



## KS4 Animal Behaviour

Teacher's pack

## GCSE Animal behaviour teachers pack

This pack has been designed to assist teachers during their attendance of the 14-16 (GCSE) Animal Behaviour Conference

### Resources

Please bring the following resources with you:

- Pens/pencils/rubbers.
- A photocopied primate worksheet for each student; please select the correct worksheet for the ability of your students.
- Primate data collection worksheets for each student pair.
- Clipboards (if you do not have any please inform us and we can lend you some).
- A stopwatch if you are timing the observations, otherwise please ensure students have their own equipment for timing the observations.

### 10:30 – 11:30 Introduction to animal behaviour

This session takes place in the Science and Learning Centre. Please ensure that you are there ready to start at 10:30am.

An education officer will lead the session which focuses on different types of animal behaviour, including a selection of innate and acquired behaviours. It also looks at reasons why an animal behaviour study might be undertaken and how to carry out an animal behaviour study. The session includes a practical animal behaviour study in the classroom using live animals (rats).

At the end of this session, the education officer will describe where the primates can be found for your study out in the park.

### 11:30 – 12:40 Study of primate behaviour

This section of the day is undertaken with the guidance of you, the teacher.

As the leader of this section of the day, you must ensure that the park rules are adhered to. Year 10 / 11 students can, for short periods of time, be out of direct sight of adult leaders in order to carry out specific tasks. Students should be in small groups and not alone if they are out of sight of group leaders. Leaders must be aware of the location of the students at all times in case of emergency.

Students should work in pairs during the behaviour study.

Please lead the students to the primate enclosures where the students will undertake a preliminary investigation of their subject animals using the worksheets provided within this teachers pack, the ID signs and the enclosures themselves. In Appendix I there is a list of the information for you to check your students' answers against. It is essential that students are quiet during this period to allow the primates to acclimatise to their presence. We also recommend that you do not eat near the enclosures as this will directly affect the primates' behaviour.

Please note that there are three variations of the worksheets: higher ability, middle ability and lower ability.

For the observational study, one of the pair needs to be able to see the individual that they have identified as the focus of their study. They should have already identified a good location for their observations on the worksheet. Again students must remain calm and quiet to ensure that the behaviour of the primate group is not affected.

Students should record the general behaviour of their primate every 30<sup>th</sup> second for a period of 10 minutes on the data tables. The method used should be exactly the same as that used during the rat behaviour study.

Please make sure that students start and finish at roughly the same time and that they have completed the full 10 minute period of observations and tallied up their results ready for the feedback session.

Students must be back at the Science and Learning Centre for 12:45pm.

### **12:45 – 1:30 Behavioural study discussion**

This session takes place in the Science and Learning Centre with the same education officer as session 1. The education officer will run through an exemplar set of data and then students will write up their study, feedback their findings and discuss the variables that will have affected their results.

Please take the students' data and worksheets away with you for further discussion at school. You could develop on the conference and discuss how to improve the reliability of their data.

The following pages contain the worksheets required for the primate observations out in the park. These are in the order of higher ability, middle ability and then lower ability.

## Primate behaviour study

### **Animal information:**

Record as much information as you can about the animal you are going to monitor. E.g. species, distribution in the wild, habitat, diet etc.

Hint: The animal identification signs are a good place to find out information!

### **Behavioural information:**

As you see them, list all the behaviours the animal you are monitoring shows.



Draw a plan of the enclosure in the space below and label all of the items in the enclosure, e.g. trees, logs, ropes, boxes, feeding platforms etc.

Suggest an area that would be the best place to stand to observe your animal.



## Primate behaviour study

### Animal Information:

Find the animal identification sign for the animal you are going to monitor.

These signs are a good place to start in order to find out information about the animal you are going to monitor.

Type of animal: .....

Country the animal comes from: .....

Habitat the animal lives in the wild: .....

Diet in the wild: .....

Any other information: .....

As you see them, list the behaviours the animal you are monitoring shows.

1. ....

8. ....

2. ....

9. ....

3. ....

10. ....

4. ....

11. ....

5. ....

12. ....

6. ....

7. ....



Draw a plan of the enclosure in the space below and label all of the items in the enclosure, e.g. trees, logs, ropes, boxes, feeding platforms etc.

Suggest an area that would be the best place to stand to observe your animal.

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## Primate behaviour study

### Animal Information:

Find the animal identification sign for the animal you are going to monitor.

These signs are a good place to start in order to find out information about the animal you are going to monitor.

We are observing a ..... These primates come from the following countries

.....

In the wild they live in ..... habitats. In the wild, they would eat..... , ..... and .....

As you see them, tick the behaviours you see the animal you are monitoring doing.

