt each year?

12 A. I don't remember the strike limits off the top  
13 of my head, but the other strike limits for the other  
14 species are higher.

15 Q. Over 100. That sound right?

16 A. You add in minke and -- yeah, that sounds right.

17 MR. GRUBER: Thank you.

18 THE COURT: Okay. Thank you for your testimony.

19 THE WITNESS: Okay. Thank you.

20 **(Witness excused.)**

21 MS. PRUETT: Thank you. Sea Shepherd calls  
22 Carrie Newell.

23 THE COURT: All right.

24 (Whereupon,

25 **CARRIE NEWELL,**

1 | was called as a witness, and having been duly sworn, was  
2 | examined and testified as follows:)

3 |           THE COURT: Please.

4 |           MS. PRUETT: Good afternoon, Ms. Newell. How  
5 | are you doing?

6 |           THE WITNESS: Good. Thank you.

7 |           MS. PRUETT: So my name is Catherine Pruett.  
8 | It's P-R-U-E-T-T for Sea Shepherd.

9 |   **DIRECT EXAMINATION**

10 |           BY MS. PRUETT:

11 |           Q. Ms. Newell, could you please state and spell  
12 | your name for the record?

13 |           A. Carrie Newell. C-A-R-R-I-E, N-E-W-E-L-L.

14 |           Q. And what is your address?

15 |           A. I have two residences. My Depoe Bay address is  
16 | 234 South Highway 101, Depoe Bay, 97341.

17 |           Q. And what is your educational experience?

18 |           A. I have four degrees. My first degree was in  
19 | fisheries and wildlife management. My next degree was a  
20 | biological composite; it also included a bunch of geology.  
21 | My next degree was invertebrate zoology, and that was a  
22 | Master's. That worked primarily with amphipods. And then  
23 | my last degree from Oregon State was a Master's with  
24 | working with summer resident gray whales, and I discovered  
25 | what they ate and a number of other things.

1 Q. Thank you. And what is your current occupation?  
2 Could you describe that?

3 A. I've been a professor for 36 years. This year,  
4 I just retired. I'm presently a marine biologist. I run  
5 a whale watching business. I also have a museum. And we  
6 do a lot of research on off times, looking for all the  
7 cool summer resident whales.

8 Q. Great, thank you. I'm going to refer you to  
9 page 2 of Exhibit 2 of your written testimony. Brett's  
10 going to pull that up for me. It's the first document up  
11 there.

12 Okay. Carrie, are you familiar with this paper?

13 A. Yes, I am.

14 Q. Okay. Are you the author?

15 A. Yes, I am.

16 Q. Thank you. So we can go back. How about this  
17 way? Sorry about that. Could you describe this map?  
18 This figure up here. Figure 1.

19 A. When I was doing my research at Oregon State, I  
20 sampled a number of areas along the central Oregon coast.  
21 And you'll see on this map here all the localities that I  
22 sampled prey at, and also identified what I call -- or I'm  
23 going to say summer residents, but I know it's PCFGs. And  
24 so all those areas is where I also photo identified the  
25 PCFGs. All the way from Seal Rock up to Lincoln City.

1 Q. Okay, great. Thank you. And what was the  
2 purpose of this paper?

3 A. This paper -- we had an El Nino year in 2005.  
4 And there was a lot of weird stuff going on compared to  
5 what I had seen other years. I had researched these  
6 whales and also their food sources for many years previous  
7 to that. And there -- everything was totally different in  
8 2005. And so my advisor said, you know, we're doing this  
9 big thing because it's an El Nino year and you have a lot  
10 of good data. And he wanted me to write up my results.  
11 And so this was a totally odd year compared to what we  
12 were normally seeing.

13 Q. Okay. And have you done any of these types of  
14 studies or other wildlife studies in other locations?

15 A. I have done -- yes, I have. So I worked with  
16 Ken Balcomb doing a summer resident -- or the southern  
17 resident community of orcas. And I worked with him in the  
18 '90s. I also did a study with blue whales down in Oxnard.  
19 It was an acoustics study. I also go down to the  
20 lagoons, and I take people down there, but I also interact  
21 with the researchers there to see in San Ignacio Lagoon  
22 what's going on. I have done a number of environmental  
23 assessments. And then I've worked as an observer up in  
24 Alaska. I've done other work, research work, doing deep  
25 sea scattering zones on the WACOMA and OSU research boat.

1 I've done -- a program where we looked at marine mammals.

2 I'm sure I'm forgetting some things, but those are the

3 main ones.

4 Q. You have an extensive background in cetacean  
5 studies?

6 A. Cetaceans and invertebrates too. So I have, I  
7 have a strong educational background in both invertebrates  
8 and marine mammals. And birds. I love birds.

9 Q. Okay, in the studies that you mention in San  
10 Ignacio, are those related to gray whales?

11 A. Yes.

12 Q. Is it any particular group of gray whales?

13 A. Well, it's -- I have documented over the years  
14 I've gone down there. We have seen some of the PCFGs down  
15 in San Ignacio Lagoon. And so it's kind of cool to be  
16 able to, you know, work with them off Depoe Bay and then  
17 see them down in San Ignacio.

18 Q. I'm sure it's quite interesting.

19 A. Yeah. Very cool.

20 Q. So you testified that you're a professor. Could  
21 you describe that a little more fully? Although I  
22 understand that you just retired. Congratulations.

23 A. Yes, thank you. Yeah, it was, like, 36 years.  
24 So anyhow, I taught at a number of colleges and  
25 universities. I taught at Oregon State, Lane Community

1 College, Yavapai College -- and that was in Arizona. The  
2 classes I primarily taught, I taught marine biology.  
3 Actually wrote my own textbook. I also taught seabirds  
4 and marine mammals. I taught a birds of Oregon. General  
5 biology, you know, with, of course, good old genetics and  
6 everything like that. So some general classes and a lot  
7 of diverse classes. Because Lane has that opportunity to  
8 give you a lot of flexibility with what you teach.

9 Q. Okay, so is it -- is this the only peer-reviewed  
10 study, or is this the only study that you've published?

11 A. Yes.

12 Q. Why is that?

13 A. Well, I published other -- I published half a  
14 dozen books. I've been a reviewer on journal articles.  
15 But to tell you the truth, my focus has been to be on the  
16 ocean as much as possible. I mean, I -- every waking  
17 moment, I'm trying to go on the ocean. I'm trying to  
18 learn as much as I can. My passion has always been these  
19 PCFGs. I mean, ever since I was a young child, I wanted  
20 to work with whales. And when I had this opportunity when  
21 I moved to Oregon in 1992 and I became a naturalist on a  
22 boat and I was also teaching at the college at the time,  
23 and saw Scarback, it's like, oh my goodness. You know,  
24 this is what I want to do. This is what I spent my whole  
25 young childhood doing, watching Jacques Cousteau and a



1 number of other programs. So every waking moment, I try  
2 to, I try to go on that ocean and I try to learn just as  
3 much as I can about not only whales, but also the birds  
4 and the sea lions and the seals and invertebrates, and as  
5 much as I can. Because everything's interconnected.

6 Q. All right, great. Thank you. So you mentioned  
7 1992. Is that when you started studying gray whales in  
8 particular?

9 A. It was. It was.

10 Q. Okay, so then for the past 27 years, I guess,  
11 you have been studying gray whales. Is that primarily in  
12 and near Depoe Bay in addition to some other locations?

13 A. Yes. In the early '90s, from '92 to about '99,  
14 I did a lot of my -- lot of the work off Newport. And  
15 then when I began my study with Oregon State in 1999,  
16 that's when I really started focusing on Depoe Bay. I had  
17 -- I got my captain's license. I got my first boat. And  
18 then I just started, you know, being my own -- you know,  
19 going out whenever I wanted to go out. And so I have  
20 worked primarily in Newport and Depoe Bay. Mostly in  
21 Depoe Bay now.

22 Q. Excellent. And so how many days do you guess  
23 you work per year on the water studying gray whales?

24 A. Oh, a lot. I put in my declaration 188 to 285.  
25 And I do want to let you know that some of that time I

1 | spent a couple weeks down in Baja in February. So you  
2 | know, in February, a lot of times you can't get out of  
3 | Depoe Bay. I mean, it's, like, a really, a really  
4 | dangerous crossing. And so what I do is, you know, I've  
5 | gone down there. And my teaching schedule is very  
6 | flexible when I was teaching, because I taught night  
7 | classes. So during the day, I'd come on the ocean, and  
8 | then I'd rush back and I'd get ready and then I would  
9 | teach at night. And so I mean, I just wanted to learn. I  
10 | mean, I love learning and I, and I still love learning.  
11 | And so yes, that's what I, that's what I do.

12 |       Q. Are you able to spend more time now that you've  
13 | quit teaching so you don't have to rush back and get ready  
14 | for classes?

15 |       A. Yes. Yes. And I'm hoping now -- I have so much  
16 | data, and I've put a lot of it in spreadsheets. But I  
17 | have so much more data to do. And so now I'm hoping now  
18 | that I'm not working 7 days a week every single day, which  
19 | is pretty much what I've done for the last 14, 18 years,  
20 | now I'll be able to actually go and analyze that data in  
21 | more detail and write more papers. I'm very much looking  
22 | forward to that.

23 |       Q. And we're looking forward to the outcome of  
24 | those.

25 |       A. Thank you.

1           Q.    So just considering these numbers, I mean, in  
2 your testimony, you said it was somewhere between -- so  
3 you said 188 and 285 days per year on the water. In some  
4 of your other testimony, you indicated that it was up to  
5 12 hours a day.

6           A.    Right.

7           Q.    For the past 14 years. I mean, that's how long  
8 -- you've been studying them a lot longer, so 27. But  
9 just that period of time. So I tried to crunch some  
10 numbers here. Would it surprise you that, even if you  
11 just spent 10 hours a day and even if it was only, you  
12 know, if it were only 200 days per year that you're doing  
13 this, over the course of 14 years, that you would have  
14 spent 28,000 hours watching gray whales?

15          A.    I did not realize that.

16          Q.    And studying them and recording their behavior,  
17 as you testified?

18          A.    Right. I have pictures. I have pictures. I  
19 have probably definitely a lot more than that in pictures,  
20 so --

21          Q.    Okay, great. But it isn't just pictures that  
22 you --

23          A.    No, no, not at all. So what I do -- so I have  
24 an opportunity -- like, I go out on my own, and I also,  
25 when I do whale watching, of course I'm one of the

1 | captains. And so every single trip of every single day,  
2 | and every surfacing, I'm taking pictures of specific  
3 | PCFGs. And also, I take pictures with my fishfinder. And  
4 | so with my fishfinder, it's going to give me my GPS, it  
5 | gives me my time, it gives me my depth. And I mean, we're  
6 | just passive observers, so most of the time, we'll see it  
7 | says zero knots. But you know, once in a while, the  
8 | whales are traveling, so I will also document the knots if  
9 | the whale is traveling.

10 |       So that gives me a good record of where they're at.  
11 | And then what I can do -- I mean, I'm kind of a fanatic  
12 | with pictures. So every time the whale surfaces, I'll  
13 | take pictures, you know. On the boat, I'll say, you know,  
14 | I'll say -- and I'll teach the people on the boat. Not  
15 | only, not only -- it's not only a gray whale, but it's a  
16 | gray whale with a name, with a history. And then, you  
17 | know, I'll say, okay, I'm going to get these pictures;  
18 | this is what you look for on this whale. And then I go  
19 | and I show specific characteristics of that whale. And  
20 | then I document that.

21 |       And then also, if I take -- say we're on a whale for  
22 | half an hour. Every time it surfaces, I am getting a  
23 | picture, and then I can go back and look at the interval  
24 | between when they were surfacing, and that will give me  
25 | the dive cycle. You know, because it's hard to write

1 everything down. You know, I'm driving the boat, you  
2 know, taking pictures, talking to people. So I have to do  
3 a lot of multitasking.

4 Q. Excellent. Okay, so it sounds, it sounds as  
5 though, I mean, given the amount of hours you're on the  
6 water, I mean, that equates to -- I was doing the math a  
7 little more here. So 13 straight years, 8 hours a day,  
8 every day, no vacation time. So I mean, you spend a lot  
9 of time doing this. To your knowledge, has anyone else  
10 spent that much time studying gray whales?

11 A. Well, John Calambokidis. I mean, he's --

12 Q. Of course.

13 A. Yeah, he's been my mentor. He's an amazing guy.  
14 And you know, I'm sure, I'm sure he's racked up tons and  
15 tons of time. But probably off the Oregon coast, just  
16 strictly off the Oregon coast, I don't know of anyone else  
17 that has put in that much time.

18 Q. Okay, so do you catalogue these studies? I  
19 mean, you were talking about how you took some of the  
20 data.

21 A. I do.

22 Q. The weather, temperature, ocean, anything like  
23 that. Do you catalogue any of your studies?

24 A. Yeah. So the way I catalogue it is I put my  
25 data in Excel spreadsheets. I have different colors that

1 show, you know, all the various criteria that I'm  
2 documenting. And then I'll say, like, the picture  
3 DFC1476, you know, and so I know that picture was  
4 associated with that data. And I mean, it's all together  
5 anyhow, so it's correlated. And then I also take my best  
6 pictures and I put them in a book. I'm presently in its  
7 fifth edition. I'm actually doing a sixth edition,  
8 working on that now over the winter. And so I'm sure it's  
9 going to be much thicker, because I've learned a lot more.  
10 So yeah, that's another place that I put my data.

11 Q. Okay, great. Thank you. So Brett is pulling up  
12 right now Exhibit 2. This is something you referred to.  
13 Can you take a look at this? Are you familiar with this  
14 up on the screen?

15 A. Yes.

16 Q. Okay. And what is that?

17 A. This is my -- I call them summer resident gray  
18 whales. If I, if I said these are the PCFGs, that would  
19 be a little more difficult for people. So, many people  
20 along the coast don't realize that we have this unique  
21 group of whales that are here, you know, only in the  
22 summer. And the news -- I always listen to the news  
23 around Christmastime and spring break, and they always  
24 say, like, oh, yeah, you know, the best time to go whale  
25 watching is spring break and Christmastime. And I'm like,

1 no. You know, the best time is coming in the summer  
2 because these whales are staying in one spot. I mean, you  
3 can go, like -- for example, this year, Yogi came in June.  
4 And you'll see his picture later. He looks like Yogi  
5 Bear.

6 Q. Who is Yogi?

7 A. Yogi is one of our summer residents, one of the  
8 PCFGs that has, like, a Yogi Bear face. I've named him  
9 Yogi because on the side -- you'll see it later. But  
10 anyhow, I have an opportunity to tell people, like, we're  
11 going to go to this locality, and there's a good chance  
12 we're going to see this whale. And we're going to go to  
13 this locality; there's a good chance we'll see this  
14 specific individual.

15 In my museum, I have showcased a lot of these PCFGs.  
16 They're outside the museum. I've made big, long gray  
17 whale cutouts. I made the cutout, and my youngest  
18 daughter painted them to match the specific patterns of  
19 each of these PCFGs. When you walk inside the museum, I  
20 have a whole wall that also shows the PCFGs. And again,  
21 when people come in there, whether they're going whale  
22 watching or not, you know, if I have time, I will show  
23 them specific markings on each whale that they need to  
24 look for so they can identify them as an individual. If  
25 I'm not there, I also have a number of employees that I've

1 | also taught them how to, how to identify these whales.

2 |       Q.    Great, thank you.  So I'm offering into -- let's  
3 | see.  As Exhibit CN-5 to Carrie Newell's testimony.  She  
4 | does refer to this particular book she's talking about  
5 | right now.  In her written testimony, it just wasn't  
6 | available in PDF format or in hard copy, as it's been sold  
7 | out.

8 |       A.    This is my last copy.

9 |       Q.    Okay.  Thank you.

10 |       MR. SLONIM:  Your Honor, can we ask which  
11 | edition this is?

12 |       THE WITNESS:  This one's a fifth edition.

13 |       MS. PRUETT:  Yes.  And I'm sorry --

14 |       MR. SLONIM:  What year was that?

15 |       THE WITNESS:  This one was April 2005.  So it  
16 | definitely needs to be updated.  Oh, I'm sorry.  I'm  
17 | sorry.  It's June 2013.  I apologize.  That was -- the  
18 | first edition was April 2005.  My fifth edition was June  
19 | 2013.

20 |       MS. IMAKI:  Your Honor, I'd just ask that --  
21 | state an objection.  Is there any reason why this was not  
22 | introduced earlier or provided to the parties before  
23 | today?

24 |       MS. PRUETT:  Carrie?

25 |       THE WITNESS:  I had a problem finding the PDF



1 files. And I knew I had them somewhere, and I just got  
2 off the ocean 3 days ago. And I took hours and hours and  
3 hours and hours, and finally found the PDFs. I thought I  
4 had them on my Gmail; they got deleted, and I just found  
5 them -- I think it was yesterday or day before. So I  
6 apologize for that.

7 MS. IMAKI: And you still have the hard copies  
8 of your book in multiple locations?

9 THE WITNESS: Yeah. But it's -- since I'm,  
10 since I'm redoing this book this winter, this is literally  
11 my last copy. Everyone else -- there's a lot of places  
12 that want them. I said, just wait till I update it,  
13 because I --

14 MS. PRUETT: We've provided everyone with a copy  
15 now on a USB. It's marked, again, as CN-5.

16 THE COURT: That's today, right?

17 MS. PRUETT: Yes. Today. Yes, thank you.  
18 We'll make sure it's available to you as well. Okay. We  
19 will start rolling through --

20 THE COURT: All right.

21 MS. PRUETT: Yes?

22 MS. IMAKI: I would reserve the right to recall  
23 if we have any questions about this exhibit after we've  
24 had a chance to review it.

25 MS. PRUETT: Absolutely. Thank you.

1 THE COURT: I understand.

2 MS. PRUETT: We'll be going through it a bit. I  
3 believe Carrie's going to go through it a bit.

4 BY MS. PRUETT:

5 Q. Just quickly, you already talked about some of  
6 the conditions, the ocean conditions, as well as the types  
7 of tools you use and your vessel that you use to study  
8 whales when you're going out. You mentioned in your  
9 testimony that you also look at physical attributes of  
10 whales, including -- correct me if I'm wrong -- size and  
11 age, if you know the age; body condition; coloration  
12 changes; dorsal hump; knuckle and fluke patterns; changes  
13 in barnacle patterns; the number and pattern of tooth  
14 rakes, which you mentioned is an increasing phenomenon  
15 because of an increase in orca predation. And you collect  
16 opportunistic food and fecal samples. You also -- is that  
17 correct?

18 A. Yes, yes.

19 Q. You also mentioned that you were looking at  
20 behavioral characteristics, such as feeding locality and  
21 feeding behavior; dive cycle, which I think you mean by  
22 that, you explained, how long they're down and come up?

