Appendix A: IWC Euthanasia Protocol Questionnaire

This questionnaire is focusing on cetaceans 5m and above in size, as smaller cetaceans, such as dolphins and porpoises, have well founded euthanasia protocols.

Q1 What country are you based in?

Q2 What is your current role/job? (eg Researcher/Veterinarian/etc).

Q2.a What experience do you have with whale euthanasia/strandings?

Q3 Are you aware of recommendations set out by the International Whaling Commission for the euthanasia of stranded/beached whales?
Yes/No

Q3.a If your answer to Q3 was YES: Do they seem straight forward?
Yes/No

Q3.a.i If your answer to Q3a was NO: Why are they not straight forward?

Q4 How relevant do you find the current recommendations?

	1	2	3	4	5	6	7	8	9	10	
Not Relevant	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	Very Relevant

Q5 How did you hear about the IWC recommendations?

- I have not heard about them before now
- I use them in my job/life
- I know of them but have not implemented them
- I know of them but have had to use alternative methods for practical reasons

[*If you are unaware/would like a refresher on the IWC guidelines, feel free to follow this **link** and have a read*]

Q6 In your opinion, whose responsibility is it to ensure the protocols are being implemented at the stranding site at the time of euthanasia?

- Local Animal Health Officer
- Veterinarian
- Ranger
- Police

- Other

Q6.a If you selected ‘Other’ Please Specify

How much do you Agree/Disagree with the following statements?

[Please rank: 1 = STRONGLY DISAGREE, 9 = STRONGLY AGREE]

Q7 The IWC recommendations are being followed in this country.

Q7.a If you are unsure please select ‘unsure’

	1	2	3	4	5	6	7	8	9	
Strongly Disagree	☐	☐	☐	☐	☐	☐	☐	☐	☐	Strongly Agree

Q8 The IWC recommendations are being followed to the best of our ability in this country

	1	2	3	4	5	6	7	8	9	
Strongly Disagree	☐	☐	☐	☐	☐	☐	☐	☐	☐	Strongly Agree

Q9 The IWC recommendations are difficult to follow accurately in this country

	1	2	3	4	5	6	7	8	9	
Strongly Disagree	☐	☐	☐	☐	☐	☐	☐	☐	☐	Strongly Agree

Q9.b If you Agreed/Strongly Agreed with the statement in Q9, please could you expand on why you think this is?

Q10.a If you are unsure, please select ‘unsure’

	1	2	3	4	5	6	7	8	9	
Strongly Disagree	☐	☐	☐	☐	☐	☐	☐	☐	☐	Strongly Agree

Q11 In your opinion, which of these is the most important to uphold during an euthanasia/stranding event?

	Most Important	Mid-Importance	Least Important
Animal Welfare	☐	☐	☐
Public Safety	☐	☐	☐
Emotions of General public	☐	☐	☐

Q11.a Do you believe your ranking (in Q11) is reflected in your country's protocols/guidelines?
Yes/No

Q11.b Do you believe your ranking (in Q11) is an accurate representation of the IWC protocols?
Yes/No

Q12 Do you think your country's guidelines are an accurate representation of the IWC protocols?
Yes/No

Q13 Do you feel that the IWC protocols are reasonable from a welfare perspective?
Yes/No

Q13.a If your response was NO: Could you please expand on why you think this is?

Q14 Do you feel that the IWC recommendations are reasonable considering practical limitations in your country?
Yes/No

Q14.a If your response was NO: Could you please expand on why you think this is?

STRANDINGS (Questionnaire cont.)

If you have been involved in strandings, then please answer the following questions.

If you have not been actively involved/have no experience of strandings, please skip to Q22.

Q15 Can you give an example of the most recently used euthanasia method at a recent stranding in your area? Please include species/size/location. (If you have experienced multiple strandings recently, please feel free to include more information relating to these).

Q16 To your knowledge, during a stranding where euthanasia is the outcome, are sedatives and analgesics used as routine?
Yes/No

Q17 Is death achieved using a chemical sedative/agent?

- No: I've never been involved in an event where sedatives/analgesics/chemicals were used
- Yes: Sedation and analgesia given, followed by chemical euthanasia method
- Yes: Sedation and analgesia given, followed by mechanical euthanasia method
- Yes: Sedation alone followed by chemical euthanasia method
- Yes: Sedation alone followed by mechanical euthanasia method
- Yes: Analgesia alone followed by chemical euthanasia method
- Yes: Analgesia alone followed by mechanical euthanasia method
- Other

Q17.a If you selected Other, please specify:

Q18 In the events where chemical agents were used, were you involved in calculating the weight of the animal/were you aware of it being done?
Yes/No

Q18.a If you answered YES: How was the weight of the animal calculated/estimated in these cases?

