WESTERN GRAY WHALE ADVISORY PANEL **PHIDTF-3**
PHOTO-ID TASK FORCE

REPORT OF THE PHOTO-ID TASK FORCE AT ITS 3RD MEETING

8-9 DECEMBER 2009
GENEVA, SWITZERLAND

CONVENED BY INTERNATIONAL UNION FOR CONSERVATION OF NATURE

Contents

1 INTRODUCTORY ITEMS

1.1 Introductions of participants

Workshop participants are listed in Annex 1. Due to a flight delay, Tyurneva was unable to arrive before the evening of 8 December. As a result, the first half-day session dealt only with introductory items and item 5.3 of the agenda (Annex 2).

1.2 Identification of chairman and rapporteurs

Reeves chaired the meeting and Humphrey acted as rapporteur. Cooke, Bradford, Weller and Broker contributed to report preparation by drafting certain sections.

1.3 Summary recap of establishment and work of Photo-ID Task Force

The TF met for the first time in Vancouver in October 2007 and its report (the 'Vancouver report') was considered at WGWAP-3 (November 2007), at which time it was decided to continue the TF on an open-ended basis with revised terms of reference. A series of tasks were identified at WGWAP-4 (April 2008), with a work plan and timelines. Timelines were revised at WGWAP-5 (December 2008) (see Annex 4 of the WGWAP-5 report).

The TF met for the second time in Geneva in April 2009 and a new list of tasks was identified, with a timeline for completion. The report of that TF workshop was considered at WGWAP-6 (April 2009). The Panel endorsed the TF recommendations, including that it continue to function, address the new list of tasks and take on any additional relevant work arising from recommendations of the Panel. The Panel requested that the TF membership be specified immediately after WGWAP-6. In response to this last point, Larsen reported at this meeting that the issue of membership had been discussed during a teleconference and it had been agreed that the membership would continue as before. Muir participated in the present meeting as an observer, with the expectation that this would facilitate her ongoing collaborative work with Tyurneva. It was agreed that her name would be added to the circulation list for TF related messages and documents.

1.4 Aims of meeting and expected product (reporting procedures)

The aims of the meeting were to apprise TF members of progress on outstanding tasks, identify new tasks and discuss and resolve ongoing issues related to photo-ID.

1.5 Adoption of agenda

The adopted agenda is given in Annex 2. It was noted that several sub-items under items 4 and 5 were not identified in the workplan but had arisen from earlier TF or WGWAP recommendations or from events since WGWAP-6.

2 DOCUMENTS AND PROGRESS REPORTS

2.1 Review of available documents

The document list is given as Annex 3.

2.1.1 Existing documents made available

Pre-existing documents available for reference included reports of the two previous Task Force meetings (workshops) and reports of all previous Panel meetings (http://www.iucn.org/wgwap/).

2.1.2 New documents, including presentations

No new (or primary) documents were available for the meeting. Tyurneva provided brief PowerPoint presentations on two agenda items – 4.1.1 and 5.2 (also see WGWAP 7/13).

2.2 Status and numbering of documents

This was not an issue.

2.3 Review of data sets received, including status and data on portal, and clarification of dataset revision histories

Larsen reported that IUCN had received the catalogues from the two teams as well as the data from both teams that had been requested for the joint analysis. The catalogues are on the portal with access restricted to the two teams. Larsen emphasised that data submissions are now routinely tagged with the date of receipt by IUCN so that each submission has a unique identifier.

3 PROGRESS ON TASKS IN PHOTO-ID WORKPLAN (REPORT OF PHOTO-ID TASK FORCE WORKSHOP, 19-20 APRIL 2009, ITEMS 4.1-4.2)

At its last workshop, the TF had agreed a new list of tasks and recommendations, *in italics* below.

3.1 Task 1 (Cross-matching of the Sakhalin catalogues to 2008 season)

Task 1. Cross-matching of the catalogues to be conducted annually, starting with the 2008 catalogues ("2008" catalogue means the catalogues based on data collected up to and including the 2008 field season).
Timeline: The 2008 catalogues should be submitted to IUCN by 1 September 2009.
The cross-matching should be completed in time for WGWAP-7 (expected December 2009).

2009 recommendation:

- *The Task Force **agreed** that the matching update [of the catalogues up to 2007] had been successful, and **recommended** that it be repeated annually (resources permitting), using the same approach (submission of both updated catalogues to IUCN, followed by blind independent matching). Unresolved temporary whales should continue to be appended to the catalogues that are exchanged for matching. Whenever a temporary whale is upgraded to (or combined with) a catalogue whale, this should be recorded in the catalogue entry (i.e. the catalogue entry should include a previous temporary whale number if there is one).*

3.1.1 Review of data received

Larsen confirmed that both teams had submitted their updated catalogues (through to and including the 2008 season) by the 1 September 2009 deadline and their cross-match summary files prior to the start of the TF meeting. The methodology used by each team to conduct the 2008 cross-match update was not discussed but was presumed to have been the same as specified in the previous TF report for the 2007 update.