23 A. Yeah, how long before they surface. They'll  
24 take a terminal dive, and then how long before they come  
25 up again.

1 Q. You also mentioned in your testimony, your  
2 written testimony, that you look at companionship,  
3 courtship, mom/calf interactions like teaching feeding  
4 techniques and movement patterns; is that correct?

5 A. That is correct.

6 Q. Okay. So this would probably be a really good  
7 time to explain that in more detail by taking a look at --  
8 going through some of the pages of the book. Is there  
9 anything in particular you wanted to start with there?

10 A. You know, I'm just going to give you some random  
11 page numbers, if that's okay.

12 Q. Okay.

13 A. Because a lot of the stuff, I'd like to show you  
14 pictures and see -- show you all how I actually have  
15 compiled a lot of the data and how it's utilized in this  
16 book. So the beginning of the book, I give some general  
17 characteristics of gray whales. So let's just turn to  
18 page 14. If you -- if we can go to 14 --

19 MS. IMAKI: Your Honor, I would object to the  
20 reliance on this book as substantive testimony, because we  
21 haven't had a chance to review it at all. And maybe  
22 tomorrow we could recall the witness to testify about  
23 this, but we haven't -- if you're going to rely on the  
24 contents of this declaration as substantive evidence, I  
25 would appreciate the opportunity to review it first.

1 MS. PRUETT: We're happy to come back tomorrow.

2 THE COURT: We're going to be --

3 MR. SLONIM: The other issue, Your Honor, is  
4 this was supposed to be a summary of testimony that was  
5 previously submitted.

6 MS. PRUETT: We've gone way beyond that. We've  
7 gone way beyond this original concept that people would be  
8 sitting here giving a summary of testimony, which in fact  
9 Carrie is doing. Because I believe, in the case  
10 especially of Mr. Scordino, you ask him a question, he  
11 goes on for half an hour. It goes on and on. We've had  
12 this with everyone. NMFS started the process just days  
13 ago with that same process, asking questions instead of  
14 doing this 5- to 10-minute summary. We too were expecting  
15 a summary, but we're not giving it that way. No one else  
16 has.

17 THE COURT: I believe there were references to  
18 her -- in her declaration, there are some references to  
19 this book that was submitted.

20 MS. PRUETT: Definitely.

21 THE WITNESS: Yes.

22 MS. PRUETT: And we have it up on the screen.  
23 Maybe you can even make it wider. We could go through it  
24 now or tomorrow. It is all on your USB drive. I don't  
25 have a problem waiting till tomorrow.

1           THE WITNESS:  And I have it -- I can find where  
2 it was in my declaration.

3           THE COURT:  All right, let's -- we'll have this  
4 witness back tomorrow.  And if necessary, later tomorrow,  
5 so that we'll -- you know, because I think we'll -- and it  
6 looks like for the rest of the testimony that we will have  
7 a significant period of time tomorrow.  How long do you  
8 think your other witness is going to be on the stand?  Most  
9 of the day?

10           MS. PRUETT:  Sorry, I'm waiting -- Brett's  
11 (indiscernible).

12           MR. SOMMERMEYER:  The next -- Stella?  It's hard  
13 to say.  I would, you know, I would probably -- 45 minutes  
14 of direct with her?  Something like that?  It's hard to  
15 predict.  It depends on various dynamics.

16           THE COURT:  But that was a witness that was a  
17 primary witness also concerning both the rebuttal and the  
18 UME.

19           MR. SOMMERMEYER:  No, she is testifying on  
20 rebuttal only.

21           THE COURT:  Rebuttal only.  (Indiscernible)?

22           MR. SOMMERMEYER:  As to the issues she's --

23           THE COURT:  And Ms. Newell is also only  
24 testifying on rebuttal.

25           MR. SOMMERMEYER:  Right.

1 MS. PRUETT: Yes.

2 THE COURT: Then she'll be back tomorrow. And  
3 if -- even if you need to call her after this, I will take  
4 leave from motion if we need to have some way of dealing  
5 with further issues. It may have some relevance. It may -  
6 - it's of some nature that it helps me understand some of  
7 the issues. So I'll allow the testimony even though --  
8 but I really need to find a way of getting that PDF here,  
9 because we can't take -- our computers are secure. We  
10 can't take your --

11 MR. SOMMERMEYER: Oh, you can't. Okay.

12 THE COURT: -- flash drives.

13 MS. PRUETT: Okay.

14 MS. IMAKI: That's the same for the federal  
15 government computers as well.

16 THE COURT: Okay. Thank you.

17 MR. SOMMERMEYER: A CD or --

18 MS. IMAKI: CD or a file sharing or something so  
19 that's --

20 MS. PRUETT: We're happy to do whatever works  
21 best for everyone. And I would also submit that one of  
22 the reasons this particular testimony -- we're starting  
23 off with it, basically, in the beginning of the direct  
24 here is because it has -- it really sets the stage for  
25 everything else. We have Carrie Newell here as an, as an

1 expert witness in terms of just mostly her extensive time  
2 she's been on the water and studying these whales. And so  
3 a lot of that --

4 THE COURT: We understand. But again, the  
5 purpose of -- the way the rules are set up, this should  
6 have been in --

7 MS. PRUETT: Absolutely.

8 THE COURT: -- earlier. But again, I'm trying  
9 to get the -- trying to get a full record, but also need  
10 to have the parties to have an opportunity to review this  
11 material for full and complete cross-examination. So  
12 we'll move ahead now with this testimony. But again, for  
13 tomorrow, we'll -- hopefully they'll have time to review  
14 it enough for -- to be able to do cross-examination  
15 tomorrow. Or if not, we may have to maybe be here  
16 Thursday morning. But hopefully we can do it by tomorrow.

17 MS. PRUETT: So actually, a number of the  
18 questions I have pertain to some of the whales that she's  
19 talking about in here. And so we could call her just back  
20 tomorrow and already stop for now. So a number of the  
21 subsequent --

22 THE COURT: Would that be preferable?

23 MS. IMAKI: NMFS would be amenable to her going  
24 through the direct now, as long as we have the chance to -  
25 -

1 THE COURT: Long as you have the --

2 MS. IMAKI: -- bring any additional questions  
3 about this tomorrow or at a later date, if necessary. I  
4 don't know if we'll have sufficient time tonight to finish  
5 preparing review of this, but we'll do our best.

6 THE COURT: Okay. Well, why don't we move ahead  
7 so that we're not going to be --

8 MS. PRUETT: Okay.

9 THE COURT: Yeah.

10 MS. PRUETT: All right. Thank you very much.

11 BY MS. PRUETT:

12 Q. Okay. Please proceed. You had asked us to pull  
13 up page 14.

14 A. Okay, so very quickly. On page 14 to 15, I just  
15 give some general characteristics of gray whales, just to  
16 show you -- just so people know what they're looking at.  
17 Heart-shaped blow. A lot of people don't realize grays  
18 are unique with this beautiful heart-shaped blow, and just  
19 parts of their body they're looking at. And that's  
20 primarily what those pages address.

21 Q. Okay.

22 A. Page 16? I'm going to be talking in a moment  
23 about a feeding behavior that we call sharking. And I  
24 want to direct you to the bottom pictures. A lot of  
25 times, gray whales, when they feed, they feed on the right



1 side. Margaret gave me this cute little whale. They feed  
2 on their right side, and that left tail fluke comes up,  
3 and it kind of looks like a little shark fin. And so a  
4 lot of people will say, you know, we have orcas in the  
5 area, we have sharks in the area. And so I try to say no,  
6 no, no, no, that's indicative of a gray whale feeding,  
7 primarily on their right side. There's a few lefties, but  
8 mostly on the right. So I will be talking about that  
9 feeding behavior later.

10       Going to page 18 and 19, again, when you're  
11 identifying gray whales, gray whales have a load of  
12 barnacles and whale lice on their body. And those are  
13 some other ways that we can use to identify the  
14 individuals. So I talk here about how the whales have  
15 these, and how the whale lice actually serve a positive  
16 role, like with Scarback. Jonathan mentioned Scarback the  
17 other day, and I want to mention her more in a moment.  
18 And also barnacles and barnacle scars and barnacles  
19 attach. They -- and fall off. They depigment the skin.  
20 So again, you're going to see how certain of these whales  
21 have certain patterns that, when you're trying to identify  
22 them as individuals, that's something, again, we look for.

23       So if we continue on, very quickly, page 21. I just  
24 give a generalized overview of the pattern of movement of  
25 the gray whales. They go down to -- most of them go down

1 to three primary breeding lagoons. What I've tried to  
2 show here that, the southward migration, typically the  
3 whales are further offshore. The northward migration,  
4 typically they're a little closer to shore. And also, you  
5 have some of these that are coming up from the lagoons  
6 that come up, come off to the northwest and become our  
7 PCFGs. So that's primarily what I'm showing there.

8       And then if you want to jump to page 26, please? On  
9 page 26, Jonathan actually -- when him and I got to work  
10 together, he actually took this picture. I gave him  
11 credit for it. At the time, we were doing -- he was, he  
12 was telling me -- and I have it in the book here, and I  
13 also gave him credit for it. I've talked to him by name  
14 in the book, but I said, the seasonal residents are  
15 genetically different from whales in Alaska, then there  
16 could be additional laws to protect them. So at the time  
17 when Jonathan and I were working together in Depoe Bay, I  
18 mean, that was a question that we were addressing. And so  
19 he taught me how to do -- how to use a crossbow and how to  
20 get, how to get samples. So very informative. He's a  
21 very good teacher.

22       Also, you'll also see on here, you're going to see --  
23 if you can move it up a little bit? The yellow -- the CRC  
24 numbers? Well, John Calambokidis has this extensive  
25 record of these PCFGs. And I have taken many of my

1 pictures, passed them on to John. And so Alie and some  
2 other of his people have actually looked at my pictures,  
3 correlated their CRC number with my names of the whales.  
4 So that way, you know, if I tell John, you know -- I'm  
5 looking down at Depoe Bay. I said, oh, I see 1154, CRC  
6 1154. And then he can say, oh, yeah, I know who that is.  
7 Because he is not going to say, oh, that's Milky Way.  
8 But he'll be able to look it up in his record. So I've  
9 tried to make this a usable guide not only for the  
10 layperson, but also for researchers up and down, up and  
11 down the whole coast. So I just wanted to mention that  
12 part.

13 So continuing on here, let's look at page 30. Let's  
14 look at page 30 here. So when I first moved to Oregon --  
15 and I'm from Michigan originally. And I moved out here,  
16 and I had just gotten done with my research with  
17 amphipods. Now amphipods, of course, you know, that's one  
18 of the primary foods they -- that gray whales eat up in  
19 Alaska, and there are some problems with the amphipods up  
20 there now. And so I would go to the Hatfield Marine  
21 Science Center, and I wanted to learn as much as I could.  
22 So I would listen to some of their marine mammal experts  
23 there. And their marine mammal experts would say, yeah,  
24 gray whales off the Oregon coast, you know, they're eating  
25 amphipods. We don't know much about them. You know, and

1 | there was numerous things that came up, and my mind  
2 | started -- it's like, whoa, you know. I don't think  
3 | they're eating amphipods, because amphipods primarily live  
4 | down in a soft substrate, and these whales were in kelp  
5 | beds. And as you well know, kelp has to be attached to  
6 | rocks, primarily.

7 |       And so I have a scuba license. And so I got on scuba  
8 | gear. That's me right there. And so I went down. I dove  
9 | in these kelp beds, and I found these huge swarms of these  
10 | mysid shrimp. And I thought, oh my goodness, you know, I  
11 | bet you that's what they're eating. But you just can't  
12 | assume anything. I mean, that's one of the problems with  
13 | our society now that they make all these assumptions. And  
14 | I want to have very solid evidence that this is exactly  
15 | what's happening.

16 |       So I collected, I collected the mysids, and there was  
17 | two primary subspecies. They are very substrate-specific.  
18 |       And off Depoe Bay, there's a lot of basalt. And you have  
19 | deep surge channels, so a lot of times you're going to see  
20 | the mysids down in the pockets of these surge channels.  
21 | It's very dangerous diving there, I mean, but there's a  
22 | lot of cool stuff. And so a lot of times, these mysid  
23 | shrimp are associated with kelp beds. And again, that's  
24 | just something they do.

25 |       So I collected two primary species: *Holmesimysis* and

1 | *Neomysis* are the two genera. And so I said, I really,  
2 | truly think this is what they're eating. But I had to  
3 | prove it. I had to wait 3 years before I collected fecal  
4 | samples. Do you know how excited I was when a whale pooped  
5 | in front of me? I mean, that was, that was one of the  
6 | highpoints. It's like, oh my goodness. And again, I  
7 | couldn't chase the whales, so it had to be an  
8 | opportunistic sample. And the fecal material dissipates  
9 | very rapidly. But I had bought plankton nets, and so I  
10 | collected the fecal material. As you see there, it's that  
11 | reddish stuff at the bottom there.

12 |         And so I collected it, and you'll see that, you'll  
13 | see the statocysts in there. Now those statocysts, that's  
14 | how you identify the specific individuals. And another  
15 | important thing is we don't know how important whales are  
16 | as what's called a whale pump. So they're taking and  
17 | they're feeding on the bottom, but when they're excreting  
18 | their fecal material -- and sometimes up to 2 liters at a  
19 | time for the larger whales -- you know, that's bringing  
20 | all these -- all this nitrogen and iron to the surface,  
21 | and that helps promotes primary productivity. So that's  
22 | another really important role of the fecal material.

23 |         So anyhow, that was my discovery, and because of that  
24 | discovery, I had an opportunity to do, to do some other  
25 | really cool things. And so if you continue on, I would

1 | like you to go next to -- let's see. We're at 30. Please  
2 | go to page 36.

3 |           MS. IMAKI: Your Honor, I would just like to  
4 | lodge a continuing objection to the introduction of this  
5 | new testimony based on this exhibit. As far as I can  
6 | tell, this book is only referenced in 2 of the 46  
7 | paragraphs in Ms. Newell's declaration. And to the extent  
8 | this is not summarized in the direct testimony or the  
9 | rebuttal testimony that has already been submitted, we  
10 | would just like to note our continuing objection to the  
11 | introduction of new testimony at this stage.

12 |           THE COURT: Okay.

13 |           MS. PRUETT: Ms. Newell's ongoing testimony as  
14 | well as this book supports her validity as an expert.  
15 | This is essentially giving you a snapshot of what she  
16 | does.

17 |           THE WITNESS: And we'll get into site fidelity.  
18 | I'm going to get into site fidelity, which is going to be  
19 | a question. And it gets into the UME. You'll see the  
20 | lean years. I'd like to explain about what I call the  
21 | lean years. And it's definitely related to my testimony.  
22 | It's a way that you can visually see what I, what I have  
23 | in my declaration. And you'll see as I continue on with  
24 | this that it will have direct connections to many parts of  
25 | my declaration.

1 MS. IMAKI: So if this is already part of the  
2 direct declaration, I would just ask to be referred to  
3 that since we haven't had a chance to review this, and if  
4 we don't see where it's cited in those -- in your  
5 declaration. So to the extent this is direct testimony,  
6 then, you know, a summary is of course acceptable. But if  
7 it's outside of what's already been submitted, now is not  
8 the time to introduce it for the first time.

9 MS. PRUETT: It has been submitted in the part  
10 in which -- in her testimony in which she -- Ms. Newell  
11 discusses body health and condition. She talks about the  
12 lean years there. She talks about how they have -- she  
13 has concerns. She sees them sometimes thinner than other  
14 years, sometimes in poor condition. She notes all of  
15 that. All of this is already in her testimony. She's  
16 just elaborating on it.

17 MS. IMAKI: Okay. I mean, I haven't had a  
18 chance to review this yet, so to the -- I'm just saying,  
19 to the extent it's new, we would object.

20 THE COURT: All right. I'm allowing her to  
21 continue to testify. It's basically informational  
22 information that's giving me a very -- I do remember her  
23 testimony from what she had submitted before. She was  
24 referring to certain individual whales that she was  
25 constantly able to recognize. If these are located in

1 | this book, those are things which should be there. She  
2 | did mention issues in her testimony about certain  
3 | emaciated whales and the difference between an emaciated -  
4 | - I think -- which is similar to where -- the testimony  
5 | that we have, that we have already heard from other, from  
6 | other witnesses.

7 |           So right now, I'm going to allow, I'm going to  
8 | allow this to continue. But we recognize that the parties  
9 | have a right to effective cross-examination on this issue.  
10 | And the fact that there's additional evidence, some --  
11 | everyone has brought in some additional evidence than the  
12 | exact, the exact words that were raised in all the  
13 | declarations. So I'm going to allow this at this stage,  
14 | and we'll see where it, where it leads us to. So --

15 |           MS. PRUETT: And with that said, we'll try and  
16 | make sure that we aren't going on too long, and that we'll  
17 | summarize more, maybe, efficiently some of these topics.

18 |           THE WITNESS: Okay. I wanted to -- Jonathan had  
19 | a really good point when he was talking. You know, he  
20 | talked about how you can see a depression behind the  
21 | rostrum, and then the scapula showing through the skin.  
22 | And then I had mentioned how, you know, I take pictures of  
23 | body condition. That's another thing I take a picture of,  
24 | you know, every trip I'm out there. And you can see in  
25 | the picture that this is the same whale in two different



1 | years at about the same time. The pictures were taken at  
2 | about the same time, during the summer. And you can see  
3 | how, knowing the same individual, you can see how they  
4 | change in body condition depending on, you know, the  
5 | amount of food available. And so I wanted to mention  
6 | that.

7 |           If you go to the next page, it's just a  
8 | continuation. I'll make it very quick, but you can see,  
9 | again, the scapula sticking through the skin, the  
10 | depression behind the rostrum, depression where the  
11 | cervical vertebrae is located.

12 |           We'll continue on here -- 38, 39. Because of  
13 | the discoveries that I made, I was very fortunate to have  
14 | a Cousteau group and Oregon Field Guide film my research.

15 |           And continuing on, so we're going to get into  
16 | something we talked about on page 45. We talked about --  
17 | in my declaration, I talked about, you know, how certain  
18 | behaviors are learned behaviors. And something that I  
19 | have noticed over the years that I feel is a learned  
20 | behavior is what you see at the bottom of page 45 there.  
21 | So go to the bottom. Okay, you see it's bubble blasting.  
22 | And only a few of our PCFGs do this. And when I talk  
23 | about that in my declaration, I talk about how this is a  
24 | learned behavior, because what I had observed and what I  
25 | continue to observe is that about half a dozen whales do

1 | this type of feeding behavior.