Q19 When making a decision about which method to use, is disposal of the carcass a consideration?
Yes/No

Q19.a If YES: Please could you expand on how this influenced the euthanasia choice?

Q20 Do the technical difficulties of euthanasia (resulting from species differences) influence practicalities/conformity to the recommendations?
Yes/No

Q20.a If YES: Please briefly describe:

Q21 What is the most limiting factor when it comes to selection of euthanasia method? (eg cost/available expertise/etc)

Q22 Would you be willing to provide further information? For example - event records?
Yes/No

Q22.a If YES: Please provide your preferred email address.

SCENARIO BASED QUESTIONS (x10)

The next 10 questions will be scenario based and should take no more than a few minutes. These scenarios were created using SPSS with set variables randomly allocated to each scenario. Please answer to the best of your abilities.

SCENARIO EXAMPLE

- A whale was stranded in the surf, and was estimated to be 6 meters in length. It was euthanised with ballistics, without pre-medication, and it died in seconds.

How would you rate the welfare of the whale at the point of death?

	1	2	3	4	5	6	7	8	9	10	
Very poor welfare	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	Very good welfare

All 49 Scenarios presented to questionnaire responders:

- A whale was stranded in the surf, and was estimated to be 6 meters in length. It was euthanised with ballistics, without pre-medication, and it died in seconds.
- A whale was stranded on the beach and was estimated to be 14 meters in length. It was pre-medicated before being euthanised with KCl, and it took less than 60 minutes to die.
- A whale was stranded on a the beach, and was accurately measured to be 8 meters in length. It was pre-medicated before being euthanised using a cranial implosion technique, and took less than 6 hours to die.
- A whale was stranded in the surf and was estimated to be 6 meters in length. It was pre-medicated before being euthanised with KCl, and it took more than 6 hours to die.
- A whale was stranded in the surf, and was estimated to be 6 meters in length. It was pre-medicated before being euthanised with pentobarbital. It took less than 60 minutes to die.
- A whale was stranded on the beach and was estimated to be 22 meters in length. It was pre-medicated before being euthanised with ballistics, and it took more than 6 hours to die.
- A whale was stranded on the beach and was accurately measured to be 6 meters in length. It was pre-medicated before being euthanised with a cranial implosion technique, and took less than 60 minutes to die.
- A whale was stranded in the surf and was estimated to be 8 meters in length. The decision was made not to euthanise, and no other drugs were given, and the whale died after more than 6 hours.
- A whale was stranded in the surf and was estimated to be 18 meters in length. It was pre-medicated before being euthanised with ballistics, and it took less than 6 hours to die.
- A whale was stranded in the surf and was accurately measured to be 10 meters in length. It was pre-medicated before being euthanised via exsanguination, and it took more than 6 hours to die.
- A whale was stranded in the surf and was accurately measured to be 22 meters in length. The decision was made not to euthanise, although pre-medication was given. It took less than 60 minutes to die.
- A whale was stranded on the beach and it was estimated to be 22 meters in length. It was euthanised via exsanguination, without pre-medication, and it took less than 60 minutes to die.
- A whale was stranded in the surf, and was estimated to be 22 meters in length. It was euthanised via cranial implosion, without pre-medication, and it took seconds to die.
- A whale was stranded on the beach and was estimated to be 18 meters in length. It was euthanised with KCl, without pre-medication, and took less than 60 minutes to die.
- A whale was stranded on the beach and was accurately measured to be 10 meters in length. It was pre-medicated before being euthanised with ballistics, and it took less than 60 minutes to die.