3.1.2 Presentation and review of matching results

Bradford reported the cross-match results of the Russia-US team, which Tyurneva confirmed were identical to those of the IBM team. These results can be summarized as follows:

- 183 catalogue whales in total
- 18 whales are unique to the Russia-US catalogue
- 11 whales are unique to the IBM catalogue (two of these are identified as temporary whales by the Russia-US team; see below)
- 154 whales are shared between the two catalogues (including the stranded whale discussed under item 5.2).

The total number of catalogue whales increased from 178 through 2007 to 183 through 2008. Of the five newly identified whales, three are shared by the two catalogues and two are in only the IBM catalogue.

Each team identified some "temporary whales," i.e. whales for which there are photos of one or two aspects but not the required high-quality right-side view. The Russia-US team identified five temporary whales. Both teams agreed that two of these whales match individuals represented only in the IBM catalogue. The IBM team identified nine temporary whales. The Russia-US team found that two of these whales matched individuals in the Russia-US catalogue. According to the Russia-US team, these two individuals are also represented as permanent whales in the main IBM catalogue (i.e. these two temporary whales are internal matches within the IBM dataset).

The cross-match update did not result in any revisions of matches found in the previous matching exercises (i.e. those comparing the 2005 and then the 2007 catalogues) but some catalogue photos had been replaced with better images.

3.1.3 Action arising incl. recommendations for future updating

The teams agreed to exchange their cross-match summary files, which include comments on the individual matches. The Task Force **agreed** that the 2008 cross-match update had been successful and **recommended** that it be repeated for the 2009 catalogues and continued annually (resources permitting), using the same approach (submission of both updated catalogues to IUCN, followed by blind independent matching). Unresolved temporary whales should continue to be appended to the catalogues that are exchanged for matching. Whenever a temporary whale is upgraded to (or combined with) a catalogue whale, this should be recorded in the catalogue entry (i.e. the catalogue entry should include a previous temporary whale number if there is one).

3.2 Task 2 (Outreach materials to get ID photos from carcasses and platforms of opportunity)

Task 2. Outreach materials to get ID photos from carcasses and platforms of opportunity. To be taken forward by the IUCN range-wide project.
Timeline: Progress report to be submitted by IUCN to WGWAP-7.

2009 recommendation:

- *It was agreed that further development of this task should be carried out by Larsen and Weller as part of the IUCN rangewide conservation effort.* ***IUCN should report back*** *on progress to the next WGWAP meeting.*

3.2.1 Presentation and discussion of draft materials

At the last TF meeting, Weller had summarised progress to date on the development of a graphics-based advisory protocol to help ensure that photographs of adequate quality (i.e. useable for individual recognition) are obtained from any dead or living western gray whale found within the population's range. The TF had agreed that the template provided by Weller offered a useful basis on which the work could proceed and recommended that this task, including incorporation of several TF suggestions, should be further developed by Larsen and Weller as part of the IUCN WGW Rangewide Conservation Plan.

Consistent with that recommendation, Larsen reported that the task had been identified as a 'high priority' action in the Rangewide Conservation Plan. Considering this and given the recommendation at the last meeting, it was agreed that this item need not be further considered at the present TF meeting. Larsen advised the group that a penultimate draft of the Rangewide Conservation Plan was close to being finalised and that he would present an overview of progress to the Panel during WGWAP-7.

3.2.2 Action arising

None.

3.3 Task 3 (Population analysis based on joint data set)

Task 3. Population assessment based on joint data set (through 2007).
Timeline:
Template for the data sets to be supplied by Cooke to the teams by July 31.
Final data sets to be received at IUCN by October 31.
Analysis to be presented to WGWAP-7 in December (and to TF pre-meeting if held).

2009 recommendation:

- *The TF* ***recommended*** *that the population assessment using the joint data be presented at the 7th WGWAP meeting, subject to resources.*

3.3.1 Presentation and review of analysis

The proposed method of analysis has been applied to the Russia-US data set in previous assessments, initially in the report of the ISRP (Reeves *et al*. 2005), and in subsequent annual updates presented as papers to the IWC Scientific Committee. A complete description of the model can be found in the paper (workshop document RW12) submitted to the IUCN Range-Wide Workshop held in Tokyo, September 2008.

To apply the method to the joint data set, certain decisions are required concerning the interpretation of the IBM data set which differs in some characteristics from the Russia-US data set.

Cooke explained that for the purpose of the model as implemented to date, there are essentially three types of observations:

MC: mother-calf pair

UC: unaccompanied calf

O: other

In the applications of the model to date using the Russia-US data set, the following assumptions have been made:

MC: each pair so recorded is a genuine mother-calf pair

UC: each animal recorded as a calf is a genuine calf of the year

O: "other" whales can be anything except calves. A whale recorded as "Other" can be a mother of the year, which has separated from its calf, but it cannot be a calf.