2 |           What I think is happening is that they're going  
3 | underwater. They're blowing bubbles out of their  
4 | blowhole. They're collecting the mysids in, you know, a  
5 | group. You know, like, you have a -- you'll have a ring  
6 | of bubbles around you, and they're just like, oh, I'm  
7 | scared, I'm scared. And they come in a tight clump. And  
8 | then what I see is whales go on their side. They do that  
9 | sharking, and then, you know, they're probably -- again, I  
10 | don't have, I don't -- I can't say this definitely because  
11 | I don't have the visual information underwater. But  
12 | anyhow, I assume they're just sucking them up. And I saw  
13 | a whale named Blanco watching Morisa. And Morisa is very  
14 | proficient at doing this. I mean, she does this feeding  
15 | behavior a lot. And I swear that Blanco is trying to  
16 | learn it from her because he would like -- you know, just  
17 | doing this weird thing, and like he was trying to  
18 | replicate that. And then finally it's like, oh, I can't  
19 | do it. And then he went back and did his typical feeding.

20 |       So again, there's a lot of new stuff coming out about  
21 | culture of whales, which we'll get into later. But this  
22 | is one thing that I truly believe is culture-related.

23 |           So going on here, so we're going to very quickly  
24 | just target just a couple of the PCFGs that we've  
25 | mentioned. So in the whale index that you see on page 50,

1 on page 50 there, I've taken -- I have 70 whales right  
2 here. And I've divided these whales into manmade cuts,  
3 killer whale attacks, white spots, dark whales, light  
4 whales. I'm not going to go through the whole list, but I  
5 have them divided so it's easier to figure out where they  
6 are.

7           So if you go to one that Jonathan mentioned, if  
8 you go, please, to page 52-53, you're going to see  
9 Scarback. She's probably the most famous PCFG. Her  
10 painting is in Newport. Talbot was -- is a famous artist.  
11 He drew her with a calf. She is a female. I've seen her  
12 every single year since 1992. I've seen her with numerous  
13 calves. What I have seen with her, she has about a 3- to  
14 5-year reproductive potential. The maximum reproductive  
15 potential of a gray whale is every other year, if there's  
16 enough food available. If there's not enough food  
17 available, then it's going to be longer than that.

18           Scarback has this huge wound on her right side.  
19 One of the -- Dr. Bruce Mate thinks that she got hit by an  
20 exploding harpoon that blew a huge chunk of blubber out.  
21 And you see on her side there a lot of orange. That's all  
22 orange whale lice. They eat the dead skin. That's  
23 helping keeping that -- this whale alive. And that was in  
24 the mid-'80s. And so I mean, she's doing fine. If I had  
25 to say, like, you know -- if there's one whale that really

1 | knows areas, I would say it's her. She comes back every  
2 | year to Newport and Depoe Bay. But she also comes up to  
3 | Neah Bay. She has what I would call regional preferences.

4 | Not the site fidelity that certain whales have, which I  
5 | will be mentioning in a moment, and I talk about that a  
6 | lot in my declaration. But she has regional preferences,  
7 | so she -- there's three areas along the central Oregon  
8 | coast that she likes to hang out: Seal Rock, Newport and  
9 | Depoe Bay. And it was so cool to hear Jonathan the other  
10 | day. He said, oh, yeah, we had Scarback for 2 months here  
11 | this summer. And I, and I said to myself -- I don't know  
12 | if I told Jonathan. I said, you know, I bet you the day  
13 | was 8/17/19, because I have photographic evidence of that,  
14 | that she was heading north. And I was telling my people.

15 | It's like, you know, she can go all the way up to Neah  
16 | Bay. And so -- and sure enough, and that was so awesome  
17 | to find out that, sure enough, she came up to Neah Bay.

18 |           And what I've learned, having a small population  
19 | of whales is so important because you can see these whales  
20 | year after year after year. No one has ever documented  
21 | this yet, and I hope now -- I'm trying to get a peer-  
22 | reviewed paper out before someone jumps and gets this out  
23 | before I do, and I've shared this with so many researchers  
24 | it might already be done now. But Scarback, when I first  
25 | saw her in 1992, her tail flukes were all dark with some

1 barnacle scars. Over the years, they became whiter and  
2 whiter. And I'm seeing this pattern in a lot of, lot of  
3 the PCFGs. I'm seeing how their tail fluke, as they're  
4 getting older -- and Scarback's at least in her 40s. She  
5 could be much older. I could see that, you know, they're  
6 changing. So I mean, she's easy to identify. But again,  
7 if you would use just the tails, I mean, it would not be  
8 the same whale. You could not tell. So that's why these  
9 studies of these small groups and seeing them year after  
10 year are so important. And since she's there most in  
11 Portland, I took a little longer time with her.

12           So just a couple of more here that I want to  
13 familiarize you with. Fifty-four. Rambolina. She got  
14 hit by a boat. First identifying pictures from her, page  
15 54. Sorry. Page 54. I didn't take these pictures, but  
16 in -- from the mid-'80s when she was still an adult. But  
17 I did see her. She's one of the whales that I've seen in  
18 San Ignacio Lagoon with a calf. So she has the prop cuts.

19           If you go to page 61, page 61, here you have  
20 evidence -- I'll wait till you get there. Here you have  
21 evidence of transient orcas. What I have seen over the  
22 years is that more of the PCFGs have evidence of transient  
23 tooth rakes on their body. Even the adults do. So there's  
24 a new technique that the orcas have been using on the  
25 adults. So adults that have never had tooth rakes before,

1 | now what's happening, the orcas are jumping, grabbing the  
2 | dorsal hump and trying to drown them that way. On this  
3 | little calf that you see here, most of the time what  
4 | transient orcas do is they'll try to drown the calf, jump  
5 | right behind the blowholes, try to drown it. And as you  
6 | see here, the orcas as they came down, they raked the side  
7 | of the neck there, and then barnacles connect them. And  
8 | if you flip it over, it spells N-I-F-E, so I named this  
9 | one Nifer. Did you know that gray whales can spell?

10 |           So anyhow, so you'll see that. And then also, I  
11 | mean, this is, this is getting to be a big problem with  
12 | our PCFGs. And I mentioned this in the declaration, that  
13 | now we're getting, you know -- there's so many other  
14 | problems facing these whales. And so more and more and  
15 | more transient orca attacks, because the population of the  
16 | transient orcas are increasing. I believe it's by about  
17 | 3% per year, maybe even more.

18 |           But on 64, this is Lucky. Lucky was a calf when  
19 | -- a young whale, just recently weaned when he first came  
20 | into the area. Had some tooth rakes, and he came back  
21 | again, and he had tooth rakes again. So he got attacked  
22 | at least twice. That's why we call him Lucky. I'm  
23 | guesstimating he's maybe around 7, but it's a guesstimate.  
24 | So again, just wanted to show that.

25 |           So if we look here at 89, if we go to 89 please?

1 | So this is really awesome. This is Milky Way. This is  
2 | Scarback's 2004 calf. And as you can see here, you see  
3 | Scarback. You see Milky Way next to Scarback. And I've  
4 | seen this calf -- I saw, I saw Scarback teaching this calf  
5 | how to feed on mysids. Saw this many times. So  
6 | typically, gray whales are born a lot of times about the -  
7 | - around the third week in January. They stay with their  
8 | moms for about 7 months. What I have seen off the Oregon  
9 | coast many times is that they're weaned right about the  
10 | beginning of August. And so in the time, July and the  
11 | beginning of August, that's when the females are starting  
12 | to teach their calves how to feed on these mysids. So  
13 | what I've seen is the calf on its side doing the sharking  
14 | -- first the mom, then the calf. And you know, I've seen  
15 | this. So again, moms teaching calves where to come, where  
16 | to feed, how to feed. Very important that we talk about  
17 | that. I talk about that at different times in the  
18 | declaration. Also, you see Milky Way got attacked by  
19 | orcas. I can document that, and I know about when it was.  
20 | And so that's another very important thing there.

21 |           So 98. If you look at 98 here, we have a whale  
22 | named Ufish. And I'd like to make comparison pictures in  
23 | the book, because a lot of times, there are certain  
24 | patterns that are not going to ever change. There are  
25 | certain patterns that will change. So when, you know --

1 | if during the hunt, you know, they need to know which  
2 | whale that is, you know, you need to know that, if it's  
3 | barnacles and barnacle scars, that over time those are  
4 | going to be fading. But if it's natural pigmentation,  
5 | that pattern is going to stay forever. I mean, it's like  
6 | a birthmark. They're born with that certain pattern, and  
7 | it will be with them forever. So you can see in my book  
8 | here that, in 2008, on Ufish the U was pretty prominent.  
9 | But in 2012, it has faded a lot. In my most recent  
10 | pictures of Ufish, you can hardly see it at all. But the  
11 | fish pattern is the same. You all can see the difference?  
12 | So that's really important there too.

13 |           On 104, if you go to 104, so a number of these,  
14 | you know, have been around a long time. So we had -- I  
15 | skipped over Morisa, but Morisa was a female that was  
16 | around this summer for 93 days. Comet is a whale -- and  
17 | this is Comet. Comet's been around for 4 months straight.  
18 | I mean, every trip, every day, I can say, there's Comet,  
19 | there's Comet. Comet has an obstruction, and if you go to  
20 | the next part of Comet, the next page, an obstruction in  
21 | the left blowhole. So Comet bubbles underneath the water.  
22 | It's an easy way to, way to tell this whale, because it's  
23 | like, you know, like a comet hit the water and, you know,  
24 | popped up. It's a, it's a different type of blow pattern  
25 | than all the other whales have. But she's been around for



1 a long time. A very friendly whale. I take my dogs out  
2 on the boat, and it's -- they love it. They love it.

3           So just -- I think I have only about two more  
4 here. So on -- I have one more. So on page 108, another  
5 whale that has had a long site fidelity -- 4 months at a  
6 time -- is Ice Cap. Now what I've tried to do -- next one  
7 down. So on Ice Cap -- so another thing that I've been  
8 able to see on a number of these whales is -- being out  
9 there every single day that I can unless the ocean is bad,  
10 I can see what happens with the whales. So as you can  
11 see, on 8/18/10, Ice Cap got hit by a boat prop. I saw  
12 it. I know what boat did it and everything. And I  
13 watched throughout the rest of the summer how scar tissue  
14 started forming and how that, how that wound was healing  
15 over time. And I've documented that on many, many of the  
16 whales.

17           And so that just kind of gives you a brief  
18 overview not only as an ID book, but it shows you numerous  
19 other things. Thank you.

20           MS. PRUETT: Okay. So you summed that up very  
21 well. Thank you. One more moment, please.

22           BY MS. PRUETT:

23           Q. Ms. Newell, you mentioned several times -- many  
24 times, actually -- the term "site fidelity." Do any of  
25 the whales you encountered -- you mention that they show

1 | site fidelity. What is it that makes you believe it? And  
2 | what does that term mean to you?

3 |       A. Well, site fidelity is when they're coming back  
4 | to the same area, and a specific area, and they're staying  
5 | there for periods of weeks to months. And I have seen  
6 | that, and I know John Calambokidis has mentioned it also  
7 | many times in various papers he's published. And there's  
8 | regional preferences and there's site fidelity. So if  
9 | they're coming to a certain area, and it's a very  
10 | localized area -- and I've seen this with some of the  
11 | whales. There's a whale named Yogi and Ginger. I'm not  
12 | going to bore you with some more pictures, but they were  
13 | there. Yogi got here. He has like a Yogi Bear face on  
14 | his side. But he came here this year mid-June, and I got  
15 | off the ocean just before I came here 3, 4 days ago. And  
16 | I still saw him.

17 |       And what was so cool about that whale is I could tell  
18 | my people -- I had shown the picture in the museum. I'd  
19 | say, look for this whale; it has a Yogi Bear face. And  
20 | we're going to go to the north part of the bay. There's a  
21 | good chance you're going to see this whale. Did the same  
22 | with Morisa. Morisa came -- she came this year about June  
23 | 20. She left -- last time I photo identified her was in  
24 | September, but there was a kelp bed that she stayed at  
25 | almost all summer at what's called South Point. And once

1 again, I'd say, this is how you identify her; she's got  
2 like a dot and dash, like Morse code, but she's a female.  
3 And she's brought calves, and her calves come back. And  
4 so I'm telling the people, you know, this specific site is  
5 where these whales are going to be.

6 Ginger's another whale. Last year, Ginger came in  
7 March and Ginger did not leave until November. It was the  
8 longest period of time that I've ever seen a PCFG along  
9 the coast. And I'm not saying -- I mean, there was a few  
10 days -- I mean, she could have quick left and come back,  
11 because there was a few days I couldn't get out; the  
12 weather was bad. But pretty much every day when I went  
13 out, I could pretty much say, hey, we got to go south of  
14 the bow buoy. We got to see Ginger. She's my best  
15 fluking whale. Because almost every time, she would stick  
16 up her tail flukes.

17 And she was skinny this year. And I didn't show  
18 you the picture, but she's -- I've seen her. She came as  
19 a calf or a 2-year-old, probably. Again, I'm  
20 guesstimating. But this year, she was skinnier than she  
21 normally was, and I've been able to compare the pictures  
22 from the other years because she's been here 5 straight  
23 years. And with her, she's -- and she got hit by boats.  
24 Prop cut on her right. A lot of cuts. And on the left,  
25 another cut. So she has -- she's easy to tell, but she's

1 | doing fine. I mean, she's surviving. I don't think she  
2 | will be one of our stranded whales. I mean, she's  
3 | skinnier than normal.

4 |       Q. All right, thank you very much for the extra  
5 | descriptions. So would you say that the whales you've  
6 | described that you see routinely and consistently, do you  
7 | see them year after year?

8 |       A. The whales that I see -- so in my book, for  
9 | example, when we look at the index, so about 25 out of  
10 | those 70 whales I'd say I see almost every year off Depoe  
11 | Bay. Some of the other ones, there tends to be what we  
12 | call transients, what I also call wanderers. And I think  
13 | once I analyze more of my data, I'm going to find that --  
14 | my guess; again, I'm guessing -- that those are going to  
15 | be young males or males, and they're just -- and they'll  
16 | have more of an extensive range. I mean, some of these  
17 | are extremely localized. Definitely less than 60 nautical  
18 | miles. I know that for a fact. And so -- but there are  
19 | some. I mean, there are some that definitely, they're  
20 | like, oh, yeah, let's check this area, this area, this  
21 | area.

22 |               But what I feel -- and again, I -- going through  
23 | my data over the next couple of years -- it's going to  
24 | take me a couple years to go through it all. What I think  
25 | I will be seeing is I will see that there's going to be a

1 | lot of internal recruitment by moms and calves. And then  
2 | I'm going to see that the moms will be primarily taken to  
3 | an area that they know will have a good food source. And  
4 | I go down. I mean, I know what those areas look like  
5 | underwater. You know, I scuba dive in those areas. So  
6 | you know, there's certain areas that are quite predictable  
7 | to have a whole bunch of mysid shrimp. And I mean, they  
8 | are opportunistic. They do eat other things. Sometimes  
9 | porcelain crab larvae twice a year. But mostly off the  
10 | Oregon coast, they're eating these tiny little mysid  
11 | shrimp. And so I think the moms are like, this is a good  
12 | spot, and it's a predictable spot almost every year,  
13 | except for 2005.

14 |       Q.    Great, thank you. So I'm going to refer you  
15 | back now to your study that we mentioned that is attached  
16 | to your written testimony. It is CN-2. And if Brett  
17 | would scroll down for me, let's see, to page 3? And make  
18 | it bigger for the highlighted part. Could you read the  
19 | highlighted part for us, please?

20 |       A.    "Using the criteria mentioned above, 33 gray  
21 | whales have been identified as residents during the summer  
22 | feeding season, May through October, from Lincoln City to  
23 | Seal Rock, Oregon between 2000-2005. Of these 33, 28 have  
24 | returned during the last 3 years."

25 |       Q.    Would you feel comfortable calling that

1 percentage evidence of site fidelity?

2 A. Yes, I would.

3 Q. So if I understood your testimony correctly, you  
4 continue to see -- this was, sorry, 2003 to 2005, right?

5 A. Yes.

6 Q. The data you're relying upon. If I understand  
7 your testimony correctly, you continue to see this site  
8 fidelity trend?

9 A. Yes. And again -- so you have to put some  
10 parameters on the site fidelity. I mean, it's like, you  
11 know, I'm seeing some from 2 to 3 weeks to 7 months. So  
12 again, depending on the individual, you know, some are  
13 going to stay there, you know, 2 weeks. So that's site  
14 fidelity for that whale for that period of time. But then  
15 some other ones are going to stay until they migrate back  
16 south. And so I'm teasing my data apart more now, making  
17 that -- you know, and like I said, there's some regional  
18 preferences too. So I'm adding a few more criteria to the  
19 definition. But again, a lot of these whales come right  
20 back to the exact same spot year after year. And the  
21 amount of time they stay there, most of them are months at  
22 a time.

23 Q. So it's a lot more than just two whales.  
24 Somebody mentioned, I think, in testimony here in this  
25 hearing, that, you know, there are two whales.

1 A. Oh, yeah. Oh, yeah. Lots more than two.

2 Q. And you're seeing a lot of these repeat visitors  
3 for decades, even?

4 A. Absolutely.

5 Q. Okay. So at this point, I'm going to have Brett  
6 bring up the 2019 Calambokidis paper that NMFS submitted  
7 as Exhibit 3-101. They submitted it at the start of this  
8 testimony, and as it had just been released.

9 A. Is that the one at Figure 8?

10 Q. Do you recognize it from the title? So John  
11 Calambokidis and Alie Pérez?

12 A. Yeah, I'm thinking it -- yeah, this is the right  
13 one. I thought you brought up -- yeah, this is the right  
14 one. Yeah.

15 Q. Okay. So you mentioned Figure 8. So did you  
16 have an opportunity to read this study?

17 A. Many times.

18 Q. Okay, it just came out. Right? This is the one  
19 that just --

20 A. Oh, now? Well, I've read it before.

21 Q. Okay. No. Yeah, no, I mean, it just came out -  
22 - this is the one that just came out last week, but you've  
23 read it since then.

24 A. Oh, this is -- oh. Okay. I think this is the  
25 right one. Yeah. Go see if, see if this is the one that

1 has Figure 8. Yeah. I don't know if you can turn that.  
2 So this is from Calambokidis et al. New paper that came  
3 out. And this is where he has the updated population  
4 data. And I'll wait till you can get it turned.

5 Q. Can you screenshot it? Okay. Okay. I'm going  
6 to hand this (indiscernible).

7 A. Okay. Thank you. Okay. So I guess we're going  
8 to do it sideways, so --

9 MR. SOMMERMEYER: No, wait. No, we got it.

10 MS. PRUETT: Did you get it? Okay, one sec.  
11 Ordinarily this works on our computers pretty quickly, but  
12 this is not ours.

13 THE WITNESS: Okay. What I need everyone to do  
14 is go like this, okay? And then we'll try to interpret  
15 it. Okay, so I'll interpret this graph here.

