

## **Definitions and Reporting Principles for Animal Vital Statistics included in the Ocean Park Corporation 2019-2020 Annual Report**

### **Section 1 – Scope**

Ocean Park Corporation (“the Park”) maintains a livestock inventory register (“Register”) of all animals managed under human care on its premises and all changes in animal numbers are recorded in the Register. The animals reported in the Animal Vital Statistics table (“Statistics”) only include vertebrate species owned by the Park or under breeding loan whereby any offspring would be owned by the Park, during the year ended 30th June 2020, subject to the following exceptions:

- Freshwater fish and amphibians native to Hong Kong maintained at the Park’s facilities for breeding and educational display and which remain the property of the HKSAR Government, including the offspring of those animals.
- Animals that the Agriculture, Fisheries and Conservation Department (“AFCD”) confiscated or rescued and which remain the property of the HKSAR Government.

### **Section 2 – Animal Groups**

The animals are reported in the Statistics in groups of marine mammals, terrestrial mammals, birds, reptiles, amphibians and fish.

#### ***Marine Mammals***

Marine mammals are in the class Mammalia. They are warm-blooded and some species have hair. Females give birth to live young and have mammary glands that secrete milk for the nourishment of their offspring. Marine mammals represent a diverse group of species that rely on the marine environment for their existence. There are five species of marine mammals included in the Statistics, namely the Indo-Pacific bottlenose dolphin, California sea lion, spotted seal, harbour seal and walrus. All marine mammals are checked daily by the Park’s animal caretakers.

#### ***Terrestrial Mammals***

Terrestrial mammals are in the class Mammalia. They are warm-blooded and make the land their home for part or all of their lives. Females give birth to live young and have mammary glands that secrete milk for the nourishment of their offspring. There are 13 species of terrestrial mammals in the Statistics, namely the giant panda, Asian small-clawed otter, red panda, Arctic fox, Southern two-toed sloth, pygmy marmoset, capybara, kinkajou, Sichuan golden snub-nosed monkey, red-handed tamarin, red-necked wallaby, koala and slender-tailed meerkat. All terrestrial mammals are checked daily by the Park’s animal caretakers.

#### ***Birds***

Birds are in the class Aves. They are feathered, winged, bipedal, warm-blooded, egg-laying, vertebrate animals. There are 63 species of birds in the Statistics, including three species of penguins and 60 species of other birds, such as pigeons, doves, birds of prey, macaws, cockatoos, toucans and passerines. All individual birds are maintained for guest encounters, managed breeding programmes, or public presentations that are listed under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (“CITES”) Appendices I or II, and are checked daily by the Park’s animal caretakers. The remaining birds are managed in aviaries and a census of these birds is taken quarterly. During this census, techniques for counting individual birds and flocks within the aviaries include selective counting for easily identifiable species or individuals and group counting for small and medium sized flocks.

### ***Reptiles***

Reptiles are in the class Reptilia. They are an evolutionary grade of animals, comprising turtles, alligators, crocodiles, snakes and lizards. Unlike mammals and birds, living reptiles are covered with scales and are cold-blooded. There are 16 species of reptiles in the Statistics comprising tortoises, turtles, alligators, snakes and lizards. All reptiles are checked daily by the Park's animal caretakers.

### ***Amphibians***

Amphibians are in the class Amphibia. They live in a wide variety of habitats, mostly in terrestrial or freshwater ecosystems. Amphibians typically begin life as larva living in water, where the young undergo metamorphosis from larva with gills to an adult air-breathing form with lungs. There are 11 species of amphibians in the Statistics consisting of frogs and salamanders. All amphibians are checked daily by the Park's animal caretakers.

### ***Fish***

A fish is a limbless vertebrate with gills and fins living in water. Most fish are cold-blooded. There are 311 species of fish in the Statistics comprising both freshwater and marine species. Fish identifiable individually such as sharks and rays, or listed under CITES Appendices I or II, are checked daily by the Park's aquarists. The others are managed in schools and a census is taken monthly, where photographs of the schools may be taken to aid counting and for estimating the population of each species. However, there are inherent limitations in the accuracy of the number of fish estimated through the monthly census counts due to the three-dimensional configuration of fish tanks, the presence of tank furniture (e.g. plants, corals, rocks, etc.), as well as the dynamic nature of fish that school or aggregate in groups. A count is also performed every two months for those schools of fish that are difficult to count or estimate. Occasionally, some fish are caught and moved to other tanks, at which time the number of fish in a tank can be further verified.

## **Section 3 – Reporting Principles**

The animal groups are delineated into acquisitions and dispositions, which have been assigned the following definitions and principles for reporting in the Statistics. All acquisitions and dispositions maintained in the Register are reported to AFCD pursuant to the Park's exhibition licence or any other permits.

### ***Births***

Births include live-births and hatchings (in the case of birds, amphibians, certain reptiles and certain fish species). The date of birth is recorded as close as possible to when the animal is known to have been born. With certain species, there may be instances in which a birth occurs and the parent protects the offspring, making it not immediately visible to the Park's animal caretakers. In these instances, the date of birth may be calculated.

Births of mammals, birds, reptiles, amphibians and fish are included in the Statistics from the date of birth, hatching or metamorphosis.

### ***Other Acquisitions***

Other acquisitions include breeding loans, donations received, purchases, adoptions, field collection and stock adjustments for schooling fish and flocks of aviary birds. The date of arrival is recorded in the Register when an animal physically arrives at the Park or the Park takes ownership of an animal prior to it being transported to the Park. Stock adjustments for all fish and birds are recorded in the Register and Statistics when the census is taken.

***Mortalities***

The death of an animal is recorded in the Register at the time when a veterinarian declares that the animal has deceased. In some instances (such as with birds in a flock and schooling fish), a death may be recorded in the Register when a dead body is observed and recovered. Deaths may also be recorded in the Register when known animals are no longer sighted and the likelihood of their leaving an enclosure or tank is extremely low. This would apply in cases where a fish may have been predated within an aquarium.

***Other Dispositions***

Other dispositions include stock adjustments for schooling fish and flocks of aviary birds, breeding loans, donations made, animals reintroduced to nature or a trained free-flying bird flying away that is unable to be retrieved. These dispositions are recorded in the Register and the Statistics when the animal physically leaves the Park or when a census is taken.

***Mortality within Quarantine***

Quarantine is applied when animals are acquired by other acquisition methods, and the period is determined upon the Park's veterinarian decision. Mortality within quarantine shows the number of animals that died before the Park's veterinarian declared that they are fit to join the collection.

***Mortality within 30 Days of Birth***

Mortalities within 30 days of birth refers to those animals that died within 30 days after their date of birth, hatching or metamorphosis.

***Mortality while In Collection***

Mortalities while in collection refers to the deaths of those animals which, if acquired, have passed the quarantine and been declared fit to join the Park's collection, or, if born at the Park, have survived for more than 30 days since their date of birth, hatching or metamorphosis.