As had been discussed at the Task Force meeting in April 2009, Bradford considered that these assumptions are justified in the case of the Russia-US data set because:

(i) of the 61 mother-calf pairs identified behaviourally in the field through 2007, 56 were tested genetically (i.e. both mother and calf were biopsied). Of the latter, 55 (all except one) were confirmed by the genetics.

(ii) a scoring system is used to assess the status of unaccompanied calves based on a number of visual parameters. The system has been tested on known calves (i.e., the 55 calves mentioned above) and shown to reliably distinguish calves from non-calves;

In the IBM data set, animals are assigned to the same three categories, but some designations of mother-calf pairs (MC) and some designations of unaccompanied calves (UC) are annotated with question marks (?) to indicate uncertainty in the designation.

The IBM data set contains a total of 28 mother-calf pairs through 2008, of which 7 are marked as questionable. All 21 non-questionable MC pairs were confirmed by the Russia-US data set. All 7 questionable MC(?) pairs were rejected by the Russia-US data set, because in each case the apparent mother was determined genetically to be male. There are no MC pairs in the IBM data set whose status is uncertain in the sense of being neither definitely confirmed nor definitely rejected by the Russia-US data set.

Of the 7 suspected calves in the rejected MC pairs, 4 were confirmed as calves (with known mothers) in the Russia-US data set and 3 were whales not contained in the Russia-US catalogue. All 6 non-questionable unaccompanied calves (UC) in the IBM dataset were confirmed as calves (with known mothers) in the Russia-US data set. Of the two questionable unaccompanied calves (UC?) in the IBM dataset, one was confirmed as a calf (with known mother), while the other was not contained in the Russia-US catalogue.

There were no designations of animals as calves (definite or questionable, accompanied or unaccompanied) in the IBM data set that were rejected by the Russia-US data set. However, there were 8 whales designated as calves by the Russia-US team that were seen in the same year by the IBM team, but not designated by the IBM team as calves.

For the purpose of the joint analysis, the TF **agreed** to the following approach:

(i) only the Russia-US MC pairs and the non-questionable IBM MC pairs (which are a subset of the former) would be treated as MC pairs in the analysis;

(ii) only the Russia-US calf determinations of unaccompanied calves would be used. For the IBM data set, unaccompanied calves, questionable calves, rejected mothers and other whales would be combined into a new category "Indeterminate".

(iii) if both teams observe a given whale in the same year, and if the observations are compatible, then the most informative designation is used. For example, if one team identifies a whale as a calf, and the other team observes the calf alone as an Indeterminate then the observation enters the model as a calf.

The joint analysis was conducted on this basis after the TF meeting. Tyurneva supplied some final corrections to the IBM dataset which were incorporated into the analysis.

3.3.2 Action arising

Sakhalin Energy suggested that in view of the longstanding reliance on Cooke's model for regular assessment of the western gray whale population, and given the fact that the new assessment using the combined dataset represented a milestone in the WGWAP process, it would be appropriate at this time to arrange for a formal, technical peer review. The TF **agreed** that this was a good idea and proceeded to plan for such a review.

It was noted that any independent reviewer would need access to all relevant previous applications of Cooke's model, beginning with his contribution in the report of the IUCN Independent Scientific Review Panel in 2005 and including various documents submitted over the last several years to the IWC Scientific Committee, to the WGWAP, and to the IUCN Range-Wide workshop. It will also be important for the reviewer to have explanations from the two photo-ID teams (IBM and Russia-US) of how they collect and manage their data. Representatives of both teams agreed that their respective explanations as laid out in the first report of the Photo-ID Task Force (Vancouver report) would be adequate for this purpose.

The above-listed materials, along with the complete draft manuscript and associated data files, should be provided to the reviewer as a package. It was acknowledged that preparation of the supporting data files for the reviewer would require additional time on Cooke's part.

TF members agreed that Phil Hammond at St. Andrews University would be an ideal reviewer and Larsen was asked to approach him to determine his terms and availability. The work would be carried out under contract to IUCN. A good second choice, should Hammond be unable or unwilling to take this on, would be John Brandon.

The expectation is that the revised analysis, incorporating input from co-authors and the independent reviewer, will be completed for presentation at WGWAP-8 and that it will subsequently be submitted to a peer-reviewed journal for formal publication, but only after clearance by all relevant data owners. Sakhalin Energy pointed out that if the paper is to be submitted on a non-confidential basis to the WGWAP, the IWC Scientific Committee or any other forum, at least eight weeks of lead time will be needed to clear the ENL approval process.