16 So each one of these skinny lines is an  
17 individual whale, okay? Many, many, many datapoints  
18 long range. I mean, look at -- see how long --  
19 there's a couple here that have -- you know, one almost 3  
20 degrees there. So anyhow -- I can't even hardly see that  
21 myself over on the map. So it goes from 40 to 50 there.

22 So again, very, very wide ranges. You know,  
23 those are probably our wanderers, what John calls our  
24 transients. And then you see other ones here that hardly  
25 move at all. You see how a whole bunch of these are --



1 | these hardly move at all. And then, and then they're  
2 | clumped. And so what this is showing is that there's --  
3 | they're not homogenous, and they are some degree -- I'm  
4 | just going to quote from the paper. I'm quoting from the  
5 | paper --

6 |           MS. IMAKI: Could you help us by -- we can  
7 | either come back to this and -- after we have it turned  
8 | and put it up on a different computer?

9 |           MR. SOMMERMEYER: (Indiscernible) take a second.  
10 | Sorry. It's a good time for a break.

11 |           MS. IMAKI: If we just wait (indiscernible) it's  
12 | going to be so much easier to read.

13 |           THE COURT: I'll tell you what. We're --

14 |           MR. SOMMERMEYER: Yeah, I have to eject this  
15 | first.

16 |           THE COURT: We take a 2:30 break anyway. Why  
17 | don't we take a break while you --

18 |           MS. PRUETT: Thank you very much.

19 |           THE COURT: We'll take a 15-, 10-minute break  
20 | while everyone gets the computer set up, and we'll go from  
21 | that. We're on recess.

22 | (Off the record from 2:22 p.m. to 2:35 p.m.)

23 |           THE COURT: All right, we're back on the record.

24 |           MS. PRUETT: Thank you for the timely break,  
25 | Your Honor. I appreciate it.

1 THE WITNESS: Thank you.

2 BY MS. PRUETT:

3 Q. Okay, so again, we are back to the paper we left  
4 off on. And you were in the process of describing Figure  
5 8. And this, again, is NMFS Exhibit 3-101. It's the 2019  
6 Calambokidis paper that was just published and came out  
7 last week. And so now, this is in the right direction  
8 now.

9 A. Thank you.

10 Q. It's been rotated. And you know, it would  
11 probably be helpful, since it was a little bit confusing  
12 where it was before, to describe what the axes represent.

13 A. Okay. So on these axes, as you can see on the Y  
14 axis, the left side there, that's latitude. And then on  
15 the bottom here, these are individual whales. So each one  
16 of these lines, the red lines, the red lines is an  
17 individual whale. And so I'm going to read what John has  
18 put here, and then once again I will go over the  
19 explanation of it.

20 So he said, "The distribution of latitudes of  
21 sightings (points) for whales with six or more sightings  
22 after 1 June from 1996 to 2017, the 75% inner quantile,  
23 which is the solid thick line, and full range, which is  
24 the light dashed line. Each position on the X axis  
25 represents an individual whale. Whales have been arranged

1 on the plot by sorting first on the lower bound of the  
2 inner quantile to a half degree, and then the upper bound  
3 by, bound by the quantile. This has the effect of sorting  
4 from north and south, and cluster whales with smaller  
5 quantile ranges followed by whales with larger ranges."

6       So what he is trying to show here is that the whales  
7 do have regional preferences, and they are clustered at  
8 times, and that some whales are the transients. It's  
9 these whales that, as I mentioned, have this very  
10 extensive north and south range. Some of them, minimal  
11 movement north and south. And then, and then the clumping  
12 behavior.

13       And so if we go back to -- in his paper, if we can go  
14 to the highlighted portion underneath the discussion? And  
15 so when he talks about the population structure of gray  
16 whales, and he says it involves two elements. He said,  
17 "One group of whales returned frequently and account for  
18 the majority of the sightings in the Pacific Northwest  
19 during the summer and fall. This group is certainly not  
20 homogenous," meaning -- you know, homo means the same, but  
21 -- "and even within this group, there is some degree of  
22 preference for certain subareas." So again, there's  
23 preferences. You know, gray whales absolutely have  
24 preferences. "And despite widespread movement and  
25 interchange among areas, some of these gray whales are

1 | likely to be seen returning to the same areas they were  
2 | seen before." Again, in a number of John's papers, he has  
3 | talked about site fidelity and this term of regional  
4 | preferences. And again, the chart's a little bit  
5 | complicated, but you can kind of -- hopefully you got the  
6 | gist from that chart.

7 |         And he also put here, he says, "The second group of  
8 | whales are transients that are seen in only one year tend  
9 | to be seen for shorter periods that year and in more  
10 | limited areas. Despite extensive interchange among  
11 | subregions in our area, whales do not randomly -- they do  
12 | not move randomly among these areas." And so I have  
13 | absolutely seen this with the whales off Depoe Bay.  
14 | Certain whales definitely have certain areas they like to  
15 | go to, and John has seen -- he's seen the same thing. And  
16 | I know -- yeah, that's it.

17 |         Q. Thank you. Do you recall -- and maybe Brett can  
18 | scroll up to the top in case you don't recall. But over  
19 | what period of time the study was conducted, or what --  
20 | the datasets is for how long a period of time?

21 |         A. It was --

22 |         Q. Should be on the first --

23 |         A. Yeah, 1996 to 2017.

24 |         Q. So 22 years, right? And a few lines down from  
25 | that, just to clarify, how many unique gray whales were

1 | included?

2 |       A.    Okay, so he did -- 1944 unique gray whales were  
3 | obtained.

4 |       Q.    Were used for the study.

5 |       A.    Yes.  Yeah.

6 |       Q.    Were referenced in the study.  Okay, thank you.

7 |       A.    And of course, if they are unique, not all of  
8 | them would be PCFGs, because we don't have that many.

9 |       Q.    Thank you.  Okay, so in your testimony, you  
10 | discussed your concerns with the study by Barbara  
11 | Lagerquist et al, which Mr. Scordino cites to claim that  
12 | gray whales do not have high site fidelity.  Can you  
13 | explain your concerns with that study, please?

14 |       A.    Well, I've gone over her paper different times,  
15 | and I just think her methodology has some flaws in it.  So  
16 | when you're, when you're trying to get at questions like  
17 | that -- I mean, and she does great research.  Please don't  
18 | think I don't think she does great research.  She does.  
19 | But I think in this specific paper, there's things that  
20 | could have been done differently to make it -- I think  
21 | it's somewhat biased, and there's a small sample set to  
22 | begin with:  35 whales.  And 23 of those whales were  
23 | tagged at St. George, California, and in a, in a clumped  
24 | time, so a very short time period within a few days.  And  
25 | then a few weeks for -- you know, she -- a whole bunch,

1 | and then some more.

2 |       And then another thing is, what I've seen with the  
3 | whales is that, later in the summer, they're already  
4 | starting to move south, okay? And so they're -- you know,  
5 | they -- and I'll know this better when I analyze more of  
6 | my data, but -- and I've talked to other researchers about  
7 | this. But what I have seen is that, in September, we get  
8 | the most whales. I mean, we have in September anywhere  
9 | from 25 to 30 whales in a very small area, from, you know,  
10 | maybe 2 nautical miles. I mean, lots of whales. And  
11 | throughout my whole study, that has been consistent. I  
12 | always tell people, if you want to see the most whales,  
13 | come the first 2 weeks of September.

14 |       But what I have seen is that a lot of the whales that  
15 | -- say, for example, Ginger -- well, Yogi's still here,  
16 | but let's say Ginger, Morisa -- I don't know when Scarback  
17 | left Neah Bay, but let's say Scarback. Let's say those  
18 | whales -- it's like, it's later in the summer, so now  
19 | they're starting to move south. And so they're moving  
20 | south, and they're opportunistic feeders. So let's say,  
21 | you know, they're still hungry. They have to eat, you  
22 | know, their full food supply during the summer. And so  
23 | there's sufficient food at least through northern  
24 | California that I've seen. There could be pockets, even,  
25 | along the California coast, but as far as the main feeding

1 areas, you know, northern California to Vancouver Island  
2 are the -- they're the hotspots.

3       So anyhow, those whales have started to move south,  
4 you know. They were there at the beginning of September;  
5 now they're starting to move south. Now we're getting  
6 some new whales coming in. What I feel -- and I can't say  
7 this for sure because I haven't analyzed all the data, and  
8 this is why we need -- I'll have to talk more about  
9 Jonathan, if some of his whales, you know, from Neah Bay  
10 are now, you know, off Depoe Bay in, you know, say,  
11 October 1. And then -- because I think they're staging --  
12 they're still feeding, but I think they're -- from the  
13 north, they're coming down, they're coming down. It's  
14 like, well, we got to get down to Baja, you know. And not  
15 all the whales go to Baja, but a number of them do.

16       And so they're going down. So she -- when she did  
17 her sampling, she's already targeting whales that are  
18 already on the move. And so with a small sample size and  
19 a clump distribution and whales that are already on the  
20 move, I don't think it gives us a clear picture of what's  
21 truly happening.

22       Q. Thank you. So you spoke a little bit in there  
23 about feeding, feeding habits and, you know, where they're  
24 going, and also about Dr. -- sorry, Mr. Scordino. And  
25 yesterday, he mentioned in his testimony, and you were

1 here for that, that he specifically uses a fishfinder to  
2 see -- maybe to look for spots where there might be mysid  
3 shrimp.

4 A. Right.

5 Q. Can a fishfinder alone determine with accuracy  
6 whether mysid shrimp are present?

7 A. No. No. Do you have that picture?

8 Q. Yeah. So I'm going to refer you now, or I'll  
9 put up on the screen here -- Brett will -- Carrie Newell's  
10 testimony. This is her thesis at -- I'm sorry. An exhibit  
11 to her testimony: thesis marked CN-4. So this is  
12 something you already have. And first, let's just look at  
13 -- take a look at the title and make sure this is -- do  
14 you recall this document?

15 A. I do.

16 Q. And what is it?

17 A. It's my thesis.

18 Q. Thank you. Is there a date on there?

19 A. 2009.

20 Q. Okay, thank you. So Brett, if you could scroll  
21 down to maybe page 44, I believe. Try 56. Sorry. So Ms.  
22 Newell, are you asking us to look -- there we go. Is this  
23 the figure you were --

24 A. Yeah. Yeah.

25 Q. The picture you were talking about, I think?



1           A.    It is.  So what I've -- this shows a little bit  
2 -- this is -- I changed my fishfinder to a different view  
3 for this picture.  But here you have the depth.  And you  
4 see here this dark area, that is the bottom.  Now on this  
5 specific one, you'll see right above here, you see this  
6 area.  And it could be mysid shrimp, because the mysids  
7 are right above the bottom.  They're about an inch above  
8 the bottom.  Or it could be kelp.  Both kelp and mysid  
9 shrimp have the same type of reflection that you see on  
10 the fishfinder, the acoustic signal.  So in this instance,  
11 I always like to ground truth my data.  Like, I don't want  
12 to just say, oh, yeah, well, mysids are there.  Boom, I'm  
13 done.  You know?  I've proven it.  Boom.  No.  So in this  
14 instance, what I did, I said, well, I don't know.  Is this  
15 kelp or are those mysids?  Because I wanted to do a figure  
16 like this and try to get at density of mysids.

17           So I got on scuba gear, jumped in the water, went  
18 down to this locality.  And sure enough, those were  
19 mysids.  And they're -- mysids are patchy.  So in Depoe  
20 Bay, at times when the area is really doing well, the  
21 whole bay, it's just loaded.  I mean, just the whole bay  
22 is loaded.  And other times, they're just in clumps,  
23 because mysids have a clump distribution.  They're -- it's  
24 called patchiness.  But you know, Depoe Bay is so unique  
25 with having the right substrates and, I feel, the right

1 | types of currents and everything else that we do get great  
2 | productivity of the mysids. And this was in the bay. The  
3 | bay is quite shallow. It ranges from about 25 to 40 feet  
4 | deep, depending on the tide.

5 |       So here, I ground truth this information, and then I  
6 | could get at, you know, some densities of those mysids.  
7 | Because another thing that I dealt with in my thesis is  
8 | not only, yes, they're eating them, but what's the density  
9 | that they need? You know, and what's the species? And  
10 | are they males? Are they females? Are their females  
11 | brooding young? So I got at all those questions when I  
12 | was doing that. And I still collect, I still collect  
13 | mysids, and I just dove about 2 weeks ago. So I'm still --  
14 | I got some great video footage of the swarms.

15 |       But you -- to get back to your question, no, you  
16 | cannot tell just by a fishfinder. You can guesstimate,  
17 | but not know for sure.

18 |       Q.    Great. Thank you very much for that  
19 | explanation. So I'm going to switch gears a little bit  
20 | and see this, if we can. So do you see -- I'm sorry. Do  
21 | any of the whales you see besides Scarback -- you already  
22 | mentioned that Scarback went up north -- in your study  
23 | area travel up to Washington to the approximate location  
24 | of the proposed hunting area or in the proposed hunt area,  
25 | if you know where that is?

1           A.    Over the years, Jonathan has sent me some  
2 pictures, and there were some that I recognized from Depoe  
3 Bay that were up there. I actually had family members  
4 living on the reservation for 4½ years, and I actually  
5 went up there once a month, staying anywhere from days to  
6 a week. And I would go out to Cape Flattery, and there's  
7 an area, and I would see gray whales. I never got really  
8 good pictures from land, so I can't say 100% sure from the  
9 photographs I got from land. But I did see gray whales  
10 there. And Jonathan -- I mean, over the years, you know,  
11 we have been in contact and just -- I mean, his daughter  
12 and one of my grandsons -- my daughter babysat his  
13 daughter and -- it's a long story.

14           But anyhow, so anyhow, I could -- he's got great  
15 pictures, great data. And so I went and I said, yeah, you  
16 know, I recognize that one; I don't recognize that one, so  
17 --

18           Q.    Okay, great. Thank you. That's Jonathan  
19 Scordino?

20           A.    Yes.

21           Q.    Just to clarify.

22           A.    Yes. I'm sorry.

23           Q.    Okay. Because we have John Calambokidis and --

24           A.    Yeah. I'll say Jonathan and John, just to keep  
25 them separate.

1 Q. Okay, great. Thank you.

2 A. Unless I should say their last names.

3 Q. That would probably help.

4 A. Okay.

5 Q. Great. Thank you. So are you familiar with the  
6 whale that was killed in 2007?

7 A. Yeah. Yeah.

8 Q. Okay, have you seen that whale before?

9 A. CRC 175. Yeah. I saw, I saw her -- it was -- I  
10 know -- I remember it was the end of August 2007, because  
11 I had photo ID shots of her. And I remember, I remember  
12 that day, because certain days just stick in my mind. And  
13 I just remember seeing her go north. That's all I, all I  
14 remember. And so I just -- and I could, I could have just  
15 been triggered because I knew later on that was the one  
16 that was killed. But I do remember -- I have a picture.  
17 She was heading north.

18 Q. And again, the way you can confirm this is by  
19 comparing your photo evidence that you've submitted to  
20 John Calambokidis and also look at the CRC numbers?

21 A. Yeah. Yeah.

22 Q. Is that correct? That's how you know the  
23 number? Okay. Are you concerned that other whales you  
24 study in Depoe Bay will also be at risk of take? This is  
25 something you did testify to in your written testimony.

1           A.    Yes.

2           Q.    And why, if so?

3           A.    Having worked with these whales for so many  
4 years, they're kind of like family.  And I know them so  
5 intimately.  You know, some of them, like Scarback, you  
6 know, every year since 1992.  And you know, I've seen some  
7 of them as calves.  I've seen them grow up.  I've seen  
8 them be attacked by orcas.  You know, I've seen them  
9 survive.  I've seen them be skinny, then they get fat.  
10 You know, I've seen calves coming back.  And so I'm  
11 concerned.

12           And I have total respect for the Makah.  And I -- my  
13 big thing, and I was going to put this in the summary, but  
14 I think I'll just say it now.  I don't want to see any  
15 whales killed, but listening to Polly, Daniel and -- is it  
16 Robert?  Greig.  Greig, Daniel and Polly.  Listening to  
17 their stories, it was like, oh my goodness.  Because I've  
18 always had a tremendous respect.  And going and having my  
19 family live on the reservation, I mean, they got to know  
20 them really well.  And then I'm torn.  I am so torn,  
21 because I want them to be able to have their culture.  But  
22 at the same time, I don't want to see our whales killed.

23           So I had put in my declaration that I know they don't  
24 want to do whale watching.  I mean, it's been said many  
25 times.  And if they would, I would help them.  But I

1 | thought maybe, as a compromise, that in -- you know, take  
2 | the Eastern North Pacific whales. You know, take them.  
3 | You know, go ahead. But leave our PCFGs. We have a small  
4 | population to begin with. And you know, maybe if they  
5 | would ever want me to do this, you know, I would teach  
6 | them -- and I know Jonathan does this a lot too, but I  
7 | would teach them, you know, how to identify these whales,  
8 | and I would teach them, you know, lots of behaviors. And  
9 | maybe in the summer, they could do whale watching. Maybe  
10 | in the summer, you know, they could, they could learn all  
11 | this. And they could -- maybe they could do -- you know,  
12 | practice their -- do, like, mock ceremonies and stuff, and  
13 | then get prepared, and then do the actual hunt for the  
14 | ENPs.

15 |       Because I -- I'm so sorry. I didn't want to lose it.  
16 | I'm so sorry. But I want -- I like to compromise things.  
17 | I don't like to, I don't like to be, like, no, now you're  
18 | not going to kill any whales. Because I heard the  
19 | stories. And growing up, I mean, I always -- Native  
20 | Americans were always my favorite. I mean, every paper I  
21 | did, I mean, it's like, I just wanted to learn as much as  
22 | I could. And so again, but I also love my whales. You  
23 | know, and I've shared, I've shared these pictures of these  
24 | whales. I mean, I get tens of thousands of people on  
25 | Facebook, and they want to know, is Scarback still around?

1 | You know, did she have a calf this year? And I get  
2 | people from all over the world, all over the world.

3 |       And so you know, I feel it's so important to  
4 | understand a small population like I do, and then you can  
5 | expound that to learn more about the larger population.  
6 | How do they, how do they survive a wound? How long does  
7 | it take to survive a wound? And I've documented that.  
8 | You know, you can see in my pictures how I've been able to  
9 | show that. And so -- and then how they change. I mean,  
10 | how -- like I showed you with the barnacle scars, how they  
11 | fade over time but pigmentation patterns don't.