- |   |  |
|---|--|
| <input type="checkbox"/> Eating                   | <input type="checkbox"/> Calling                   |
| <input type="checkbox"/> Sleeping                 | <input type="checkbox"/> Painting                  |
| <input type="checkbox"/> Drinking                 | <input type="checkbox"/> Observing                 |
| <input type="checkbox"/> Playing                  | <input type="checkbox"/> Reading                   |
| <input type="checkbox"/> Climbing                 | <input type="checkbox"/> Resting                   |
| <input type="checkbox"/> Walking                  | <input type="checkbox"/> Grooming itself           |
| <input type="checkbox"/> Flying                   | <input type="checkbox"/> Grooming other            |
| <input type="checkbox"/> Leaping                  | <input type="checkbox"/> Skipping                  |
| <input type="checkbox"/> Looking                  | <input type="checkbox"/> Defecating (having a poo) |
| <input type="checkbox"/> Stretching               | <input type="checkbox"/> Swinging                  |
| <input type="checkbox"/> Yawning                  |  |
| <input type="checkbox"/> Wrestling                |  |
| <input type="checkbox"/> Urinating (having a wee) |  |
| <input type="checkbox"/> Sitting                  |  |



Draw a plan of the enclosure in the space below and label all of the items in the enclosure, e.g. trees, logs, ropes, boxes, feeding platforms etc.

Suggest an area that would be the best place to stand to observe your animal.

.....  
.....  
.....





## Appendix I

### **Cotton-top tamarin**

Scientific name: *Saguinus oedipus*  
Distribution: South America  
Habitat: Tropical forest

Diet in the wild: Fruit, insects, small animals  
Natural predators: Snakes, birds of prey  
Social structure: Small groups  
Status: Critically endangered



### **Golden-headed lion tamarin**

Scientific name: *Leontopithecus chrysomelas*  
Distribution: Brazil  
Habitat: Tropical forest

Diet in the wild: Fruit, insects, small animals  
Natural predators: Snakes, birds of prey  
Social structure: Small groups  
Status: Endangered



### **Emperor tamarin**

Scientific name: *Saguinus imperator subgrisescens*  
Distribution: Brazil  
Habitat: Tropical forest

Diet in the wild: Fruit, insects, small animals  
Natural predators: Snakes, birds of prey  
Social structure: Small groups  
Status: Not currently threatened



### **Douroucouli**

Scientific name: *Aotus lemurinus griseimembra*  
Distribution: Columbia, Costa Rica and Panama  
Habitat: Tropical to dry forest

Diet in the wild: Fruit, flowers, leaves and insects  
Social structure: 1 male and 1 female with offspring  
Status: Vulnerable



### **White faced saki monkey**

Scientific name: *Pithecia pithecia*  
Distribution: South America  
Habitat: Tropical forests

Diet in the wild: Fruit, seeds, flowers and small animals  
Social structure: Family groups  
Status: Not currently threatened



### **Silvery Marmoset**

Scientific name: *Mico argentatus*  
Distribution: South America (Brazil)  
Habitat: Tropical forests

Diet in the wild: Animals, Fruit, Gum, Invertebrates  
Social structure: Family groups  
Status: Least concern



### **Sulawesi crested macaque**

Scientific name: *Macaca nigra*  
Distribution: Indonesia  
Habitat: Tropical rainforest

Diet in the wild: Mostly fruit, but also leaves, flower stalks, insects and small vertebrates

Social structure: Groups  
Status: Critically endangered



### **Siamang gibbon**

Scientific name: *Hylobates syndactylus*  
Distribution: Malaysia, Sumatra  
Habitat: Tropical rainforest

Diet in the wild: Leaves and fruit

Social structure: Family groups  
Status: Not currently threatened



### **Ring-tailed lemur**

Scientific name: *Lemur catta*

Distribution: Madagascar  
Habitat: Scrub and forest

Diet in the wild: Fruit, leaves, flowers  
Social structure: Groups of 5-30 individuals  
Status: Not currently threatened



### **Red-ruffed lemur**

Scientific name: *Varecia variegata rubra*

Distribution: Madagascar  
Habitat: Rainforest

Diet in the wild: Fruit, seeds, leaves, nectar  
Social structure: Pairs or small groups  
Status: Endangered



### **Black and white-ruffed lemur**

Scientific name: *Varecia variegata variegata*

Distribution: Madagascar  
Habitat: Rainforest

Diet in the wild: Fruit, seeds, leaves, nectar  
Social structure: Pairs or small groups  
Status: Critically endangered



### **Gentle lemur**

Scientific name: *Haplemur griseus alaotrensis*

Distribution: By Lake Alaotra, Madagascar  
Habitat: Reed beds

Diet in the wild: Shoots, stems, leaves  
Social structure: Family groups  
Status: Critically endangered





Cotton-top tamarin



Emperor tamarin



White faced saki monkey



Lemurs



Sulawesi crested macaque



Siamang gibbon



Golden-headed lion tamarin



Silvery Marmoset