4 PROGRESS ON OLDER TF RECOMMENDATIONS (NOT INCLUDED IN CURRENT WORKPLAN)

4.1 Scoring system for cow and calf determinations in the field

4.1.1 Discussion on progress by IBM team

At the first Photo-ID TF meeting in Vancouver (2007) it had been recommended that the field criteria for judging mother-calf pairs be reviewed, and that, if appropriate, a scoring system be developed. Pursuant to that recommendation, Sakhalin Energy organised a workshop and contracted Vicky Rowntree (University of Utah) to facilitate it. Rowntree has long experience in developing and applying such a scoring system for southern right whales and she had participated in the Vancouver workshop as an associate scientist under contract to IUCN. Muir, Tyurneva, Julia Yazuenko (translator) and Rowntree participated in the workshop, which was held at the LGL headquarters in Sidney, BC from 5-9 October 2009.

The objectives of the workshop were to:

- Identify the criteria that are useful for determining the relationships between adult gray whales and their smaller companions, and the age of unaccompanied small whales (calf of the year or yearlings). These criteria will make use of available information in the IBM photo ID database (photographs, video recording and field notes). Create a weighting system that scores the strength of the evidence (poor, possible or probable) used to make these determinations.
- Identify changes needed to the IBM photo-ID database to support the scoring system.
- Apply the new scoring system for C/C pairs to previous identifications of C/C relationships. Record and describe any differences that arise and make changes as necessary.
- Apply the new scoring system for determining the age of an unaccompanied small whale to previous identifications of unaccompanied calves. Record and describe any differences that arise and make corrections as necessary.
- Apply the scoring system to known smaller whales in the database that have not been identified as calves. Record and describe any differences that arise and make corrections as necessary.
- Apply the scoring system to new sightings during the years 2005-2008 that have not been identified as calves. Record and describe any differences that arise and make corrections as necessary.
- Time permitting, use the scoring system to spot-check other sightings in the database that have not been identified as cows and calves. Record and describe any differences that arise and make corrections as necessary.
- Maintain a record of all changes to mother and calf designations in the database.

At the present TF meeting, Tyurneva gave a PowerPoint presentation on the development of the scoring system. As the system is not yet final, results from this analysis were not presented.

The certainty of determinations of calves and the certainty of determinations of cow-calf relationships were assigned a letter grade. In addition, a number was assigned to indicate which criteria were used to determine that grade. The level of certainty ranged from class A (very good/high) to B (good/high) to C (possibly).

The main criteria used to identify calves were:

- Not in the catalogue in previous years
- Seen very close to suspected mother
- Behavioural interactions with suspected mother
- Seen very close and interacting with suspected mother on more than one day.

Additional criteria to identify calves were:

- Fat whale
- Small whale
- Blow height short compared to adult blow
- Vibrissae seen
- Short rounded rostrum
- Play behaviour
- Seen with other calves of the year
- Seen with mother/calf pairs
- Seen in shallow water
- Only small barnacles present on body
- No bagel barnacle spots
- Know it is not a juvenile.

Once the scoring system has been finalised and tested, a presentation to the WGWAP will be considered.

The TF welcomed this work and encouraged its continuation. Importantly, it should be made clear that none of the data provided to Cooke for the 'joint' population assessment (item 3.3) had been adjusted by applying this scoring system, which as explained is still under development. Such adjustments could be anticipated for future iterations of the population assessment.

4.1.2 Action arising

The TF was assured that Sakhalin Energy was committed to completing and implementing the scoring system in the near future and participants looked forward to seeing it in final form by WGWAP-8.

4.2 Status of plans for comparing Kamchatka whale photos to Russia-US catalogue

There was general confusion in the TF as to the source and objective of this agenda item. While such a comparison was mentioned at WGWAP-5 (see item 6.5 of the WGWAP-5 report), it appears that the actual recommendation for this work was made during the Western Gray Whale Rangewide Workshop in Tokyo in September 2008. Section 6.1 of the Rangewide Workshop report states:

- *The recent observations of gray whales along the southeastern and southwestern coasts of Kamchatka and in the northern Sea of Okhotsk demonstrate the importance of obtaining photo-identification data from other areas in addition to the northeastern Sakhalin Shelf. Therefore, the Workshop **recommends** that photo-identification effort be continued or expanded in other areas where western gray whales are known to occur, such as off Kamchatka and Magadan. It further **recommends** that all photographs from Kamchatka be compared to the Sakhalin catalogues maintained by the Institute of Marine Biology (IBM) and the Russia-US program.*
- *Photo-identification studies form an essential component of a number of elements of the conservation effort for western gray whales. The Workshop strongly endorses the recommendations made previously by the WGWAP and the IWC Scientific Committee concerning joint analyses of the Russia-US and IBM catalogues. It further **recommends** that the photographs from Kamchatka and other parts of the population's range be included in any such joint analyses and notes the importance of continuing efforts to identify additional feeding areas of western gray whales.*

In other words, the participants in that workshop recognized that a comparison between catalogues from all feeding locations would help inform eventual population assessments based on data from these areas.