12 |       So I mean, I'm learning so much, and I'd like to  
13 | share that. I mean, I sell my book from Alaska to Baja.  
14 | And I've just been invited to give a big talk again in  
15 | Alaska. And I've given talks up and down the whole coast  
16 | for years and years, you know. I run the Whale Spoken  
17 | Here -- I don't run it. I'm one of the -- excuse me. I'm  
18 | one of the people who teach the whale watch volunteers.  
19 | It's a huge thing in Oregon. So again, and I, and I teach  
20 | them a lot about these PCFGs. And so if we could not kill  
21 | them, not kill them and just focus -- you know, do  
22 | something else. You know, make a lot of money. Make a  
23 | lot of money in the summer. Do your ceremonies and  
24 | practice it, and then go and do that hunting in the winter  
25 | when you have a lot more whales.

1           I do want -- I just want to give you a quick map  
2 lesson very quick. So Calambokidis, or Mr. Calambokidis  
3 -- so in 2017, as we all know, he said there was 243  
4 whales. And the most recent paper that recently came out,  
5 there's 232. Barbara Lagerquist put in her paper by  
6 Paretta (ph.), Paretta et al. (2016), that there were only  
7 197 whales. So we have had -- Jonathan mentioned there  
8 was one PCFG that died. He said maybe it was two, but  
9 we're only going to call it one. And then there's a whale  
10 right now off Crescent City that was identified as a PCFG.

11          And then there's one in Canada that they're pretty sure  
12 is a PCFG. So that's three. Now if we use the cryptic  
13 mortality of 10%, okay? So now we're going to take 10  
14 times 3. Now that's 30. Now we take 30 minus -- we're  
15 down to 232. Now we're down to 202.

16          Now our -- we're almost getting at that critical  
17 threshold. Close to, we're close to that low abundance  
18 trigger. So we're already close to that. And I do want  
19 to address a little bit in a little bit also about  
20 recruitment, what I feel about recruitment. But again,  
21 you know, we're so close anyhow to not being able to have  
22 a take of the PCFGs. So you know, we have 26- to 27,000  
23 of our other whales. And not that I want to see a whale  
24 killed. But I want to be able to also honor the Makah.  
25 So again, that would be my compromise. And so -- but I



1 | would just ask that we don't, we don't kill any PCFGs.

2 |       Q.    Thank you, Ms. Newell.  I mean, I was very moved  
3 | by that.  I can tell that you were, and we share in your  
4 | respect for the Makah and understand your concerns there.

5 |    You did just mention -- and just for the sake of moving  
6 | this along, I know -- are you feeling up to continuing  
7 | with your testimony now?

8 |       A.    Yes.

9 |       Q.    Okay, thank you.  You did, you did just mention  
10 | -- let's see.  One moment.

11 |            MS. PRUETT:  Actually, Brett, could you please  
12 | bring up the rebuttal testimony of DJ Schubert, in  
13 | particular Exhibit 15, which we discussed a little bit  
14 | earlier today?  Did we not?  No, no, that's Carrie's.  
15 | It's not on there?  Okay.  Okay.  We'll pass on that.

16 |            (Discussion about slide.)

17 |            BY MS. PRUETT:

18 |       Q.    Okay.  So you mentioned internal recruitment.  
19 | I'm not going to be able to pull up the study that --  
20 | that's not it.  I'm sorry.  We heard about it earlier  
21 | today from DJ Schubert.  Are you familiar with the study  
22 | that DJ was speaking about?

23 |       A.    I am.

24 |       Q.    It was entitled Calambokidis et al.  Studies and  
25 | Follow-up of Mothers and Calves in PCFG -- in the PCFG --

1 | I'm sorry -- and Implications for Internal Recruitment?

2 |       A.    Yeah, internal recruitment to the PCFGs from  
3 | birth to PCFG mothers.

4 |       Q.    Okay.  So are you familiar with that, and  
5 | without it being up and being able to --

6 |       A.    Yes.

7 |       Q.    -- scroll through it, is there anything you'd  
8 | like to -- is there a position you have on that paper?

9 |       A.    I do.

10 |       Q.    And can you review it sufficiently?

11 |       A.    I do.  So in this paper, John Calambokidis, he  
12 | talks about -- there were 62 moms, and they had 102  
13 | calves.  And of those that were sighted, 59 of 91 calves  
14 | were re-sighted in succeeding years.  So 65%.  And  
15 | mortality rates of calves can be as much as 30%.  I mean,  
16 | that's the maximum mortality of calves, but it can be up  
17 | to 30%.  And he talked in his paper that it indicates that  
18 | there's a higher degree of internal recruitment than had  
19 | been suggested by previous, less complete data.  He says  
20 | that calves born into the PCFGs are the major recruitment,  
21 | as opposed to outside recruitment.

22 |       Now I am fairly confident, but again, I can't -- I  
23 | don't have the data to back me up yet.  But I would, I  
24 | would bet lots of money on this, that most of the  
25 | recruitment comes internally, with the exception in the

1 | unusual mortality events when we have a lack of food up in  
2 | Alaska. I mean, whales are going to go where there's  
3 | food. I mean, I've documented that in my thesis. You  
4 | know, you've heard that. They do go where there's food,  
5 | and there has to be a certain density of food. If there's  
6 | not a certain density, a certain kind of food, they're not  
7 | going to go there. So if they don't have enough food up  
8 | in Alaska, you know, like the UME event now, you know, I  
9 | would not be surprised if we don't see a little bit of  
10 | external recruitment going on into the PCFGs now, or maybe  
11 | not. But I truly believe, in a normal year, that most of  
12 | the recruitment is going to be internal recruitment: moms  
13 | and calves. And I have seen and documented this with  
14 | photographic evidence of calves returning in succeeding  
15 | years, and a lot of times to the same place that the moms  
16 | taught them to feed.

17 |         And so that's one point. And also, I mean, there's -  
18 | - I was a little bit -- tad bit frustrated maybe, because  
19 | again, some of the things that were said earlier I feel  
20 | were biased. And again, I try to look at the evidence.  
21 | So as far as matrilineal fidelity, meaning moms, you know,  
22 | keeping -- bringing their calves to a certain area and  
23 | then the calves returning, you know, moms teaching them  
24 | that, and looking at the mitochondrial DNA, there are six  
25 | papers -- and I did not have time to do an extensive

1 search. I'm sure there's more. But there's six papers in  
2 specific that I've read, and four of the six papers said  
3 that there are significant mitochondrial DNA found in the  
4 DNA samples that they collected. Now I feel that we were  
5 led to believe that that is not the case. But many of  
6 these are recent papers. And I know Jim Darling is  
7 working on some of that work now, and some other  
8 researchers. And what I, what I really think we're going  
9 to find once we really analyze this more -- and I'm really  
10 going to jump on the bandwagon with this -- is that we  
11 will find that this is going to be a separate stock, and  
12 that we are going to -- and because it will become a  
13 separate stock, they're going to, you know, be protected.

14       And again, I want everyone to really just be open-  
15 minded about this. Read both sides of it, you know. It's  
16 like, what do these papers say? Just don't, like, well, I  
17 want this side because that helps me. I mean, again, I'm  
18 saying I have six papers; four of the six say yes, they do  
19 have mitochondrial DNA that's unique for those specific  
20 individuals. And that comes -- just so everyone's clear,  
21 mitochondrial DNA only comes through the mother, okay?  
22 There's a little organelle in a cell. You have the  
23 nucleus, and then outside the nucleus, you have these  
24 little organelles. And one of the organelles that's  
25 actually used for energy is called a mitochondrial. And

1 that is passed on only through the mother.

2 Q. Thank you. Clearly you're good at being a  
3 professor and teaching this.

4 A. I've had to teach students that for years.

5 Q. All right, great. So again, you have seen  
6 evidence of internal recruitment, but you haven't seen  
7 evidence, though it may exist, of external recruitment; is  
8 that correct?

9 A. That is correct. I have not, I have not seen  
10 that yet. But I have -- I still have a lot of pictures to  
11 analyze, so you know, I may in the future -- I'm going to  
12 keep an open mind with that, but as of right now, no, I  
13 have not.

14 Q. Okay, thank you. Are you familiar with the  
15 timing and location of the proposed hunts? I mean, we are  
16 here, again, because NOAA wanted -- wants to be able to  
17 grant this waiver to allow gray whales to be killed. So  
18 are you familiar with the timing and location of the  
19 proposed hunts and training hunts?

20 A. I am. I am.

21 Q. Do you see pregnant PCFG whales come through?

22 A. I don't know. I can't tell. I know -- the only  
23 way you could possibly tell, and I've seen this -- I think  
24 it was a Perryman that had pictures of this. But if  
25 you're flying and you can make a comparison between the

1 same whale, which is really difficult, you know, you can  
2 get -- looking down on it, you know, from the air, you  
3 know, if it looks fat, you say, oh, it could be pregnant.

4 But when you're on a boat, you know, and you're looking  
5 at this angle of it, absolutely not. No, you can't.

6 Q. So the hunters wouldn't be able to tell if there  
7 were any pregnant gray whales in their area --

8 A. They would not.

9 Q. -- during a hunt? During a practice hunt?

10 A. No.

11 Q. Okay. What about the difference between PCFGs,  
12 ENPs, WNPs?

13 A. You know, it would be difficult. I mean, I'm  
14 sure -- if you really take the time and really study  
15 stuff, you know, I'm sure anyone really -- if you're  
16 really passionate about it, you could learn. But if you  
17 don't take the time and you're not in the ocean a lot, no.

18 Even some of my captains now -- and I have three other  
19 captains. And I'll go, and I know the whales like the  
20 back of my hand. But some of my other captains, you know  
21 -- I'll say, oh, look, it's Comet! And then I hear them  
22 say on the radio, they say, oh, yeah, see, it's Comet.  
23 And I'll say it on the radio, because I never want to say,  
24 you know -- I don't want to say out loud, guys, you know,  
25 that one's Comet. You know, if I just say on the radio,

1 oh, look, it's Comet, and then they'll pick up on that.  
2 And then a lot of times they know what to look for. But  
3 again, some of the whales they can tell, and they've been  
4 out with me, you know, for years too. But again, some of  
5 them, some of them, especially the more subtle ones, it's  
6 difficult.

7 Q. All right, thank you.

8 A. I do want to talk about one more thing with --  
9 getting back to the pregnant females, if I could, please.

10 Q. Sure.

11 A. So I looked at the rules. So there's no more  
12 than 12 unsuccessful strikes, and then no more than two  
13 strikes, and only one gray whale can be landed in the  
14 PCFGs. Now I do know, like -- and I haven't seen this  
15 with our whales, because we just do passive photo ID. We  
16 literally -- most of the trip, we literally just sit in  
17 one spot and see what the whales do. Hopefully they'll  
18 come closer. Sometimes they do; sometimes they don't.  
19 But I do know from some other researchers and also from  
20 some other data that strikes will cause an increase of  
21 cortisol -- and that's our stress hormone -- and may even  
22 lead to myopathy.

23 Now if you don't know what myopathy is, so when you  
24 have a flight or fight response, your muscles are like go,  
25 go, go, go, go, go, go. You know, and -- because you

1 know, everything's going. Well, if you continue to stress  
2 those muscles, what's going to happen is there's myoglobin  
3 that will break down. And if the myoglobin breaks down  
4 too much, it can enter the bloodstream and ultimately  
5 cause kidney failure. And the female could also abort her  
6 calf. So these -- I'm concerned about also the strikes,  
7 because we don't know -- since whales are negatively  
8 buoyant, you know, maybe there's a strike, not a kill, but  
9 a strike. Scared the whale. You know, and then they go  
10 off, and later they die. And a lot of times, we don't  
11 know that. That's that cryptic mortality that I  
12 mentioned.

13       So again, if you, if you think about all the strikes  
14 that they can do -- I mean, again, I'm not including the  
15 Eastern North Pacific. I mean, again, I've already said  
16 my piece about that. You know, if you want to kill a  
17 whale -- again, the same thing would happen with that, but  
18 again, I'm more focused on the PCFGs. But again, this is  
19 a concern of mine, that we're already at that critical  
20 threshold, and some of those strikes could result in a  
21 mortality. And if it's a pregnant female, that's two  
22 mortalities.

23       Q. Thank you. That's very well-stated. So you've  
24 testified, again, that you've spent innumerable hours on  
25 vessels, maybe even watching whales, studying whales,



1 gathering data. Twenty-eight thousand hours, to be  
2 precise. So how -- or approximately. How do the whales  
3 react to the presence of your vessel? You said they  
4 don't, or --

5 A. No, no. There are -- you know, we're just  
6 passive observers. I mean, there's whales -- I won't say  
7 that the whales won't come up to us, because some of my  
8 best pictures are when you have these opportunistic whales  
9 come right up to us. And -- oh, and there's -- that's  
10 Ginger, by the way.

11 Oh, can you go back to that just for one second?  
12 Okay, just leave this one. So anyhow, this is just right  
13 outside -- you can kind of see the bridge. The bridge of  
14 Depoe Bay is the pilings here. And this is one of my  
15 other captains, and one of, one of my -- I have RIBs. I  
16 have four RIBs. And so -- actually, Jimmy Buffett's old  
17 boat. So anyhow, this whale, just out of the blue, he's  
18 getting ready to go in. He spotted a whale close, and our  
19 rules through NMFS is, like, if a whale pops up, stop.  
20 Just stop. And so he stopped. And all of a sudden -- and  
21 I was just lucky to get this picture. All of a sudden,  
22 this whale comes straight up and, like, looks right into  
23 the boat. I mean, I didn't quite get it when it was up at  
24 its peak, but this is a spy hop. And it came way up out  
25 of the water. And I mean, it's like, oh my goodness. It

1 | was quick. It was -- you know, but still, you know, wow.

2 |       I was so excited. I mean, and that happens -- you  
3 | know, we get a number of these whales that will come up to  
4 | you. I had -- I mean, whales have personalities. Blanco,  
5 | he's a whale that would come up to us many times. He's  
6 | white, so that's why I named him Blanco. He'd come up,  
7 | and he'd do a little sneak attack. One time -- he's so  
8 | white. Even in poor visibility water, he shows up like --  
9 | you know, he's white. So anyhow, we're looking for him.  
10 | He was 100 yards away, and we're looking. All of a  
11 | sudden, I see sneaking around the back of the boat, coming  
12 | up on our right side, it's Blanco. And he goes -- and he  
13 | blows, like, over everyone.

14 |       I truly believe they have a sense of humor. I truly  
15 | believe that. Because he knew where I was. I mean, he  
16 | heard the engine. I mean, that's their best sense. They  
17 | can hear things. And he snuck up on us. And I mean, they  
18 | -- these summer residents, these PCFGs, I mean, they're  
19 | accustomed to going up to kayakers, to fishing boats, to  
20 | whale watching boats. I mean, they're used to it.  
21 | They're near shore. I mean, I've had these whales in  
22 | only, in only 6 feet of water, and they're usually 5 feet  
23 | thick.

24 |       And so anyhow -- did it -- is that cut off? It's  
25 | somehow cut off? So anyhow -- that shouldn't be cut off.

1 | But anyhow, you know, they're really close to shore, and  
2 | people can see them. And so what is so cool is that, you  
3 | know, when people get these experiences, I have had -- I  
4 | can't tell you how many people have said, Carrie, you've  
5 | changed my life; this is the best day of my whole life.  
6 | Now when I can give a person what they consider their best  
7 | day of their whole life, what else can you do? I've had  
8 | people cry. I can't tell you how many people I've had  
9 | cry. I've had numerous children over the years, and some  
10 | of them have now become marine biologists. I had one guy  
11 | write a book all about, you know, my experiences with  
12 | Carrie and the gray whales. And he was so sweet, and he  
13 | gave that to me, and now the gentleman's -- you know, he's  
14 | into all that. And then he -- I start as a child. And  
15 | I've taken on interns, and, you know, seeing that love for  
16 | the whales and seeing how -- I mean, I respect these  
17 | whales the same way the Makah respects them, but only in a  
18 | different way.

19 |         And so I mean, you know, people see them from shore.  
20 | I mean, right next to shore. In Depoe Bay, you can stand  
21 | on a rock and you can look into the blowholes. They are  
22 | that close. And so I mean, just amazing whales.

23 |         Q.     Thank you, Carrie. Newell. Ms. Newell.

24 |         MS. PRUETT: So at this point, I would like to  
25 | offer into evidence the photos to which Ms. Newell is

1 referring here. We're going to mark these -- actually, on  
2 it, it says CN-8.

3 THE COURT: CN-8?

4 MS. PRUETT: But we will actually call it 7 and  
5 resubmit those other than on that USB drive. And I think  
6 that's all I have for now. Is there --

7 THE COURT: Nothing further right now?

8 THE WITNESS: I have -- can I just say a couple  
9 last comments?

10 MS. PRUETT: Thank you, Your Honor.

11 THE COURT: What do you want?

12 THE WITNESS: Just, I have two last things. So  
13 one thing, I would like to change the record on one thing  
14 that was stated. I had stated in my declaration -- and  
15 I'm going to read specifically what I put in this  
16 declaration. It was 23. And I said --

17 MS. PRUETT: Page 23?

18 THE WITNESS: No, it's Bullet 23. It says, "In  
19 2019, Ginger returned on Memorial Day to the regular site.  
20 However, her behavior dramatically changed after a  
21 research vessel began following her to collect fecal  
22 samples. Unlike whale watching vessels that generally  
23 maintain a passive observation distance from the whales,  
24 the research vessel was following closely behind Ginger,  
25 causing her dive patterns to change. She swam faster,

1 | expending more critical energy, and stayed down longer.

2 | Now up to 8 minutes, when normally it's 3½."

3 |           So it was a gentleman that was doing just some  
4 | off -- just this summer doing some stuff with some  
5 | students. And I want, I want the record to be clear that,  
6 | when Jon Scordino said that he called Leigh Torres and  
7 | asked her -- you know, said that I had said that, you  
8 | know, that was occurring, that was not directed at Leigh  
9 | Torres. Now he said he contacted her, and Leigh does  
10 | amazing work, and I don't want to harm that collaboration.

11 | And I just want to make sure on the record that it was  
12 | never mentioned that it was Leigh Torres. And that is --  
13 | I just want to have the record clear, if you could,  
14 | please.

15 |           MS. PRUETT: So it was not Leigh Torres.

16 |           THE WITNESS: No.

17 |           MS. PRUETT: Okay.

18 |           THE WITNESS: And then the last thing is I want  
19 | to -- once again, in closing, I just want to say I love  
20 | all you guys. Love the Makah. Respect you. Having been  
21 | able to be on the reservation for a long time. My book  
22 | was actually sold at the cultural center. I had an  
23 | opportunity to actually teach some of the children about  
24 | these resident whales, these summer residents. And I'd  
25 | just like to be able to have you understand that I want to

1 | make the best for all of us. I mean, whales can -- I  
2 | mean, they're also a carbon sink. I mean, you know, you  
3 | take 33 tons of carbon out when a whale eats. And you  
4 | know, they're worth a couple million dollars. And so  
5 | let's think of these whales also in the light of a, you  
6 | know, living species and respect them.

