Concept Plan CF 2018-118

Memory of recent actions in large-brained mammals (*Elephas maximus*).

Perth Zoo Science

Project Core Team

Supervising Scientist	Peter Mawson
Data Custodian	Peter Mawson
Site Custodian	

Project status as of Nov. 22, 2018, 2:42 p.m.

Closure pending approval of closure form

Document endorsements and approvals as of Nov. 22, 2018, 2:42 p.m.

Project Team	granted
Program Leader	granted
Directorate	granted

Memory of recent actions in large-brained mammals (*Elephas maximus*).

Biodiversity and Conservation Science Program

Perth Zoo Science

Departmental Service

Service 6: Conserving Habitats, Species and Communities

Aims

1.- Determine if an Asian elephant is capable of understanding an abstract rule such as the “repeat” command.

2.- Determine if an Asian elephant is capable of discriminating and identifying past actions and performing responses that clearly reveal the extent to which past actions were identified and remembered.

3.- Determine the abilities of an Asian elephant to represent their own recently performed behaviours in working memory.

4.- Determine the ability of such representations to affect future behaviours.

Hypothesis:

1.- The Asian elephant will be able to understand and abstract rule as the “repeat” command.

2.- The Asian elephant will be capable of discriminating and identifying past actions and perform responses that clearly reveal the extent to which past actions were identified.

3.- The Asian elephant will show abilities to represent their own recently performed behaviours in working memory.

4.- The Asian elephant will show the ability to address information in the future based on past actions or behaviours.

Expected outcome

The project will provide species-appropriate challenges, opportunities and stimulation for the Asian elephant, as recommended by the World Association of Zoos and Aquariums.

Strategic context

The management of elephants in captivity and the real and perceived welfare states of those animals receive intense public interest. This project is aimed at utilizing the elephant’s sensory and cognitive abilities in order to provide enrichment and improved well-being for the elephants, according to recommendations from the World Association of Zoos and Aquariums.0.05

Expected collaborations

The outcomes of the this research will be applicable to other Asian elephant collections in the Australasian Zoo regional group.

Proposed period of the project

March 8, 2018 – Dec. 31, 2019

Staff time allocation

Role	Year 1	Year 2	Year 3
Scientist Technical Volunteer Collaborator			

Indicative operating budget

Source	Year 1	Year 2	Year 3
Consolidated Funds (DBCA) External Funding			