Although the Kamchatka and IBM catalogues are routinely compared as a matter of internal practice, the TF has to date not been formally tasked with a comparison of the Kamchatka and Russia-US catalogues. In summary, there are currently no plans for comparing the Kamchatka whale photos to the Russia-US catalogue. Further, the Task Force **agreed** that until an objective for doing so is clearly established by the WGWAP, no further action on this task could be taken.

4.3 Progress on other old TF recommendations, if any

None

5 PROGRESS ON OTHER TASKS ARISING FROM WGWAP-6 AND LATER DEVELOPMENTS

5.1 Examination of photos of calf from Kamchatka to verify its status

WGWAP-6/019 recommendation

- *In view of the problems found by the Photo-ID Task Force with identifications of some mother-calf pairs, the Panel **recommends** that the Task Force examine photos of this calf carefully to verify its status.*

Tyurneva reported that the preliminary calf determination scoring system presented in item 4.1 of this report was applied to the Kamchatka calf. As a result of this exercise, the whale was assigned a "high" (Class B) certainty of being a calf. The calf (and its mother) was observed only once, but had the mother-calf pair been seen on multiple occasions, the calf certainty score would have been "very high" (Class A). The calf's mother is a known reproductive female from Sakhalin, but in the previous year (2007) was sighted only in Kamchatka (without a calf).

Sakhalin Energy expressed confidence in this determination and indicated that it did not consider additional verification from the Task Force to be necessary. Other TF members indicated that their preference would have been for the TF as a whole to examine the photos, but accepted that this recommendation could be closed, with the annotation that it had been rejected for the reasons given.

5.2 Discussion of photos of gray whale stranded at Chaivo

WGWAP-7/13 reports that on 5 September 2009 a local hunter discovered the carcass of a dead stranded gray whale near Chaivo Lagoon (52°25'45.6"N, 143°16'07.7"E). During a number of inspections and examinations of the whale in the ensuing days, digital photographs were obtained and subsequently used to identify this individual. In Tyurneva's Powerpoint presentation on the photo-identification of this whale, she explained that it matched an individual in the IBM and Kamchatka catalogues as well as in the Russia-US catalogue (as later confirmed by Bradford). This animal was first seen as a calf by both the IBM and Russia-US teams in the Piltun feeding area in 2005. At that time, the Russia-US team determined the individual to be male (based on genetic analysis) and this is consistent with the sex determination by Sakhalin Energy based on their observation of a penis during visual inspection of the carcass. This whale was not observed by either photo-ID team off Piltun in 2006-2009 but was observed by the IBM team in Olga Bay, Kamchatka, in 2008 and again in July 2009.

Bradford raised the issue of data safeguards and data sharing policies with respect to the use of the photo-ID catalogues by both teams (see discussion of this in section 6.4.3.)

Weller recommended that IBM examine photos of this whale taken in July 2009 in Olga Bay, with particular emphasis on acquiring detailed information on body condition, parasites, scarring and other marks that could be suggestive of a possible cause of death or compromised health. Further, scarring and other marks that are indicative of previous non-lethal interactions with fishing gear, vessel, and/or killer whales should also be noted. He suggested that a tissue sample collected from the carcass be compared to the Russia-US genetic database. Broker reported that the tissue sample had been given to the Russian IWC Commissioner (V. Ilyashenko) for genetic analysis. Weller noted that matching required the use of microsatellites, and that, due to inter-laboratory comparability issues common to microsatellite analyses, an actual tissue sample was needed as opposed to only the results from another laboratory. It was agreed that the comparison could be conducted at the lab used by the Russia-US team (SWFSC, in La Jolla, CA) and that the results be provided to all parties. A Russian CITES export will be needed to send a sample out of Russia.

5.3 Joint analysis to rank whales as candidates for satellite tagging from both photo-ID and genetics data (see recommendation WGWAP-6/006)

At WGWAP-6 Weller had reported on an analysis, based on data from the Russia-US research programme, that combined genetic information (sex determinations, assignment tests and paternity assignments) with individual occurrence patterns and 'ease of real-time visual recognition' to rank whales as candidates for satellite tagging. The Panel had noted that this exercise would have benefited from incorporation of the IBM photo-identification data, with an ultimate objective to plot on a map where higher-ranking males have been located in the feeding areas and it recommended that such a joint analysis be undertaken.

No progress had been made towards implementing this recommendation and a discussion ensued concerning the rationale for pursuing the ranking system and associated joint analysis further. Weller reminded the group that from the very beginning of discussions within the WGWAP as well as the IWC Scientific Committee, the satellite tagging effort off Sakhalin has not been viewed as an experiment, but rather as a directed research action with a specific focus on learning more about the migration route(s) and wintering area(s) of western gray whales. Interest in obtaining this information has been driven by concern about the mortality of whales in fishing gear in Japan and the hope that better understanding of the location and timing of occurrences in Korean, Japanese and Chinese waters would inform and enable conservation measures to reduce the risk of injury and mortality. Thus, whereas in an experimental context it could be argued that selection of whales for tagging should be without bias (in this case, granted that only males in good body condition would be considered, given the desire to avoid any stress or injury to females in a critically endangered population), in the present situation an informed bias that improves the chances of achieving the study goals should be welcomed.