7 |           But again, I've already given you my compromise,  
8 | and I appreciate you guys listening to me. And thank you  
9 | for everything.

10 |           MS. PRUETT: Thank you, Ms. Newell. Thank you,  
11 | Your Honor, for your indulgence.

12 |           THE COURT: All right.

13 |           MS. IMAKI: Would it be okay to request a short  
14 | break?

15 |           THE COURT: You may take a short -- yes. Why  
16 | don't we -- sure. Ten minutes enough?

17 |           MS. IMAKI: Yes.

18 |           THE COURT: Okay, it'll be a 10-minute break.  
19 | We're in recess.

20 | (Off the record from 3:27 p.m. to 3:39 p.m.)

21 |           THE COURT: All right, we're back on the record.

22 |           MS. IMAKI: Thank you, Your Honor.

23 |                           **CROSS-EXAMINATION**

24 |           BY MS. IMAKI:

25 |           Q. Good afternoon, Ms. Newell. My name is Caitlin

1 Imaki. I represent NOAA Fisheries in this matter. I have  
2 some questions for you about your declaration and some of  
3 the testimony that you gave earlier this afternoon.

4 A. Okay, Caitlin.

5 Q. If there's any reason -- is there any reason you  
6 would not be able to fully answer my questions today?

7 A. Not as far as I know. I don't know what your  
8 questions are yet.

9 Q. Okay. You feel, you feel okay, though?

10 A. Yeah. Yeah, I mean, I will do my best.

11 Q. Sounds good.

12 A. That's all I can say. I'll do my best.

13 Q. Okay. I'll try to speak clearly, but if you  
14 don't understand my question for any reason, please go  
15 ahead and ask me to rephrase or repeat it. Ms. Newell,  
16 what was your goal in preparing testimony for this case?

17 A. My goal? When I, when I was preparing it, I  
18 wanted to get across a couple points. First of all, that  
19 I have extensive research doing the PCFGs, and that I  
20 don't simply -- I just don't simply photograph them. I  
21 use many types of parameters to get at as many aspects of  
22 the whale and its habitat as I can. And then also, as  
23 you've seen in my declaration, I -- ever since I had an  
24 opportunity to go and live amongst the Makah for -- and it  
25 would only be, like, a couple days, a couple, you know,

1 weeks at a time. I knew what the -- all the controversies  
2 that occurred in 1999. I mean, I was not involved in  
3 that, but I did watch it, you know, on TV. And in the  
4 back of my mind, you know, for years, I thought, you know,  
5 if it would ever work that, you know, I could offer some  
6 type of a compromise that hopefully both parties would go  
7 for -- I mean, and I swear, I thought of that for years.  
8 And those are my two main things that I tried to bring out  
9 in my declaration.

10 Q. Okay, so you personally have had a longstanding  
11 interest in this matter.

12 A. Absolutely.

13 Q. Thank you. And when did Sea Shepherd retain you  
14 to testify in this case?

15 A. They contacted me -- I think it was middle of  
16 June. And then -- and I was so busy. Summers are so  
17 busy, and we didn't really have long conversations. The  
18 only really long conversation we had was just shortly  
19 before I did the, did the declaration because I was, I was  
20 busy. I didn't even know if I could do anything. I said,  
21 you know, I don't know. I said, I am so busy. Because  
22 when I'm working, I'm tired, you know. I don't have a lot  
23 of time to do anything else.

24 Q. Okay. So in light of how busy you were, how  
25 many hours or how much time did you spend preparing



1 | testimony in this case?

2 |       A.    You know, I did not -- I was up all night one  
3 | night preparing it, and then I got off the ocean that day  
4 | about 8:30. I started writing it. I was up all night. I  
5 | worked at 8:00 in the morning. I did a little more after  
6 | work that day. And I mean, and that's it. I mean, I  
7 | didn't, I didn't have time to do extensive research on it.

8 |    As you've seen, I hardly have any references, actually,  
9 | in my declaration because I didn't have time. I didn't  
10 | have time to dig up all the stuff I really should have dug  
11 | up and looked at beforehand. I just did what I knew off  
12 | the top of my head.

13 |       Q.    Okay. Thank you. So it sounds like -- did you  
14 | write the first draft of your testimony, then?

15 |       A.    I did. I wrote all of it.

16 |       Q.    Okay. Did anyone edit your testimony in any  
17 | way?

18 |       A.    No. I did it all. I did ask for some  
19 | clarifications, but I mean, it's just like, I didn't  
20 | understand the take. And so I did, I did ask for  
21 | clarifications on the take. You know, what did that  
22 | involve? Because I -- to tell you the truth, I didn't  
23 | even know this was happening. You know, because I don't  
24 | even listen to the news in the summer. I mean, I don't  
25 | know what's going on in the world. I mean, I work. I

1 work, eat, sleep, you know, and that's it. But I did, I  
2 did ask for clarification on that because I didn't know.

3 Q. So is it safe to say that you did not have a  
4 chance to review the proposed regulations and all the  
5 management metrics that are included within them?

6 A. I did not.

7 Q. Okay, thank you. Ms. Newell, I understand from  
8 your declaration and from testifying earlier today that  
9 you've been photographing and studying gray whales since  
10 about 1992; is that correct?

11 A. That is correct.

12 Q. And you operate a whale watching business and  
13 serve as a naturalist on those trips, correct?

14 A. That is correct.

15 Q. And how long have you been serving as a  
16 naturalist on those trips?

17 A. Well, I'm the captain too. So I -- well, ever  
18 since I've been doing my business. I started my business  
19 in 2005.

20 Q. Okay. Was that the 14 years ago?

21 A. Yes.

22 Q. Does that sound correct?

23 A. Yes.

24 Q. Okay.

25 A. I had to quick do the math in my head, so --

1 Q. You mentioned in your declaration that you  
2 typically take three to seven trips per day from April to  
3 October.

4 A. Yes.

5 Q. So that's 7 months out of the year; is that  
6 correct?

7 A. Yes. And then also, as you can read in my  
8 declaration too, opportunistically in the winter too. So  
9 I mean, as all of you know, you know, it gets nasty. So  
10 it's more hit and miss. And I also go to Baja for a  
11 couple weeks in February.

12 Q. Okay. So when you said the winter, the  
13 opportunistic trips, were those the two to three trips per  
14 day from December to March --

15 A. Yeah.

16 Q. -- that you mentioned in your declaration?

17 A. If I can get out on the ocean, yeah.

18 Q. Okay. So if we can go back to the summertime  
19 trips, if you average -- you said three to seven, but  
20 let's just say four trips a day for 5 days a week for 30  
21 weeks --

22 A. I do every day.

23 Q. Okay. So you mean 7 days a week?

24 A. Seven days a week.

25 Q. Okay, well, I only calculated five. I don't

1 | have to do math on the fly, so --

2 |       A.    Okay.

3 |       Q.    So if we do four trips times 5 days, it's thirty  
4 | weeks. Just as a conservative number. That's 600 trips;  
5 | does that sound right, from April to October?

6 |       A.    I'd have to look. I mean, I'd have to look at  
7 | my actual data that I have. But yeah, let's just say  
8 | that's a rough estimate.

9 |       Q.    Okay. And then for the winter months, if it's  
10 | two trips a day -- you said two to three for -- I  
11 | calculated 5 days a week for 16 weeks. So 4 months,  
12 | that's another 160 trips. And how about in November? Do  
13 | you take trips in November?

14 |       A.    I do, if there's whales. I've been taking quite  
15 | a few trips this November. Like I said, I just got off  
16 | the ocean about 3 days ago. So I'm not taking it now, of  
17 | course, so --

18 |       Q.    Right. All right. So adding that up, just  
19 | general estimation, 700 to 800 trips a year, just by your  
20 | whale watching business; does that sound about right?

21 |       A.    Yeah, sure.

22 |       Q.    Okay. And in fact, your -- Ms. Pruettt earlier  
23 | today did some other calculations and said possibly 28,000  
24 | hours out on the water interacting with the creatures out  
25 | there.

1           A.    Because I also, I also run out and do transects  
2 a lot of times before a trip or after a trip.  Because I  
3 want to know -- like, a lot of times when I'm doing the  
4 actual whale watching, I -- you know, if there's a good  
5 whale, we just sit and watch that whale a good chunk of  
6 the time.  But if I really want to see how many whales are  
7 in the area, you know, I want to do a transect.  So I want  
8 to be able to go from, say, what's called Government Point  
9 to Cape Foulweather, and then see the total amount of  
10 whales that I would encounter during that time.  And so,  
11 and so that would be, you know, either before or after my  
12 trips.

13           Q.    Okay, and those -- when you're doing those  
14 transects, you're out looking for whales, typically?

15           A.    Yes.  And scuba diving.  I mean, and collecting  
16 the mysid shrimp.  I have a plankton net.  Sometimes I  
17 collect the food on the whale watching trips themselves.  
18 But what I've found is that, when I have to collect the  
19 mysids, they're right above the water and I got to sit  
20 still and the boat rocks a little bit, and people could  
21 get seasick.  Not usually, but sometimes.  And then  
22 they're throwing up, and then it's like, it's all a bad  
23 thing.  So again, a lot of times to do the mysid shrimp  
24 sampling, that, again, is a different time than my whale  
25 watching.  Same with scuba diving.

1 Q. Okay. So there may be additional times that  
2 you're out there on the water.

3 A. Yes. Yes.

4 Q. Okay. You talked today about how you would  
5 often take photos of whales, either during your whale  
6 watching trips or perhaps during these other trips that  
7 you've been talking about; is that correct?

8 A. Absolutely.

9 Q. And oftentimes, I would assume these photos can  
10 be used to identify the whales; is that also correct?

11 A. Yes. Yes.

12 Q. And then sometimes, you will submit these photos  
13 to the Cascadia Research Collective.

14 A. Yes.

15 Q. Is that correct? How often are you able to get  
16 a photo of sufficient quality that you can make a positive  
17 identification?

18 A. Actually quite often. I've done photo ID long  
19 enough and I know the behaviors of the whale, the whale  
20 enough that -- I mean, people are just blown away that --  
21 you know, it's a rough ocean. I'm driving the boat and  
22 taking pictures. And then I get this great picture of  
23 Yogi. That happened just this last week. And then I give  
24 -- a lot of times, I give my whale watching people that  
25 specific picture, my very best picture from the trip. I

1 | give them that, and then people are like, oh, I got Yogi.  
2 | You know, because a lot of times, they just have their  
3 | cell phones or something, and so they don't get a good  
4 | picture. So I'm multitasking a lot. I'll put it that  
5 | way.

6 | Q. Sounds like a hard job.

7 | A. A fun job.

8 | Q. Good.

9 | A. Yes.

10 | Q. So based on my review of the Cascadia report, in  
11 | past years, you've submitted as many as 190 photos per  
12 | year; does that sound correct?

13 | A. I have submitted more than that. I think those  
14 | are probably the only ones they actually use. Because I  
15 | would, I would give them my external hard drives, and I  
16 | have thousands of pictures on the hard drive. And so you  
17 | know, maybe those are the only ones that they specifically  
18 | picked out as pictures good enough to use.

19 | Q. Okay, so --

20 | A. Because I mean, each of my hard drives hold  
21 | thousands of pictures, and I, and I would -- and I  
22 | remember last time I brought them up there, I -- there  
23 | were thousands of pictures on there. And I don't know  
24 | what Alie took off of it, so --

25 | Q. So you submit many more than just 190 per year.

1 A. Yes.

2 Q. Okay. How close do you need to get to a whale  
3 to get a good quality photo in order to ID it?

4 A. You know, I have a 300-millimeter lens with a  
5 really good resolution. I mean, if, you know, I set up on  
6 a whale at 100 yards, if it's not a rough ocean and if  
7 it's -- you know, say it's, say it's only a 4- to 5-foot  
8 swell, which is pretty good. So even at 100 yards with my  
9 300-millimeter lens with the high resolution I have, I can  
10 get a good picture. Now as I mentioned earlier, you know,  
11 there's times when those whales come right at us. I mean,  
12 and again, what the rules say is, of course, you can't  
13 move. I mean, you just -- you cannot even have that motor  
14 making any type of movement. You just got to stay there.  
15 And a number of times, these whales, I mean, they come  
16 close. And so -- and then at that point, I do get good  
17 pictures, real good pictures. And so --

18 Q. So -- sorry.

19 A. No, I'm done. Thank you.

20 Q. So at the 100 yards, is it difficult to get a  
21 picture farther than 100 yards, if the whale is farther  
22 than 100 yards from your boat?

23 A. It's not going to be as good of a quality  
24 picture. And if it's, if it's a whale that I'm familiar  
25 with and it's a very distinctive whale, and say it's 250



1 yards away, I've got a picture. Not a really good  
2 picture, but I can get a picture probably enough to tell  
3 at least who it is. Now it's not one I would submit to  
4 John as far as, you know, wow, yeah, look at this great  
5 picture. But it's one that I can at least document, you  
6 know, who that whale was that day. And that, and that's  
7 one of my main goals, is who's out there and where are  
8 they at. And then, and then I'm always trying to get, you  
9 know, like I said, fishfinder pictures, so --

10 Q. Okay. In terms of the closer-up photos, is it  
11 typically that you are able to get close-up photos? Do  
12 the whales often come towards your boat?

13 A. A fair amount, yes.

14 Q. Okay. And you did show us some pictures today -  
15 -

16 A. Right.

17 Q. -- from your guidebook, I believe. One of them  
18 is on page 52. I believe that was a photo of Scarback.  
19 And in that instance, the whale was right next to the  
20 boat; is that correct?

21 A. Yes. I was going to mention that. So on that  
22 specific day, that's where she was spy hopping right next  
23 to the boat. Now we were just sitting offshore. I  
24 remember that day, because that was the best day I've ever  
25 had with Scarback. And she was off in the distance. And

1 | we saw her, and we stopped. And then all of a sudden, she  
2 | turned and she came right at us. And she spy hopped.  
3 | First, there's two boats. Two Zodiacs out there. First,  
4 | next to my smaller Zodiac, and then she came up to me.  
5 | And she was just being very friendly.

6 |       I mean, I've had -- I tell fishermen they can't do  
7 | this, but sometimes they still do it. But some of the  
8 | fishermen have had Scarback do those same behaviors, and  
9 | they've taken a brush and they've, you know, brushed her  
10 | and stuff. And I said, you can't do that; that's against  
11 | the law. And so I mean, my people -- when she was that  
12 | close, you know, I -- engines were off. I said, don't  
13 | touch her, don't touch her. You know, just let her do her  
14 | thing; just don't touch her. Because it was an amazing  
15 | experience. I mean, she was just all over both the boats,  
16 | I mean, playing with us. And it was my best day ever with  
17 | her.

18 |       Q.    I bet your clients like it when the whales get  
19 | that close to the --

20 |       A.    Oh, yeah. They were, they were crying. A  
21 | couple, a couple of them were crying on that trip.

22 |       Q.    You showed us another photo. I think it was --  
23 | I think you said Blanco. You were talking about her,  
24 | about the Jimmy Buffett boat. Do you recall that  
25 | particular part of your testimony --

1           A.    Yeah.

2           Q.    -- you gave today?  That was another instance  
3 where the whale had come right up to the boat; is that  
4 correct?

5           A.    That is correct.  You can't make them do a spy  
6 hop.  I mean, you cannot make them -- say, come here,  
7 Scarback; I want you to spy hop by my boat.  I mean, that  
8 is on their terms, so --

9           Q.    Would it be fair to say, though, that it's, you  
10 know, one of the objectives of whale watching, though, to  
11 go out there and try to get, you know, great interactions  
12 with the animals, and hopefully they come close to you?

13          A.    Of course.  I mean, if -- I mean, it's -- I love  
14 to be able to share that with people.  But like I tell the  
15 people, I tell them every single trip, it's like, we got  
16 to give them their distance; we need to leave it up to  
17 them.  We cannot chase them.  We need to stop and give  
18 them the room.  And if they want to come up to us, they  
19 will.  If they don't, they won't.  And it's totally on  
20 their terms.

21          Q.    Earlier today, you mentioned that sometimes you  
22 were, quote, "on a whale for half an hour" or so.  What  
23 did you mean by being "on a whale?"

24          A.    I mean in a certain locality.  Not literally on  
25 it.

1 Q. I figured it wasn't on top.

2 A. Yeah. No, no.

3 Q. That's why I'm asking.

4 A. Yeah, I set up 100 yards near a whale -- where a  
5 whale was feeding, so --

6 Q. So staying in its vicinity?

7 A. Yes, staying -- that's a better way to term it.  
8 I'm sorry. I should have said it that way. That's good  
9 terminology.

10 Q. Do you know -- let me ask you this. So you  
11 mentioned you've been, I think we clarified, doing whale  
12 watching for 14 years, correct?

13 A. 2005. Yeah. Yeah. Yeah.

14 Q. And there are three other whale watching  
15 businesses just in Depoe Bay; is that right?

16 A. That is correct.

17 Q. And do they engage in the same level of activity  
18 that you do?

19 A. No. Two of the companies are fishing boats. So  
20 a lot of times what they do is they'll fish in the morning  
21 and then they'll do whale watching in the afternoon to  
22 kind of supplement their income. And so they'll do two,  
23 usually only two trips a day. Sometimes up to three.  
24 There's another Zodiac company, and he does not -- you  
25 know, I saw him -- like, he's been out of the water now

1 | for a couple months, but he's -- maybe the most I've seen  
2 | him, maybe he's done maybe four trips in a day?

3 | Q. So both fishing and whale watching activity by  
4 | some of these boats, correct?

5 | A. Yes.

6 | Q. Okay. So it seems safe to say that these whales  
7 | encounter at least some level of human-caused disturbance  
8 | from whale watching operations or fishing boats multiple  
9 | times a day, day after day, and have been around this type  
10 | of activity for years; is that correct?

11 | A. Yes.

12 | Q. And you describe in your testimony that the  
13 | whales do continue to Depoe Bay year after year and use  
14 | that area; is that correct?

15 | A. That is correct.

16 | Q. And I believe you go on to say in your testimony  
17 | that there are numerous other whale watching companies  
18 | along the Oregon coast. Do you know approximately how  
19 | many?

20 | A. There's no more north of Depoe Bay. There's --  
21 | let's see. In Newport, I think only two: Discovery and  
22 | Tradewinds. And then further south, Coos Bay sometimes  
23 | has a fishing charter that once in a while goes out.  
24 | Further south, there -- it's really hit and miss. Once in  
25 | a great while, the fishing boats will take people out. But

1 as far as actual whale watching companies, from my  
2 knowledge, Newport and Depoe Bay are the only two that  
3 have good whale watching companies. And there's three  
4 spots along the Oregon coast where the whales are  
5 prevalent really in large numbers. And one place that  
6 doesn't have many -- I don't know. Occasionally they  
7 might go out on a whale watching trip. There's Port  
8 Orford. So Port Orford, Newport, Depoe Bay. Those are  
9 the three places where we have the most abundance of the  
10 PCFGs.

