

# Behaviour and Environment Evidence Base

## Reliability testing procedure - Observer



This document outlines the procedure for completing reliability testing for behavioural observations when using the Behaviour and Environment Evidence-Base (BEEB) ethograms and ZooMonitor projects. To complete reliability testing, you will need to pass each stage to proceed to the next.

Reliability testing has 3 stages:

1. Ethogram quiz (passed with 80%)
2. Behavioural repertoire video reliability (passed with 75%)
3. ZooMonitor reliability (passed with 75%)

Document list:

- Reliability testing procedure\_Observer (this document)
- Ethogram
- Ethogram quiz (Word document)
- Video reliability entry sheet (Excel sheet)

The following is a guidance on the steps to complete the reliability testing with your reliability testing coordinator. Certain steps are suggestions on how to practice recognising behaviours:

### Getting to know the ethogram:

1. Familiarise yourself with the taxon ethogram. Note the details in the definitions and the specificity of them.
2. Observe the species while having the ethogram at hand and begin identifying the different behaviours as practice.

### Stage 1: Ethogram quiz

1. Once you have learned the ethogram well and feel confident in your understanding, you should take the ethogram quiz. Do not have the ethogram or ZooMonitor project open while completing the quiz.
2. Return the quiz to the reliability testing coordinator.

- a. If you have passed with 80% or more, you will receive your quiz back with the answer key. Study the questions you got incorrect and proceed to the next step.
  - b. If you have received less than 80%, you will receive your results back and know which questions you got correct and incorrect, but with no answer key. Study the ethogram again, and retake the quiz until you pass.
3. Familiarise yourself with ZooMonitor and practice using the taxon ZooMonitor project with your animals. Be sure to enter “practice” in the notes at the beginning of the session. You can use practice sessions to practice identifying the behaviours and using ZooMonitor.

## Stage 2: Repertoire reliability test

1. In this step, you will follow the directions in the “Video reliability entry sheet” excel document. Enter your results in the “Repertoire reliability” tab.
2. Return your excel sheet with your results to the reliability testing coordinator.
  - a. If you have passed with 75% or more, you will receive your results with the answer key. Study your results and proceed to the next step.
  - b. If you have received less than 75%, you will receive your results back indicating where your responses were correct and incorrect, but without an answer key. Study your results, conduct some more practice observations and retake the test until you pass.