Bradford summarised the Russia-US team's findings from the genetics-based ranking scheme (i.e. not factoring in occurrence patterns and ease of visual recognition), noting that the 83 individuals known to be males based on genetic analyses had been assigned to three categories as follows:

Priority 1: Good candidates for tagging based on high assignment probabilities and the inference that they are putative fathers of calves observed off Sakhalin – **44 individuals.**

Priority 2: Intermediate candidates, including individuals with mid-range assignment probabilities as well as some with low assignment probabilities but inferred as putative fathers **– 24 individuals.**

Priority 3: Poor candidates based on low assignment probabilities and a lack of genetic evidence that they have contributed to reproduction in the western gray whale population – **15 individuals.**

The initial premise is that any male in good condition is a candidate for tagging but based on the above, some males would be preferred over others. For example, in a scenario where several individual whales are within range of the tagging vessel and are determined to be previously identified males, then everything else being equal the first priority would be to try to tag the highest-priority individual(s). This does not preclude that some Priority 2 and even some Priority 3 individuals will be tagged, but it is intended to help ensure that a relatively high proportion of those that are tagged have a high probability of migrating to the southern wintering area(s). Tsidulko emphasised that whilst the ranking scheme provided an idealised approach for selecting whales to tag, in practical terms other factors would come into play with varying degrees of force during the field effort itself, including such things as number of tags still available to deploy, environmental conditions (e.g. weather, sea state) and amount of time left in the tagging season.

There was further discussion as to how the addition of data from the IBM team (i.e. the recommended 'joint' analysis) might add to or enhance the power of the preference ranking exercise. Bradford and Weller explained that although their analysis using the Russia-US team's data had provided a reasonable basis for ranking males (using genetic information only as described above, as well as a combination of genetics, occurrence patterns and recognisability), it had not been successful in establishing a basis for choosing one part of the study area over another to improve the chances of encountering certain males. In other words, no pattern had been found in terms of where to search for higher-priority individual males. They noted that although the IBM team had better offshore coverage, it was not clear whether the additional data would reveal a pattern of encounter probabilities that could be of practical use in the field.

The Task Force concluded that the joint analysis recommended at WGWAP-6 was not worth pursuing and therefore that recommendation should be closed.

6 FUTURE WORKPLAN FOR PHOTO-ID TASK FORCE

6.1 List of outstanding tasks and new tasks arising from this meeting

<u>Item 3.1</u> *Task 1* (cross-matching) will remain as a standing task to be carried out on an annual basis, with data exchange managed by IUCN and regular reporting on progress at Panel meetings.

<u>Item 3.3</u> *Task 3* (population assessment using both datasets) was not completed before or during the TF meeting but it was agreed that Cooke would report results at WGWAP-7. Other aspects of continuing work on this task are as outlined under item 3.3 above. A *new task* was also identified at this meeting: to obtain an independent review by an appropriate expert of Cooke's population model and the initial 'joint' population assessment. This task will be managed by IUCN.

<u>Item 5.2</u> Two *new tasks* were identified in relation to the gray whale stranded at Chaivo in September 2009. *One* is for SEIC to compile the Kamchatka photographs of this individual and provide an analysis at WGWAP-8 of any marks, scars or other features (including information on body condition) that could be informative both with regard to the cause of death and to previous non-lethal interactions. The *second of these new tasks* is to implement a collaborative process whereby (a) a tissue sample from the dead whale is provided to the Russia-US team for genetic analysis, (b) results

of their analyses of both that tissue and the biopsy sample from this whale off Piltun in 2005 are shared and (c) a unified, co-authored scientific report is prepared and published (following the precedent of the 'joint' population assessment as well as the collaborative report on the gray whale bycaught in Japan in 2007 – Weller et al. 2008).

Item 5.3 This item is closed as far as the Task Force is concerned.

6.2 Work plan with timeline

As indicated under item 6.3 below, it was agreed that the Task Force, *per se*, should be dissolved, or at least suspended, for now. Therefore, the work plan and associated timeline for tasks identified under item 6.1 will need to be managed by the WGWAP chairman in close consultation with IUCN and SEIC.

Item 3.1 The annual cross-match update should follow the same timeline as last year, i.e.: 2009 catalogues submitted to IUCN by 1 September 2010; cross-matching completed in time for results to be reported at WGWAP-9.

Item 3.3 Cooke will complete and submit a first draft of the 'joint' population assessment to IUCN by no later than 15 January 2010. IUCN will circulate the manuscript to all co-authors and members of the current Photo-ID Task Force, with appropriate instructions from Cooke and Larsen regarding feedback and revisions. Cooke will also prepare and deliver to IUCN by no later than 31 January 2010 the requisite data and background materials for the independent review.