11 Q. Okay. And how about in Washington state? Are  
12 you aware of any whale watching companies in Washington  
13 state that go out and show the passengers gray whales?

14 A. Well, the only ones I know are the ones that --  
15 I mean, the ones that target the orcas, you know, when  
16 they're going into Haro Strait and stuff. But as far as  
17 any along the outer coast -- and I think even Jonathan  
18 said -- I believe from -- I wrote lots of notes, and I  
19 believe there's none along the outer coast. Now I do know  
20 there's some that, like I said, from Port Angeles, I  
21 think, and maybe Port Townsend, I think they head out of  
22 there to go see the -- hopefully the orcas. And you know,  
23 once in a while you may encounter a gray whale in the Haro  
24 Strait. Not real often. But I haven't been on those  
25 whale watching trips, so I can't say.

1 Q. Okay, so maybe not sure about the extent of  
2 whale watching up there.

3 A. Right, right. I know, like, Friday Harbor has a  
4 lot of whale watching trips. But again, that's more for  
5 the orcas.

6 Q. Okay. And then you mentioned there are fishing  
7 vessels, and clearly there are many fishing ports along  
8 the west coast of Washington and Oregon, correct?

9 A. Yes.

10 Q. And despite all this --

11 THE COURT: Can I just -- sorry. When you're  
12 saying "a fishing vessel," you're talking about a charter  
13 fishing vessel?

14 THE WITNESS: Yes. Yes.

15 THE COURT: About 40 to 60 feet?

16 THE WITNESS: Yes. Yeah. You know your fishing  
17 boats.

18 THE COURT: Yeah, okay.

19 BY MS. IMAKI:

20 Q. And despite all this activity, all these  
21 vessels, it's true that the whales continue to feed off  
22 the coast of Oregon and even Washington all summer,  
23 correct?

24 A. That is correct.

25 Q. I wanted to turn now and ask you a few questions

1 | about a couple of the specific whales you mentioned in  
2 | your testimony. At paragraph 22 and 23, you talk about  
3 | Ginger, and you talked about this a little bit earlier  
4 | today, but I have a few more questions. You describe her  
5 | changing her behavior and leaving the area after being  
6 | followed by a research vessel. Do you recall that part of  
7 | your testimony?

8 |       A.    Yes, I do.

9 |       Q.    Okay. So for the sake of discussion, let's  
10 | assume there was no change in food distribution or  
11 | anything else that would have caused her to leave the  
12 | area. You stated that she relocated to Lincoln City 8  
13 | miles away after being followed by the vessel; is that  
14 | correct?

15 |       A.    Yes.

16 |       Q.    And what was she doing when you found her at  
17 | this new location?

18 |       A.    So she was being, she was being closely  
19 | followed. And Ginger is a whale that -- and I'm not sure  
20 | if it's a male or female yet, but it has a lot of orange  
21 | whale lice, hence the name Ginger. And Ginger has been a  
22 | very predictable whale for 5 years. I mean --

23 |       Q.    I just wanted to ask you what she was doing when  
24 | she was found at the new location.

25 |       A.    Once she went to the new location, she was



1 feeding.

2 Q. Okay. So wouldn't you agree that, assuming we  
3 adopt your theory for her movement, this shows her ability  
4 to move away from the disturbance?

5 A. Yeah, definitely.

6 Q. Okay. In the next paragraph, paragraph 24, you  
7 talk about two other experiences. And the first is when  
8 you worked with Jonathan Scordino to obtain DNA samples.  
9 Could you explain how you did this?

10 A. Jonathan and I -- so we met in Depoe Bay. We  
11 went out on his RIB. And I mean, he was, he was a very  
12 good teacher, teaching me. He wanted to get some biopsy  
13 samples. And so we went out, and we went and got some,  
14 got some biopsy shots. And the whales -- I mean, the  
15 whales don't like getting hit. I mean, they, like, throw  
16 their tail up and then -- I mean, it's, like, not just  
17 fluking, but they would, like -- you know, they'd startle  
18 and then -- and I had to teach the next day. And so a lot  
19 of the whales did leave. But as you heard from Jonathan -  
20 - and I wasn't clear if he did or did not get out that  
21 day, because he said, I think, there was a storm that came  
22 in. Because I -- the next day, I had to teach. But he did  
23 say he saw whales in the area, and I'm not sure if they  
24 were the same whales. But I did see -- they did not like  
25 getting hit. And I worked with another researcher that I

1 had forgotten about down in California, and it was the  
2 same thing. The whales did not like it.

3 Q. Okay, and that second experience is not part of  
4 your direct testimony.

5 A. No. And I do -- may I say one more thing?

6 Q. Sure.

7 A. So I was really glad we used Jonathan's RIB,  
8 because I talked to another researcher, and he said that  
9 when they tag whales, he said he'll never take his boat,  
10 because he said the whales remember the boat that tagged  
11 them. And they tend to be skittish next to that boat.  
12 And that was one of the reasons he said, you know, I'll  
13 never do that. So I was glad I wouldn't have used my  
14 boat, just for the off chance that, if they did have that  
15 memory, which they could have that, then it's like, I'm  
16 not going to go up to that boat; that boat hurt me. And  
17 so I was glad we used his boat.

18 Q. Okay. But you didn't document that in your  
19 declaration you made.

20 A. I did not.

21 Q. Okay. So in terms of how the samples were  
22 taken, was it correct to say that the whales were hit with  
23 crossbow arrows?

24 A. Yes.

25 Q. Okay. And I assume that had to penetrate the

1 skin of the whale to get a sample.

2 A. Yeah, it's about the size of your little pinky  
3 fingernail. Like, eraser-sized little tiny slug. Unlike  
4 satellite tags, which are very intrusive.

5 Q. Do you recall what month this was?

6 A. I believe it was October. Maybe October 10.  
7 Something like that.

8 Q. Toward the very end of the feeding season.

9 A. Yes.

10 Q. You state in your declaration that the whales,  
11 quote, "never returned." Did you mean for the day or for  
12 a month or for the season or ever?

13 A. I never saw the whales -- the rest of that  
14 season, I did not see those specific whales. I would have  
15 to go back to my data to see if they did come back the  
16 following season. And I'm sorry. I just, I don't have  
17 that with me.

18 Q. Okay, so --

19 A. But that I would have to come back, you know,  
20 and look at.

21 Q. So when you wrote that in your declaration, was  
22 that from memory that you wrote that, then?

23 A. Yes.

24 Q. Okay. And so it's possible that those whales  
25 could have come back the following season.

1           A.    It's possible, yes.

2           Q.    And is it true that some whales are only seen  
3 one summer in the PCFG and then never return?  I believe  
4 those are termed transients.

5           A.    Yes.

6           Q.    And it's also true that some whales utilize the  
7 PCFG for a number of years and then are never seen again  
8 in that area.  Is that also true?

9           A.    I would say so.  You know, we don't know -- I  
10 mean, again, my hope in the future now that I'm not  
11 teaching every night like I was, my hope is that I can  
12 collaborate.  I was telling Dr. Weller that, you know, I'd  
13 love to collaborate with all these other places more,  
14 because I mean, teaching fulltime and then being on the  
15 ocean as much as I did, I didn't have a lot of time to  
16 collaborate as much as I wanted to.  So I would love to be  
17 able to answer that question in more detail, collaborate  
18 with the researchers in northern California, you know,  
19 southern Oregon.  You know, do more with John.  You know,  
20 do more with Jonathan.  You know, Jim Darling.  You know,  
21 all these researchers.

22           I mean, another goal of mine, which I hope sometime  
23 to attain, is to bring all these researchers together, all  
24 these gray whale researchers, so we can all look at  
25 everyone's data and come together and really see, you

1 know, what are the patterns. You know, I haven't seen  
2 this whale for 5 years in Depoe Bay. Did it die? Is it  
3 just gone? Or did it decide, I have a new preference that  
4 -- a new locality that I want to go to? So I can't say.  
5 I don't know if they died. I would need to really get  
6 more data on that.

7 Q. Okay, so you're not -- it sounds like you're  
8 just, you're not familiar with the data, if it exists, as  
9 to whether some whales do leave and then are not seen  
10 again; is that correct?

11 A. Right. Some of them, like when John  
12 Calambokidis and I, you know, we'll talk, it's like, oh,  
13 no, I have this whale, this whale. But others, you know,  
14 it's like, I haven't seen that whale either. So it might  
15 have just died.

16 Q. Okay. Thank you. So moving onto that second  
17 event, you talk about where another researcher came to  
18 Depoe Bay to satellite tag some of the local whales. Do  
19 you recall that part of your testimony?

20 A. I do.

21 Q. I believe it's the same paragraph. Do you  
22 recall what month that was?

23 A. I believe it was late summer again, because I  
24 remember I was only there -- my other captains were there  
25 the full time. I remember there was one of the days that

1 | I wasn't there. And so it had to have been, had to have  
2 | been in October when I would have been teaching. And so I  
3 | did see part of that. But what happens with the fishermen  
4 | and a lot of other people in Depoe Bay, it's -- I mean, as  
5 | a woman captain, it's been difficult to kind of get in  
6 | with the old man's club, if you know what I mean.

7 | Q. I do.

8 | A. I mean, so -- and so I've had to probably prove  
9 | myself many, many times. Like for example, telling the  
10 | fishing boats where the whales are. I mean, they don't  
11 | want to know the names. I mean, the other boats, you  
12 | know, when I first was starting to do it, I'd tell them  
13 | the names. It's like, hey, you know, it's Scarback; you  
14 | know, it's Milky Way. It's like, I don't want to know the  
15 | names. I don't want to know anything; I just want to know  
16 | where the whale is. And so then I'd just tell them the  
17 | whale.

18 | But when the whales were being satellite tagged, they  
19 | were leaving the area. And so I'm getting calls at the  
20 | school. It's like, Carrie, you know, we have a researcher  
21 | out here, and you know, we went in to get new people and  
22 | he's tagging these whales, and now they're gone. You  
23 | know, and so everyone's calling me. You know, and then I  
24 | had to -- I called the researcher and I said, you know --  
25 | I had to kind of smooth things over. And it's like, I

1 know you need to get your data, but at the same time, if  
2 you wouldn't do it right smack in Depoe Bay where we're  
3 trying to do the whale watching, because the whales are  
4 leaving and I'm getting all these calls from all the  
5 other, you know, boats. So yeah. And I, and I also was  
6 there sometimes too and saw the whales, like, just leave  
7 the area.

8 Q. So it sounds like you weren't on the boats when  
9 they were doing the satellite tagging; is that correct?

10 A. One day I wasn't. Other days I was.

11 Q. Okay. But you weren't there each day.

12 A. No. But they -- he didn't do it, he didn't do  
13 it every day. He had specified times he did it.

14 Q. Okay. And you said that this was done in  
15 October, so that was again the end of the feeding season  
16 and beginning of the migration season, correct?

17 A. That's correct.

18 Q. And you say in your declaration that most of the  
19 whales departed the area; is that right?

20 A. That is correct.

21 Q. So does that mean that some of the whales  
22 remained in the area?

23 A. There were a few whales. The whales that  
24 weren't tagged. I'd have to go back and look exactly who  
25 they were. But the ones that were not tagged, I still had

1 a few that were hanging around.

2 Q. So you mentioned that some of the whales were  
3 tagged. Do you know how many they were successful in  
4 tagging in this operation?

5 A. I can give you a guesstimate. Again, I don't  
6 have that data in front of me. But see, McFlurry -- I'd  
7 say at least seven.

8 Q. Seven were tagged?

9 A. Maybe more. But I mean, those are ones that --  
10 the thing is about satellite tag scars, is they leave a  
11 nasty wound. And so -- and I have seen, I have seen them  
12 years later come back. And I have seen a huge divot where  
13 the tag was. And so you can, you can tell.

14 Q. Okay, so it sounds like some of these whales  
15 that you know were tagged in this operation came back in  
16 subsequent years.

17 A. Yes.

18 Q. Okay. And for the other whales, do you know  
19 where each of those whales went after it was tagged? Have  
20 you reviewed that data?

21 A. You know, I haven't. I mean, I know, I know the  
22 researcher probably -- I could get it from him, but I --  
23 again, I haven't taken the time.

24 Q. Okay. And so just for the record, you did not  
25 review that data or reach out to that researcher before



1 | you --

2 |       A.    I did not.

3 |       Q.    -- testified about that incident, correct?

4 |       A.    That is true.

5 |       Q.    Okay.  So is it safe to say, then, that you are  
6 | not aware of how long the whales spent avoiding that  
7 | immediate disturbance from the satellite tagging?

8 |       A.    Rephrase that question.

9 |       Q.    Yeah, because -- do you know how long the whales  
10 | spent avoiding that disturbance?  How far away they swam,  
11 | if that's in fact what they did?

12 |       A.    Well, I know -- so we stayed, we stayed with the  
13 | couple whales that were not tagged and that just stayed in  
14 | the area.  So the other whales, couple headed north, and  
15 | then the rest headed south.  And I did not want to harass  
16 | them anymore.  I figured they were already stressed  
17 | enough.  Again, you could, you could go to the data, and I  
18 | know, you know, once they're tagged, you can -- it's much  
19 | better.

20 |       I mean, there's pros and cons with tagging.  I mean,  
21 | I personally -- I would never do it, because don't want to  
22 | hurt the whale.  Because there is evidence that one of the  
23 | whales that was tagged died because of the tag, and  
24 | there's even recent evidence that the whale that -- I  
25 | think it's the whale that just died, the PCFG that they

1 | just found south of here in Crescent City. I believe that  
2 | was one of -- that was a tagged whale, and that one has  
3 | died. And we can't make the correlation at this point  
4 | that, because it was tagged, it died. But I have seen  
5 | some really nasty, nasty, nasty wounds that have been left  
6 | from satellite tags. And it would not surprise me in the  
7 | least if that did cause the demise of at least a couple of  
8 | the whales. Shamrock, in my book, was a whale that was  
9 | tagged and now is gone.

10 |       Q.    Okay, but you didn't explain any of that or cite  
11 | any of that in your declaration, correct?

12 |       A.    I did not.

13 |       Q.    And there's no -- you haven't attached any  
14 | studies for us to evaluate the veracity of those  
15 | statements, correct?

16 |       A.    I did not.

17 |       Q.    Okay. Let's move on. I'd like to talk a little  
18 | bit about site fidelity, which you talked about in your  
19 | declaration and also earlier today. So you do quote  
20 | Jonathan Scordino's declaration where he states -- this is  
21 | at paragraph 32 of your declaration, that "some gray  
22 | whales are consistently observed in the Makah U&A from  
23 | year to year, but most show little to no fidelity to the  
24 | area within and between feeding seasons." Is that  
25 | correct? Is that a correct quote?

1 A. Okay, where are you exactly?

2 Q. It's on paragraph 32.

3 A. Is it the -- which bullet?

4 MS. IMAKI: Do you have it? Yes, please.

5 Rachel's going to pull it up for us. So it's on page 17.

6 So "some gray whales are consistently observed in the

7 Makah U&A from year to year, but most show little to no

8 fidelity to the area within and between feeding seasons."

9 THE WITNESS: Okay, hold on.

10 MS. PRUETT: Excuse me, Counsel. Are you asking  
11 whether she's agreeing with these statements by Jonathan  
12 Scordino or disagreeing?

13 MS. IMAKI: Well, I'm going to find out. That's  
14 what I'm trying to figure out.

15 MS. PRUETT: Okay, but I thought you just said,  
16 are you -- that you agree with Jonathan?

17 MS. IMAKI: Do you agree this is a correct  
18 quote?

19 MS. PRUETT: Okay. A correct quote, not that  
20 she agrees --

21 MS. IMAKI: Correct recitation of what's on the  
22 paper.

23 MS. PRUETT: I understand.

24 MS. IMAKI: Thanks.

25 THE WITNESS: Yeah, that was my question. So

1 | you just want me to read it and say, is that, is that --

2 |           MS. IMAKI: Yeah, that's where I'd like to first  
3 | direct your attention.

4 |           THE WITNESS: Okay.

5 |           BY MS. IMAKI:

6 |           Q. So I'd like to ask you some follow-up questions  
7 | about your general disagreement, if it is in fact a  
8 | disagreement with this statement. You mentioned earlier  
9 | today, when talking about site fidelity, I believe, that  
10 | you said it depends on each individual whale; is that  
11 | correct?

12 |           A. Yes.

13 |           Q. Okay.

14 |           MS. IMAKI: Could you pull up her Exhibit 2 to  
15 | Ms. Newell's declaration, please?

16 |           BY MS. IMAKI:

17 |           Q. And you reviewed a statement in one of your  
18 | studies, and this is your Exhibit 2 at page 3. I believe  
19 | it was page 3. Maybe it wasn't. Sorry, this is one that  
20 | we looked at during your direct, and it talked about 28  
21 | out of 32 returning. Can you find 28? It was in the  
22 | beginning. Just keep going. There we go. Yeah, so  
23 | Rachel, if you would just mark that.

24 |           So you talked about, of these 33 whales, 28 have  
25 | returned during the last 3 years. And so I'd like to sort

1 of circle back on this. When you talked about site  
2 fidelity earlier today, you mentioned that it could be  
3 they could come back for a matter of weeks or they could  
4 stay for a long time; is that correct? And so is this --

5 A. Yes.

6 Q. -- is this number, then, referring to whales  
7 that came back at least for a day, that you at least --

8 A. At least, at least a couple weeks. At least a  
9 couple weeks.

10 Q. But it doesn't differentiate how long they  
11 stayed.

12 A. No. And if I, if I would do another paper on  
13 site fidelity, just like I did with body condition, I  
14 would make sure that I have a very good definition of, you  
15 know, what exactly do I mean. I know this is a little  
16 vague, but I've learned a lot since then. And again, you  
17 know, every year you learn, and you learn how to present  
18 the data better. And so I would present the data better.

19 Q. Okay, I understand. So when you're using the  
20 word "site fidelity," though, in your declaration, it  
21 could mean a broad range of things, from a few weeks to  
22 many months.

23 A. Yes.

24 Q. Okay. And you also talked today about Ginger,  
25 who -- I believe it was this year. You said she's been in

1 Depoe Bay from March through November; is that correct?

2 A. That was last year.

3 Q. Oh, that was last year. Thank you. And so you  
4 said this was the longest time you'd seen a whale in that  
5 area, correct?

6 A. It's as long as I've ever seen a PCFG. Previous  
7 to that, one time Comet showed up in April. The norm is  
8 that most of the ones that I recognize come the end of  
9 May, usually around Memorial Day. Usually around Memorial  
10 Day, I can say -- I can start saying -- like, Ufish.

11 Ufish, he's one that typically comes around Memorial Day.  
12 Rambolina, same thing. So some of these are fairly  
13 predictable not only, not only that they're going to come  
14 back, but the time that they're going to come back. And I  
15 document that with different whales.

