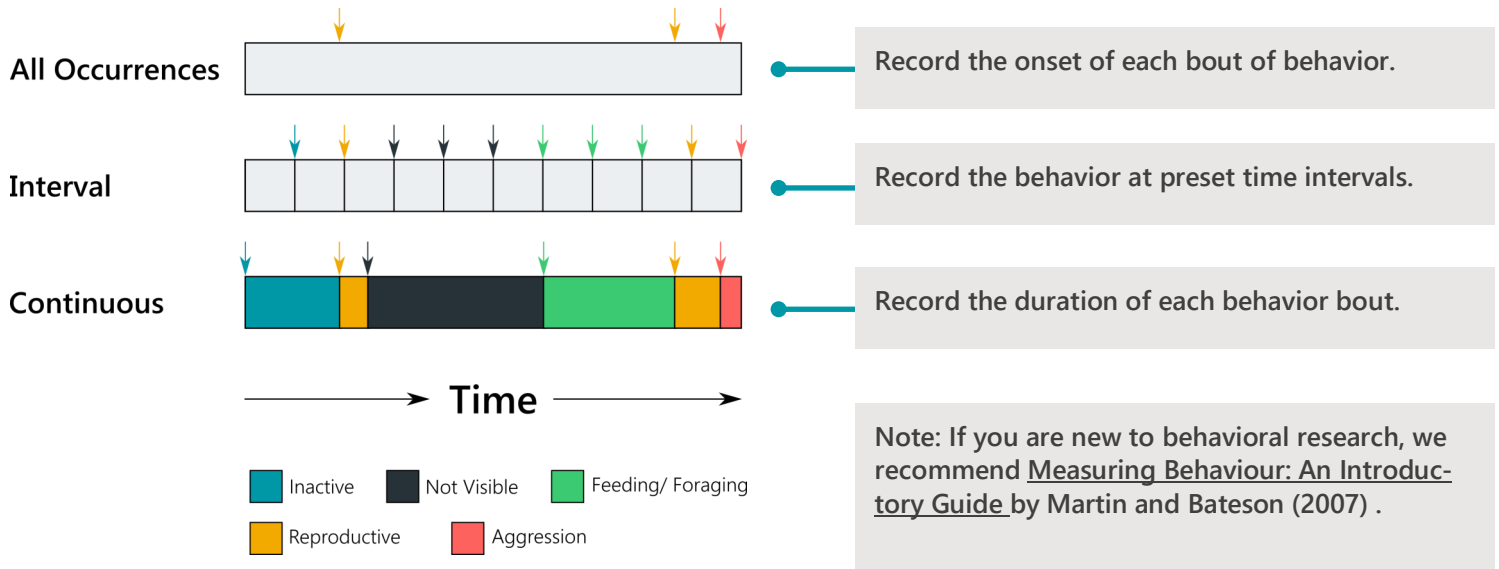# Behavioral Observations

Behavior Sampling in ZooMonitor

ZooMonitor allows you to record behavior using any combination of three types of sampling methods: All Occurrence, Interval, and Continuous recording. Below you can see an example of how data would be recorded for a project with All Occurrence sampling of reproductive and aggressive behaviors, and Interval and Continuous recording of all behaviors.

All Occurrences — Record the onset of each bout of behavior.

Interval — Record the behavior at preset time intervals.

Continuous — Record the duration of each behavior bout.

Time

- Inactive
- Not Visible
- Feeding/ Foraging
- Reproductive
- Aggression

Note: If you are new to behavioral research, we recommend Measuring Behaviour: An Introductory Guide by Martin and Bateson (2007) .

Creating a Behavioral Observation Project

In your Admin section, you can create new Behavioral Observation projects. When you are creating a new project, you need to first complete the information in the Project Settings tab (see below) and click Save. Then, the additional project tabs will be available for you to finish creating your project.

Behavioral Observation › Pygmy Hippo Monitoring

Project Settings | Focal Subjects | All Occurrence Channel | Continuous Channels | Interval Channels | Additional Questions | Observers

Name:
Pygmy Hippo Monitoring

Description:
This is a project to monitor the behavior of two pygmy hippos.

Study Duration (Minutes):
10.00

✓ Active

SAVE   CANCEL   🗑 DELETE

Project Settings—name your project and set the duration of observation sessions.

Focal Subjects—add individual animals to your project (you must first add these animals to your configuration, see Getting Started guide for details).

All Occurrence, Continuous, and Interval Channels—add recording channels to your project with different sampling methods and create behaviors within those channels.

Additional Questions—add independent variables to be recorded at the start of each observation session.

Observers—add observers that are eligible to record data on the project (you must first have created these individuals for your configuration, see Getting Started guide for details).

Behavioral Observations

ZOOMONITOR

Recording Behavior in ZooMonitor

The recording screen in the ZooMonitor App is organized into separate rows for each behavior channel. You can create as many channels and behaviors as needed. Given your project settings, you may need to scroll down to view additional channels, and scroll across the channels to view additional behaviors.

Header

Focal Row

All-Occurrence Channel

Continuous Channel

Interval Behavior Channels

Interval Space Use Channel

Multiple Channels—you can create multiple Interval and Continuous behavior channels to record different types of behaviors. You can only have one All Occurrence channel (behaviors are not mutually exclusive), and one interval Space Use Channel (See below).

Lock Button—to prevent accidental screen touches, you can lock the screen with the lock button.

Viewing Descriptions—when creating a new behavior or focal animal in Admin you can add descriptions. Click the ellipses in the top right corner of the recording tile to view these descriptions when recording data.

Channel Subgroups—if you have many behaviors within a channel, you can specify subgroups when creating the behaviors to organize them in separate rows (e.g. Social, Solitary, Visibility).

Behavior/ Social Modifiers—modifiers allow you to record additional details of a behavior (e.g. specify Initiator/ Recipient for a social behavior and select the social partner). Modifiers are configured when you create a behavior and entered as a comma separated list. You can have up to three separate types of behavior modifiers and one social modifier per behavior. When recording data, modifiers are presented on a pop-up screen after selecting the behavior.

Deleting Behaviors—click the blue text next to the channel name to delete the active recorded behavior. You can delete previously recorded all occurrence behaviors. Only the active continuous/ interval behavior can be modified..

Space Use Images—any image in JPG or PNG format can be uploaded to a project configuration in Admin. Images should ideally be in a 1:1 aspect ratio of 600x600 px. Larger images and other aspect ratios will be scaled down to fit but smaller images can not be scaled up.

Recording Space Use—tap the map image to denote the location of your focal animal using a colored dot. The location will be recorded as a pixel coordinate and, optionally, using user-specified grid dimensions.

Map Scrolling/ Zooming—you can scroll down on the screen by touching above the map or on side margins of the map. You can also pinch-to-zoom on the map and scroll around the zoomed in map.