Immediately after WGWAP-7, IUCN will begin the process of engaging the independent reviewer so that by 1 February 2010 it should be possible to send the materials to the reviewer, with a deadline of 15 March 2010 for provision of the review.

Cooke will provide a revised version of the manuscript to WGWAP-8 in April 2010.

Item 5.2 The new task of compiling and analysing the Kamchatka photos of the whale found dead at Chaivo in September 2009 will be completed in time for presentation of a document on results at WGWAP-8 in April 2010.

A timeline for the other new task of exchanging tissue samples and results of genetic analyses on the Chaivo stranded whale could not be established at the present time. Therefore, it will require that the WGWAP chairman and IUCN work with the interested parties over the next few months to develop an agreed procedure and timeline, on the understanding that progress will be reported at WGWAP-8.

6.3 Discuss whether to recommend continuation of Photo-ID Task Force

After a brief discussion, it was agreed that there was no clear need or justification for continuing the Photo-ID Task Force and that it should be suspended until such time as the WGWAP decides to reconstitute it. This was on the understanding that Photo-ID would remain as a standing item on the WGWAP agenda and that progress on the various tasks would be tracked on a meeting-by-meeting basis.

6.4 Discussion and recommendations on:

6.4.1 Task Force Terms of Reference, modus operandi

Nothing to report.

6.4.2 Task Force Membership

Nothing to report (but see item 1.3).

6.4.3 Data safeguards and data sharing policy

During her presentation on the dead gray whale stranded at Chaivo in September 2009 (see Item 5.2), Tyurneva explained that she had matched photos of this whale to individual No. 126 in the IBM catalogue and No.78 in the Kamchatka catalogue. She also acknowledged that once the whale had been identified as IBM No. 126, the photos of the dead whale had been compared to the images of this whale in the Russia-US catalogue for confirmation. The clearer image in the Russia-US catalogue gave her greater confidence that her earlier match to whale No. 126 had been correct.

Bradford queried whether such use of the opposite party's catalogue was consistent with the terms surrounding exchange of material between the two teams, which limit use for the sole and specific purpose of carrying out the cross-match exercise. TF members agreed that this was an interesting and important issue and deserved some discussion and clarification. Bradford and Weller called attention to the terms and conditions of use specified at the front of the Russia-US catalogue.

The TF concluded that in a narrowly literal sense, neither team was free to use the other's catalogue for any but the specified purpose of carrying out the cross-matching exercise. If one or the other team wishes to use the other's catalogue in any other way, e.g. to make or confirm a match or to carry out some other kind of analysis even if only for verification purposes, it needs to request permission from the data owner(s). It was suggested that in the first instance, this could mean simply granting permission to carry out an exploratory exercise. Once a match or identification, for example, has been made from that exercise, it could lead to collaborative reporting. Tsidulko emphasised that it was in everyone's interest to request permission at the very beginning of any matching or identification process. This way, eventual reporting can include reference to the fact that a comparison has been attempted even if the findings are negative (i.e. no successful match or identification has been made).

It was noted that the WGWAP data sharing protocol allows parties to insist on rigid adherence to its provisions but does not preclude data owners from making less onerous (more permissive) arrangements when they wish to do so. As a general principle, it is understood that any party making any use of unpublished data provided under the data sharing protocol is obliged to get permission from the data owner unless those data have been made available explicitly on terms that are more permissive than the existing agreement.

Also by way of clarification, published data (i.e. works in the public domain) are not subject to the IUCN WGWAP data sharing protocol but rather to normal scientific codes of conduct and copyright laws. There cannot be restrictions on the use of published materials. However, the informal exchange of materials on a limited circulation CD (e.g. 'available on request') does not constitute publishing and the material is not regarded as being in the public domain.

During the course of discussion of this topic, Larsen confirmed that IUCN would proceed to highlight the data sharing protocol as a separate, stand-alone item on the Western Gray Whale website so that it is readily available for future consultation and reference. He also clarified that the agreement had been in force since WGWAP-5 when all parties agreed to adopt it.

6.4.4 Operation of IUCN Portal

Although Sakhalin Energy staff members do not have direct access to the portal from their normal work stations, the problem has been resolved satisfactorily and it was agreed that the present arrangement is adequate.

7 OTHER BUSINESS

7.1 Other recommendations to WGWAP arising from the Photo-ID Task Force (*i.e.* other than those in work plan)

None.

7.2 Other

There was no other business.

8 ADOPTION OF REPORT TO WGWAP

The basic structure and content of the report were agreed before the workshop adjourned, with the understanding that a verbal presentation would be made at the WGWAP-7 meeting and the report would be largely finalized by TF participants before leaving Geneva. It was agreed that the final TF report could be posted on the IUCN Panel website once Sakhalin Energy and the Panel have approved its release.