16 Q. Okay. But those two whales that you just  
17 mentioned you did not talk about in your testimony  
18 previous to today, correct?

19 A. I did. I did talk about them.

20 Q. You talked about Ufish in your testimony?

21 A. Mm-hm.

22 Q. Would you mind directing me which paragraph  
23 that's in?

24 A. Oh, in this testimony?

25 Q. Yes.

1 A. No.

2 Q. In your declaration.

3 A. No, no, no. I thought you said testimony. I  
4 was thinking my talk.

5 Q. Yes.

6 A. Yeah, sorry.

7 Q. But not in your written declaration, correct?

8 A. No.

9 Q. Either of those two whales.

10 A. No.

11 Q. So sort of setting that groundwork aside, you  
12 say in your declaration that, based on your gray whale  
13 expertise and field experience, that you disagree with the  
14 quoted testimony, which was Mr. Scordino's testimony that  
15 I pulled up on the screen earlier, and that you allege  
16 that he has failed to use the best available science; is  
17 that right?

18 A. Yes.

19 Q. Okay. But you do acknowledge that Mr. Scordino  
20 states that some -- he acknowledges that some gray whales  
21 are consistently observed in the Makah U&A. "Some may  
22 stay for periods of time, but that most show little to no  
23 fidelity to the area." So is it -- do you disagree with  
24 this statement?

25 A. Well, he's kind of vague. "Some" and "most,"

1 | you know, what does that mean? I mean, if -- had I -- if  
2 | I was doing that research, I would give, you know, some  
3 | percentages. I'd say, you know, out of, you know, so many  
4 | whales, I have noticed that this many have stayed around  
5 | and, you know, how long did they stay around. I mean,  
6 | just like -- I think he was talking the other day and  
7 | said, oh, yeah, and you know, Scarback came up here for 2  
8 | months. You know, and it's like, well, cool, you know.  
9 | And so again, when data is kind of vague, it's hard to  
10 | really interpret it the way you need to interpret it.

11 | Q. Okay. But you haven't presented any specific  
12 | data in your declarations, correct?

13 | A. Well, I have my papers in there, and there's a  
14 | lot of specific data in there.

15 | Q. Okay. Well, let's turn to the whales you did  
16 | talk about in your declarations related to site fidelity.  
17 | So you named five that I counted -- Ginger, Comet, Yogi,  
18 | Morisa and Scarback -- in your testimony.

19 | A. Right.

20 | Q. And yesterday we heard, and today it was also  
21 | discussed, that Scarback has a Cascadia Research  
22 | Collective ID number assigned to her --

23 | A. That is correct.

24 | Q. -- which I believe is 204.

25 | A. That is correct.



1 Q. And I heard you today describing your use of  
2 some of the ID numbers when you described how you keep  
3 track of the data; is that correct?

4 A. Yes.

5 Q. Okay. And it sounded like, when you were  
6 speaking a little bit earlier, when you were having  
7 conversations with the fishing vessels, maybe, you used  
8 the ID number as opposed to the names?

9 A. No, no, no, no. I used the names.

10 Q. Okay. That was just the --

11 A. Yeah. I use, I use the names. I mean, I don't  
12 have all those ID numbers memorized by any means. That's  
13 why I gave them a common name. I had to --

14 Q. Easier to remember.

15 A. Yeah. Yeah, something that I see on their body  
16 that's like, boom, boom, boom. You know --

17 Q. Got it.

18 A. -- that's that whale.

19 Q. Okay. But all these whales do have research --  
20 they have ID numbers, correct? If they are labeled within  
21 PCFG?

22 A. All the ones -- rephrase that, please.

23 Q. So the five whales that you mentioned in your  
24 declaration -- Comet, Ginger, Yogi, Morisa and Scarback --  
25 all have Cascadia Research Collective ID numbers; is that

1 correct?

2 A. The only one that I have to check on would be  
3 Yogi.

4 Q. Okay, but you -- do the other four have research  
5 ID numbers?

6 A. Yes.

7 Q. And Yogi may but you're not sure; is that  
8 correct?

9 A. Yeah. Yeah, I have to -- that's a whale that I  
10 have to share with John Calambokidis this year. So I  
11 mean, I've seen that whale numerous times. I don't have  
12 that whale in my book. That's one I'll be adding. And so  
13 I'm meeting with John, and we're going to go over all the  
14 new whales and, you know, give them their number if they  
15 don't have a number. You know, that's something we're  
16 going to work on, and that's this winter.

17 Q. Okay. It sounds like you don't have any of  
18 these numbers memorized, which --

19 A. No, I don't.

20 Q. -- I completely understand. Is there a reason  
21 you didn't include them in your declaration, though?

22 A. As far as -- it's probably, like I said, I just  
23 kind of rushed through this. I just did things from the  
24 top of my head. It's probably -- yeah, it was an  
25 oversight on my part. I mean, I just, I didn't, I didn't

1 | have my -- I was out with my book at the time. And I  
2 | couldn't find my PDF files, and I didn't have a lot of  
3 | time to get the declaration ready. And so I thought,  
4 | well, I know their common names; I'll just put their  
5 | common names down. Had I had more time to prepare, I  
6 | would have, you know, talked to John or, you know, dug  
7 | trying to find my PDFs.

8 |       Q.    Okay. Thank you. So you do state in your  
9 | declaration though, while you do understand that whales  
10 | travel to where their food is located, you've also seen  
11 | many whales that exhibit site preferences; is that  
12 | correct?

13 |       A.    Yes. And John has -- John Calambokidis has  
14 | stated that, and other researchers, that, you know, they  
15 | also see site fidelity. I mean, that is something that  
16 | John has said in a number of his papers.

17 |       Q.    Do you know whether any of the whales that you  
18 | identified in your declaration have been observed outside  
19 | of Depoe Bay?

20 |       A.    Scarback, yeah. We talked about Scarback  
21 | already. And I do know that --

22 |       Q.    So Scarback has been viewed outside of Depoe  
23 | Bay.

24 |       A.    Yes. She was -- 8/17/19 this year, she left  
25 | Depoe Bay, and she headed up to, she headed up to Neah

1 Bay. And I just, I just found that out when Jonathan gave  
2 his talk, because he said, oh, yeah, she was up here for 2  
3 months that year. And I remember the exact date she left,  
4 and so --

5 Q. Do you know whether she's been viewed in any  
6 other location?

7 A. This summer, I saw her. She was at, she was at  
8 Seal Rock. She was at the Yaquina Head Lighthouse and  
9 then she was at Depoe Bay. And she's the one I said that  
10 has regional preferences.

11 Q. While we're on this topic, I think it might make  
12 sense to just take a look at the 2019 Calambokidis et al.  
13 paper. I'll bring a copy up. This is NMFS Exhibit 3-101,  
14 which your -- Ms. Pruett also referred to in your direct  
15 testimony. Do you have -- do you already have a copy of  
16 this paper today?

17 A. Not on me, no.

18 Q. Okay.

19 A. That's an extra one? That's an extra one?

20 Q. Yes.

21 A. Thank you.

22 MS. IMAKI: This is an extra hard copy.

23 THE COURT: Okay, thank you.

24 MS. IMAKI: This is the same paper we've been  
25 discussing that has been distributed electronically to all

1 | the parties.

2 |           So first, just to orient folks, this is Table 3  
3 | from this exhibit. And there are acronyms in some of the  
4 | tables, so I just wanted to show this first. The acronyms  
5 | refer to different areas along the coast. And so you can  
6 | see SCA, Southern California; CCA, Central California;  
7 | Northern California; et cetera. And so you can then go  
8 | down to Table 1, and we look for Scarback's  
9 | identification, which is, again, I believe, 204.

10 |           Yeah. So it's a little bit hard to see, but if  
11 | you scroll across from Number 204, which is the collective  
12 | ID number -- actually, can you minimize it, Rachel, so we  
13 | can read the top part for just a second?

14 |           MS. MORRIS: Sure.

15 |           MS. IMAKI: Not minimize, but --

16 |           MS. MORRIS: Yeah.

17 |           MS. IMAKI: So the top row are years. Probably  
18 | it's better if folks pull it up on their computers, but  
19 | it's years of data and how many sightings, number of  
20 | histories of whales seen in the PCFG in at least one year.

21 |           And then over on the right-hand side are the acronyms  
22 | that we were looking at earlier. And so it's the number  
23 | of sightings of that particular whale in different  
24 | locations. So if you go back to 204, I believe if you  
25 | flip to the right, it starts with number 21, is the total

1 | sightings. I'm starting to get --

2 | MS. MORRIS: Do you want to figure it out?

3 | MS. IMAKI: No, I just want it to move over.

4 | MS. MORRIS: Got you.

5 | MS. IMAKI: So 204 is the number 21, and it's  
6 | seen -- this is very difficult to look at with this scale  
7 | on the screen, but 8 --

8 | THE WITNESS: I don't think --

9 | MS. IMAKI: Is it the wrong table number?

10 | THE WITNESS: Yeah. That's not the Table 1 I'm  
11 | looking at.

12 | MS. MORRIS: There's two Table 1's.

13 | MR. SLONIM: Your Honor, I think the confusion  
14 | is there's a Table 1 in Appendix 1 --

15 | MS. IMAKI: Oh, thank you.

16 | MR. SLONIM: -- which is the one Caitlin is  
17 | referring to.

18 | MS. IMAKI: This is Table 1 in Appendix 1. I  
19 | took this out of order in my notes, so I can't remember  
20 | what page it's on.

21 | MR. SLONIM: It's 55.

22 | MS. IMAKI: Thank you. Page 55. So this is  
23 | 204, which I believe is Scarback. And then if you go  
24 | across, this is 21 total sightings. And then these are  
25 | all the numbers that she's sighted in different locations.

1 | So as you can see, she's sighted actually throughout much  
2 | of the PCFG range.

3 | BY MS. IMAKI:

4 | Q. Is this data surprising to you?

5 | A. I got to make sure I have -- so you're -- hold  
6 | on. No, not really. I told you earlier she has regional  
7 | preferences. And again, she's -- she comes up, she comes  
8 | up into -- she stays a good chunk of the summer around  
9 | Seal Rock, typically, and then in Newport and Depoe Bay,  
10 | and then again heading up to Neah Bay. I mean, we've  
11 | already, we've already documented that. That's what she  
12 | does. I mean, she's -- she, like any whale, as far as I  
13 | know -- and I could be wrong with this. As far as I know,  
14 | she was the first summer resident that we really learned  
15 | about as far as I know. And so she's old. I mean, she's  
16 | at least in her 40s, so she probably is looking for all  
17 | the very best areas.

18 | Q. All right, thank you. Let me skip down a little  
19 | bit. So Ms. Newell, this is a recently published study,  
20 | and so I wouldn't have expected you to have reviewed it  
21 | extensively. But I believe you testified earlier today  
22 | that you're familiar with this series of data that is  
23 | being compiled by John Calambokidis over a number of  
24 | years.

25 | A. That data -- I haven't gone over, like, this

1 | one. I mean, not his newest paper. But yeah, I know John  
2 | does incredible work, so --

3 | Q. Okay. So now I'd like to turn to, actually, the  
4 | Table 1 on page 17 of this study. And this shows  
5 | contributions of sightings with one or more photographs of  
6 | whales per day by different research groups, 1996 through  
7 | 2017. And I believe your name is the third -- listed as  
8 | the third contributor on that list. You see that part of  
9 | the table?

10 | A. I do.

11 | Q. And this is where I found the 190 photographs in  
12 | 2013. Go to the right. It also shows that you haven't  
13 | contributed photos in the last year. Do you know, is that  
14 | an error, or is there a reason you haven't submitted  
15 | photos recently?

16 | A. I haven't had time. I've told John that -- I  
17 | said I have a ton of photos. I wanted to try to get last  
18 | year's photos to him before he did this paper. And I just  
19 | literally did not have time. But I have been in contact  
20 | with him a lot, and I have photos that I'm making, you  
21 | know, giving -- going to give to him. So I just talked to  
22 | him again, and it's like, you know, we're going to fill in  
23 | all these gaps. I said I have lots of gaps we're going to  
24 | fill in --

25 | Q. I understand.



1           A.    -- now that I'm retired from teaching.

2           Q.    I understand.  So next I'd like to look at Table  
3 3 on page 19.  Oh, that's the one we already looked at.  
4 Sorry, Rachel.  It's actually Figure 7 on page 41.  And  
5 Ms. Newell, have you had a chance to review this table or  
6 a similar one in the past?

7           A.    I have not looked at this one, no.

8           THE COURT:  We're reaching 4:45.

9           MS. IMAKI:  Okay.  I'll wrap up.

10          THE COURT:  If there's any questions, why don't  
11 we -- you've going to be -- still have some -- you're  
12 going to be -- you've got a few more questions to ask.

13          MS. IMAKI:  I do.

14          THE COURT:  Why don't we break for the day?  
15 Because you wanted to have a chance to review the other  
16 material, so you can have a more continuous -- continue a  
17 continuous cross-examination in the morning.

18          MS. IMAKI:  Okay.  I would ask Your Honor, for  
19 that new exhibit, we have a very difficult time accessing  
20 that through a PDF because we're not supposed to use --  
21 excuse me.  Not PDF, but the jump drives.  We're not  
22 allowed to insert those into our government computers.

23          THE COURT:  Insert a thumb drive into your  
24 computer.

25          MS. IMAKI:  So if there's another way?

1                   THE COURT: I believe -- can you loan her your  
2 book for the night?

3                   THE WITNESS: You want to go over my book?

4                   MS. IMAKI: Well, that may be sufficient for me,  
5 but I don't know if it would be sufficient for the other  
6 parties.

7                   THE COURT: Oh, for the Makah?

8                   MS. IMAKI: Yeah.

9                   THE COURT: Well, they're fine. They can load  
10 the PDF.

11                  MR. SLOMIN: Your Honor, we can use the jump  
12 drive. I'm assuming the data is already downloaded into  
13 somebody's server someplace, but that's a risk we're -- so  
14 we have, we have access to it.

15                  MS. IMAKI: Okay.

16                  THE COURT: You have access to it, right? The  
17 government computers, we can't touch -- we can't put  
18 anything in them, so --

19                  MS. PRUETT: Your Honor, I have an option. So  
20 when I did receive this document finally from Carrie, she  
21 sent it to me in three parts. And I put it all together  
22 and then tried sending it off to a printer so we can get  
23 everybody a copy. It didn't work that way. I couldn't  
24 get it to them physically. So what I will do is just take  
25 those three parts, label them as the Exhibit Parts A, B

1 and C so you have all three together. I will attach those  
2 to an email, get them to everyone via email, as well as an  
3 exhibit submitted.

4 THE COURT: Okay.

5 MS. PRUETT: Does that work for everyone?

6 THE COURT: I think that should work, I guess.

7 MS. IMAKI: I would just also request --

8 THE COURT: Sure.

9 MS. IMAKI: -- we'll do our best tonight, but we  
10 do have other matters that we still need to work on, and  
11 given the limited time, we'd just reserve our right to ask  
12 for additional time later if needed.

13 THE COURT: Sure. Yes, you can have extra time.  
14 Yes. Don't worry. Not counting -- some of these will  
15 not be counted against the clock. I think we've got  
16 plenty of time to be able to get all the testimony in by  
17 that -- the clock was mostly here to make sure we got out  
18 before, so --

19 MR. SLONIM: Your Honor, I had a question along  
20 those lines. I believe our time allocation is down to  
21 about 40 minutes. We anticipate needing about an hour and  
22 a half for the remaining cross-examination. And given the  
23 -- where we are in terms of time, I was -- just for  
24 planning purposes more --

25 THE COURT: Again, as I understood when the

1 parties came before me for the time management plan, was  
2 to try to find time that would be able to make sure that  
3 everyone got a chance to put their presentations in. And  
4 I think, right now, it does not appear to be a problem for  
5 everyone to get presentations in by Thursday. So the most  
6 -- it's looking to me like tomorrow we have two witnesses  
7 from Sea Shepherd?

8 MR. SOMMERMEYER: Meaning Carrie's cross and  
9 then redirect and then Dr. Villegas?

10 THE COURT: Right. And then we've got -- so  
11 more than the -- so I know that we may have a full day  
12 tomorrow and go into Thursday, but I don't see us going  
13 beyond Thursday. So I don't see the crisis that we would  
14 have. The APA says that a party should have time for --  
15 especially for cross-examination. You've completed your  
16 direct. If we need time for cross, parties are supposed  
17 to, under the APA, be able to present their case when they  
18 may have provided such cross-examination as to allow a  
19 full development of the facts.

20 So I think that's the way we're going to go,  
21 because most of the parties who've got time limitations  
22 are in cross anyway.

23 MR. SOMMERMEYER: Thank you, sir.

24 UNIDENTIFIED SPEAKER: Thank you.

25 THE COURT: All right? So nothing further,

1 | we're in recess for today. We'll start again tomorrow  
2 | morning at 9:00 a.m.

3 |                   **(Whereupon, at 4:47 p.m., the hearing in the**  
4 | **above-referenced matter was recessed, to reconvene,**  
5 | **Wednesday, November 20, 2019, at 9:00 a.m.)**

6 |

7 |

## CERTIFICATION


This certificate is valid only for a transcript accompanied by my original signature required on this page.

I hereby certify that the proceedings in the matter of Proposed Waiver and Regulations Governing the Taking of Eastern North Pacific Gray Whales by the Makah Tribe, Docket No. 19-NMFS-0001, heard on Tuesday, November 19, 2019, before the Honorable George J. Jordan, Administrative Law Judge, were recorded by means of audiotape.

I further certify that, to the best of my knowledge and belief, page numbers one to two hundred twenty-nine constitute a complete and accurate transcript of the proceedings as transcribed by me.

I further certify that I am neither a relative to nor an employee of any attorney or party herein, and that I have no interest in the outcome of this case.

In witness whereof, I have affixed my signature this 16th day of December, 2019.

  
\_\_\_\_\_  
Eileen Gonzalez  
Transcriber

## CERTIFICATION

This certificate is valid only for a transcript accompanied by my original signature required on this page.

I hereby certify that the proceedings in the matter of National Oceanographic and Atmospheric Administration, Docket number 19-NMFS-0001, hearing heard on Tuesday, November 19, 2019, before the Honorable George J. Jordan, were recorded by means of audiotape.

I further certify that, to the best of my knowledge and belief, page numbers one to two hundred twenty-nine constitute a complete and accurate transcript of the proceedings as proofed/corrected by me.

I further certify that I am neither a relative to nor an employee of any attorney or party herein, and that I have no interest in the outcome of this case.

In witness whereof, I have affixed my signature this 21th day of January, 2020.

*Sally S. Gessner*

Sally S. Gessner, CER  
Certified Electronic Court Reporter