- A whale was stranded in the surf and was accurately measured to be 22 meters in length. It was pre-medicated before being euthanised with pentobarbital, and it took seconds to die.
- A whale was stranded on the beach and was estimated to be 18 meters in length. The decision was made not to euthanise, although pre-medication was given, and it took less than 60 minutes to die.
- A whale was stranded on the beach and was accurately measured to be 6 meters in length. It was euthanised with ballistics, without pre-medication, and was dead within seconds.
- A whale was stranded in the surf and was accurately measured to be 18 meters in length. It was pre-medicated before being euthanised via exsanguination, and it took seconds to die.
- A whale was stranded in the surf and was accurately measured to be 6 meters in length. It was pre-medicated before being euthanised via cranial implosion, and it took less than 60 minutes to die.
- A whale was stranded on the beach and was accurately measured to be 22 meters in length. It was euthanised with KCl, without pre-medication, and it took less than 6 hours to die.
- A whale was stranded in the surf and was accurately measured to be 14 meters in length. It was euthanised with KCl, without pre-medication, and it took less than 60 minutes to die.
- A whale was stranded in the surf and was accurately measured to be 14 meters in length. It was euthanised with pentobarbital, without pre-medication, and took less than 6 hours to die.
- A whale was stranded in the surf and was estimated to be 8 meters in length. It was pre-medicated before being euthanised via exsanguination, and it took less than 6 hours to die.
- A whale was stranded in the surf and was accurately measured to be 6 meters in length. The decision was made not to euthanise, although pre-medication was given, and it took less than 6 hours to die.
- A whale was stranded in the surf and was estimated to be 22 meters in length. It was pre-medicated before being euthanised with KCl, and it took less than 6 hours to die.
- A whale was stranded in the surf and was estimated to be 14 meters in length. It was pre-medicated, before being euthanised with ballistics, and it took less than 6 hours to die.
- A whale was stranded on the beach and was estimated to be 10 meters in length. The decision was made not to euthanise, and no other drugs were given, and it had died within seconds.
- A whale was stranded on the beach was and was estimated to be 6 meters in length. It was pre-medicated before being euthanised with pentobarbital, and it took seconds to die.
- A whale was stranded in the surf and was estimated to be 10 meters in length. It was pre-medicated before being euthanised with KCl, and it took less that 60 minutes to die.
- A whale was stranded on the beach and was estimated to be 6 meters in length. It was euthanised via exsanguination, without pre-medication, and it took less than 6 hours to die.

- A whale was stranded in the surf and was estimated to be 10 meters in length. It was pre-medicated before being euthanised via cranial implosion, and it took less than 6 hours to die.
- A whale was stranded on the beach and was estimated to be 6 meters in length. It was pre-medicated before being euthanised with KCl, and it took less than 6 hours to die.
- A whale was stranded in the surf and was estimated to be 8 meters in length. It was euthanised with pentobarbital, without pre-medication, and it took less than 60 minutes to die.
- A whale was stranded in the surf, and was accurately measured to be 8 meters in length. It was euthanised with ballistics, without pre-medication, and took less than 60 minutes to die.
- A whale was stranded on the beach and was estimated to be 8 meters in length. It was pre-medicated before being euthanised with KCl, and it took seconds to die.
- A whale was stranded on the beach and was accurately measured to be 18 meters in length. It was pre-medicated before being euthanised with pentobarbital, and it took more than 6 hours to die.
- A whale was stranded on the beach and was estimated to be 10 meters in length. It was euthanised with pentobarbital, without pre-medication, and took less than 6 hours to die.
- A whale was stranded in the surf, and was accurately measured to be 18 meters in length. It was euthanised with KCl, without pre-medication, and took less than 6 hours to die.
- A whale was stranded on the beach and was estimated to be 14 meters in length. It was euthanised via cranial implosion, without pre-medication, and took more than 6 hours to die.
- A whale was stranded on the beach and was accurately measured to be 6 meters in length. The decision was made not to euthanise, and no other drugs were given. It took less than 6 hours to die.
- A whale was stranded in the surf and was estimated to be 18 meters in length. It was euthanised via cranial implosion, without pre-medication, and took seconds to die.
- A whale was stranded in the surf and was estimated to be 6 meters in length. It was euthanised via exsanguination, without pre-medication, and it took less than 60 minutes to die.
- A whale was stranded in the surf and was estimated to be 6 meters in length. It was pre-medicated before being euthanised with KCl, and took seconds to die.
- A whale was stranded in the surf and was accurately measured to be 10 meters in length. It was euthanised using KCl, without pre-medication, and took seconds to die.
- A whale was stranded in the surf and was accurately measured to be 14 meters in length. It was euthanised with KCl, without pre-medication, and took more than 6 hours to die.
- A whale was stranded on the beach and was accurately measured to be 14 meters in length. It was pre-medicated before being euthanised via exsanguination, and it took seconds to die.

- A whale was stranded on the beach and was accurately measured to be 8 meters in length. It was pre-medicated before being euthanised with KCl, and it took seconds to die.
- A whale was stranded in the surf and was estimated to be 14 meters in length. The decision was made not to euthanise, although pre-medication was given, and it was dead within seconds.