ANNEX 1: Workshop Participants

WGWAP
Randall Reeves (Meeting Chair)
Justin Cooke (Chair of the Task Force)*
Grisha Tsidulko*
Dave Weller*

SEIC
Doug Bell*
Judith Muir
Koen Broker*
Olga Tyurneva* (from 9 December)
Vladimir Efremov

Associate Scientist
Amanda Bradford*

IUCN
Finn Larsen
Sarah Humphrey
Laura Riddering

Translation
Alex Danilov
Grigory Shkalikov

* Members of Photo-Id Task Force

ANNEX 2: Agenda

Third Meeting of the WGWAP Photo-ID Task Force
Geneva, December 8 (15:00) – December 9 (13:00) 2009

1. Introductory items

- 1.1. Introductions of participants
- 1.2. Identification of rapporteur(s)
- 1.3. Summary recap of establishment and work of Photo-ID Task Force (Reeves/Cooke)
- 1.4. Aims of meeting and expected product (reporting procedures) (Reeves)
- 1.5. Adoption of agenda

2. Documents and progress reports

- 2.1. Review of available documents
  - 2.1.1. Existing documents made available
  - 2.1.2. New documents, including PowerPoint presentations
- 2.2. Status and numbering of documents (Larsen)
- 2.3. Review of data sets received, including status and data on portal, and clarification of dataset revision histories (Larsen)

3. Progress on tasks in Photo-ID work plan (Report of Photo-ID Task Force workshop, 19-20 April 2009, Items 4.1-4.2)

- 3.1. <u>Task 1</u> (Cross-matching of the Sakhalin catalogues to 2008 season)
  - 3.1.1. Review of data received (Larsen/Cooke)
  - 3.1.2. Presentation and review of matching results (Bradford)
  - 3.1.3. Action arising incl. recommendations for future updating
- 3.2. <u>Task 2</u> (Outreach materials to get ID photos from carcasses and platforms of opportunity)
  - 3.2.1. Presentation and discussion of draft materials (Larsen/Weller)
  - 3.2.2. Action arising
- 3.3. <u>Task 3</u> (Population analysis based on joint data set)
  - 3.3.1. Presentation and review of analysis (Cooke)
  - 3.3.2. Action arising

4. Progress on older Task Force recommendations (not included in current Workplan)

- 4.1. Scoring system for cow and calf determinations in the field
  - 4.1.1. Discussion on progress by IBM team (SEIC)
  - 4.1.2. Action arising
- 4.2. Status of plans for comparing Kamchatka whale photos to Russia-US catalogue (SEIC)
- 4.3. Progress on other old TF recommendations, if any

5. Progress on other tasks arising from WGWAP-6 and later developments (not included in current work plan)

- 5.1. Examination of photos of calf from Kamchatka to verify its status (SEIC)
- 5.2. Discussion of photos of gray whale stranded at Chaivo (SEIC)

5.3. Joint analysis to rank whales as candidates for satellite tagging from both photo-ID and genetics data (see recommendation WGWAP-6/006) (Weller)

6. Future work plan for Photo-ID Task Force

6.1. List of outstanding tasks and new tasks arising from this meeting

6.2. Work plan with timeline

6.3. Discuss whether to recommend continuation of Photo-ID Task Force

6.4. If so, discussion and recommendations:

6.4.1. Terms of reference, modus operandi

6.4.2. Membership

6.4.3. Data safeguards and data sharing policy

6.4.4. Operation of IUCN Portal

7. Other business

7.1. Other recommendations to WGWAP arising from the Photo-ID Task Force (*i.e.* other than those in work plan)

7.2. Other

8. Adoption of report to WGWAP

ANNEX 3: Documents

DOCUMENT NUMBER	SUBMITTED BY	TITLE	STATUS
PRIMARY DOCUMENTS			
PHID-3/1	IUCN	Provisional agenda	Circulated to TF 8 DEC
PHID-3/2	IUCN	List of documents	Circulated to TF 8 DEC
PHID-3/3			
PHID-3/4			
OTHER DOCUMENTS			
PHID-2 Rep.	IUCN	Report of the Photo-ID Task Force at its 2nd meeting (Geneva, April 2009)	IUCN webpage
PHID-1 Rep.	IUCN	Report of the Photo-ID Task Force at its 1st meeting (Vancouver, October 2007)	IUCN webpage
WGWAP-6 Rep.	IUCN	6th report of the WGWAP	IUCN webpage
WGWAP-5 Rep.	IUCN	5th report of the WGWAP	IUCN webpage
WGWAP-4 Rep.	IUCN	4th report of the WGWAP	IUCN webpage
WGWAP-3 Rep.	IUCN	3rd report of the WGWAP	IUCN webpage
WGWAP-2 Rep.	IUCN	2nd report of the WGWAP	IUCN webpage
WGWAP-1 Rep.	IUCN	1st report of the WGWAP	IUCN webpage