

ETHOGRAM FOR GENERAL BEHAVIOUR MONITORING

Below is a list of common behaviours to macaques which can be used to describe their general activity. Not all behaviours need to be used or they can be grouped into general categories, depending on your needs. Behaviours can also be further broken down if you want to focus on particular details. Codes are a quick and easy way to score behaviour in real time. The codes are a suggestion – take the time to learn them before scoring behaviours in real time or create your own. Symbols are a great alternative to letter codes (used here).

Behaviour	Definition	Code
Stationary/resting	Focus animal is not asleep but not engaging in other behaviours	R
Sleeping	Focus animal has eyes closed and appears to be asleep	S
Locomotion	Focus animal is walking, running, jumping etc.	L
Aggressive (general)	Other aggressive behaviours which are not listed individually – can include: biting, hitting, grabbing,	AG
Submissive (general)	Other submissive behaviours which are not listed individually – can include: fear grin, lip smack with fear grin, avoiding a dominant animal, rump present etc.	SM
Affiliative (general)	Other affiliative behaviours which are not listed individually – can include: hugging, sleeping together,	AF
Grooming	Focus animal is grooming another	GG
Groomed	Focus animal is being groomed	GD
Interaction with baby	Focus animal, which may be the mother or another individual, inspecting, playing with, grooming, nursing, hugging etc. an infant	B
Self-directed	Includes behaviours such as self-grooming, inspecting wounds, playing with self, self-hugging etc.	SD
Lip smack	Rapid lip movements, with or without tongue, directed towards a conspecific or a person	LS
Object manipulation	Touching, playing with, moving, licking, biting etc. an object, such as enrichment or enclosure fixings	O
Threat	Open mouth	T
Displace	Focus animal moves to where another is sitting who then moves away	DC
Displaced	Focus animal moves away when another comes over to their location	DD
Flee	Focus animal is moving quickly away from another, usually in response to a threat or other aggressive behaviour	FL
Foraging	Looking for food, eating, drinking	F
Vigilance	Focus animal is looking up, down, to the side, with or without head movement	V
Sexual behaviour	Elicitation, mounting, mating etc.	X
Yawn	With or without exposed teeth or maintained eye contact	Y
Stereotypic behaviour	Pacing, rocking, pulling out hair, head tossing, saluting, eye rubbing etc.	Z
Out of sight	Focus animal cannot be seen	OS

If your goal is to create a record of activity levels rather than determine the ethogram of the monkeys, the following list may be more applicable.

Behaviour	Description	Code
Activity 1	Sleeping	1
Activity 2	Resting	2
Activity 3	Stationary with vigilance	3
Activity 4	Stationary with self-directed behaviour or small manipulations of an object	4
Activity 5	Stationary with conspecific directed behaviours or large (active) manipulations of an object	5
Activity 6	Foraging	6
Activity 7	Walking	7
Activity 8	Faster-paced locomotion, including running and jumping	8

If, instead of looking at behaviours, you want to get an idea of how an animal is using its environment, you may want to use something like the following list. Break the room, mentally, into three vertical levels and three horizontal levels, and identify the types of substrates in the room which the animal can use to sit on or get from one location to another. The following list includes common features of macaque housing. The codes used here are not as obviously intrinsic in case you want to include these with the behavioural codes in your scoring. Alternatively, by using different columns to score behaviours and housing use, codes can include the same letters/symbols between the two categories.

Substrate	Description	Code
Ground	Focus animal is on the ground floor of its housing	HGH
Middle level	Focus animal is in the middle section (off the floor) of its vertical space	HMH
Top level	Focus animal is in the top level of its vertical space	HTH
Front	Focus animal is in the front section of its housing	HFV
Middle	Focus animal is in the middle section of its housing	HMV
Back	Focus animal is at the back of its housing	HBV
Caging	Focus animal is using the bars or mesh to climb	HC
Platform	Focus animal is sitting or locomoting on a flat surface	HPF
Fire hose	Focus animal is sitting, locomoting or swinging on fire hose	HF
Rope	Focus animal is sitting, locomoting or swinging on rope	HR
Pole	Focus animal is sitting, locomoting or swinging on a type of pole	HP
Enrichment item	Focus animal is sitting, locomoting or swinging on an enrichment item, such as a horse jump float or tyre	HE
Hatch	Focus animal is sitting in the hatchway between two sections of its housing	HH

5 SEC INTERVAL SCORING SHEET (1 min)

Scorer: _____ Date: _____ Time start: _____ Animal: _____

Time	Behaviour	Location	Time	Behaviour	Location
0			35		
5			40		
10			45		
15			50		
20			55		
25			60		
30					

EXAMPLE

Scorer: John Date: 27/6/15 Time start: 10:22 Animal: M384

Time	Behaviour	Location	Time	Behaviour	Location
0	R	HDF/HTH/HMV	35	F	HGH/HMV
5	R	HDF/HTH/HMV	40	F	HQH/HMV
10	DD	HDF/HTH/HMV	45	SM	HGH/HMV
15	SD	HDF/HMH/HFV	50	F	HGH/HMV
20	SD	HDF/HMH/HFV	55	L	HF/HGH/HBV
25	F	HGH/HFV	60	V	HMH/HBV
30	V	HGH/HFV			

CONTINUOUS SCORING SHEET

Scorer: _____ Date: _____ Time start: _____ Animal: _____

Time	Behaviour	Time	Behaviour

EXAMPLE

Scorer: Rachel Date: 13/1/2012 Time start: 14:05 Animal: Trinity

Time	Behaviour	Time	Behaviour
0s	GD	16s	F
1s	V	18s	L
5s	GD	20s	F
7s	A	25s	V
9s	L	26s	F
10s	F	27s	V
15s	T	30s	L

Dr Caralyn Kemp