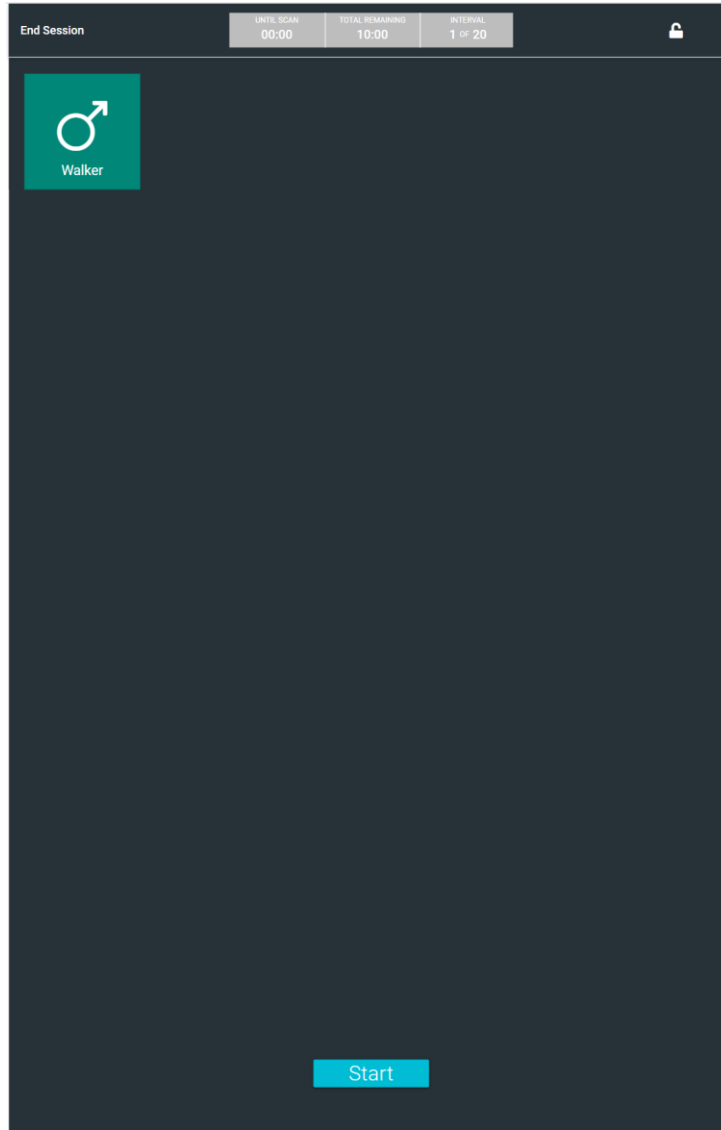
## Stage 3: ZooMonitor reliability test

These directions will use the link to the ZooMonitor video sent to you by your reliability coordinator.

1. Open up ZooMonitor and update. Follow the link to the video you will be using for the reliability test and pause it to prevent it from playing.
2. Select the “BEEB Bears” Community project in ZooMonitor.
3. Deselect all bears if there are multiple and select just one.
4. Respond to the pre-session questions with whichever responses. Since all questions must be answered to proceed, but the answers are not known, you can enter whatever responses.
5. In the “Notes” section write “Reliability video \_\_” filling in the blank with the video number that is in the video name. This screen should look like below (with your responses and video #) before proceeding.

The screenshot shows the Zoomonitor app interface for a session summary. At the top, there is a dark header with the Zoomonitor logo and a 'Download Updates' button. Below this is a teal bar with the text 'Session Summary'. The main title is 'Bear welfare - Behaviour and Environment Evidence Base (BEEB) (COMMUNITY)'. There are three buttons: '+ Start Session' (teal), 'Cancel' (white), and 'Adjust Session Settings' (white). The 'Focal Subjects' section has a 'Select / Unselect All' checkbox (checked) and three individual checkboxes for 'Walker (M)' (checked), 'Arktos (M)' (unchecked), and 'Brodie (M)' (unchecked). The 'Session Questions' section includes several text input fields: 'Weather condition' (Sunny/Clear: Sunny, Partly sunny, Partly cloudy; Clear (nighttime)), 'Temperature (Celsius)' (1), 'Humidity (%)' (1), 'Wind (km/h)' (1), 'Noise level (dB)' (1), 'Access' (Full access to all enclosure areas), 'Enrichment item' (None), 'Visitors present' (0), and 'Carcass present' (Yes). The 'Notes' section has a large text area containing 'Reliability video 1'.

6. Press “Start session”
7. Pause at the screen below before you begin the video



8. In the video you will hear “I am going to be pressing start in 3...2...1...start”.
9. Play the video and press “Start” on the screen above when “start” is said after “3...2...1”
10. Note that during the session you can ignore modifiers for “Feeding/Foraging” and social modifiers specifying an individual bear. To ignore these modifiers, simply press “Save” without selecting the modifiers.
11. At the end of the session make sure to press “Save session”
12. Saving does not upload the session for your reliability coordinator to see, so be sure that you upload the session as well afterward. How to do this is in the ZooMonitor tutorial document. If you decide to repeat one of the sessions, make sure to only upload the attempt you want scored.
13. Your reliability coordinator will then score your session.

- c. If you passed with 75% or more, congratulations, you have passed reliability testing and can begin observations.
- d. If you have received less than 75%, you will still receive your results back with the answer key. Study your results and conduct some more practice observations. The reliability testing coordinator will send you a different video for your next attempt(s).

**Once you have passed all three reliability testing stages, you can begin observations.**