



Inspection Report

Memphis Zoo
2000 Prentiss Place
Memphis, TN 38112

Customer ID: **3059**
Certificate: **63-C-0004**
Site: 001
MEMPHIS ZOO AND AQUARIUM

Type: ROUTINE INSPECTION
Date: 26-MAR-2024

3.150(a) Critical

Facilities, general.

***Disposition records show that 8 small birds disappeared from the "center flight" aviary in the past 3 months: Four violet backed starlings (18A026, 19A022, 20370, 23A075), two long-tailed paradise-whydah (18A035, 18A032), one silver-beaked tanager (24A011), and one troupial (21A032).

Facility staff searched for the birds for but did not find them. Facility staff stated that the most likely cause of the birds' disappearance is predation by rodents, and at the time of inspection there were rodent droppings in some non-public areas within the building. The Center Flight aviary is a large indoor aviary which is has two entrances made of hanging chain link, in addition to the solid exterior doors of the building.

***Facility staff stated that one North American ruddy duck recently disappeared, and that the bird was likely lost to predation (most likely racoons). The facility searched for the bird thoroughly but could not find it. The bird had been living in the "Teton Marsh Exhibit", which contains a pond and natural marshy areas, and also houses a variety of waterfowl. The back walls of the enclosure are six-foot-tall chain link, and the front of the enclosure is an elevated public walkway bordered by an approximately 4-foot tall wire and wooden fence. The bird was flight restricted (pinioned). The facility has a predator control program in place and has undertaken measures to prevent additional predation near this exhibit such as providing additional vegetation in the exhibit.

Birds that are not effectively contained in their enclosures and protected from predators may suffer from stress, injuries, or death.

Correct by ensuring that bird enclosures are maintained in good repair, protect the birds from injury, contain the birds, and restrict other animals from entering who may negatively affect the welfare of the birds within. Correct by 4/28/24.

2.131(d)(2)

Handling of animals.

No attendant was present in the petting zoo area. There are three enclosures (housing zebu, goats, and sheep respectively) that are constructed with an approximately 4-foot-tall wooden fence with horizontal slats separates the viewing public from the animals; and members of the public are not prevented from petting or otherwise reaching over or through the fence to touch the animals. There is no signage in the area telling members of the public not to touch the animals, and facility representatives agreed that members of the public are allowed to pet the animals over and through the wooden fence.

Unsupervised contact between animals and the public may result in stress or injury to animals or members of the public.

Prepared By: DIANA CARE
USDA, APHIS, Animal Care
Title: VETERINARY MEDICAL OFFICER

Date:
28-MAR-2024

Received by Title: Facility Representative

Date:
28-MAR-2024



Inspection Report

Correct by 4/15/24 by ensuring that a responsible, knowledgeable, and readily identifiable employee or attendant is present at all times during periods of public contact.

3.106(b)(1)

Water quality.

The ozone delivery system for the water in the enclosure housing California Sea Lions was not fully operational from 1/1/24 to 2/6/24. Test results from four consecutive coliform bacterial tests of the water in the enclosure housing the California Sea Lions showed levels that were ">2420 MPN per 100mL". The dates of the tests were 1/9/24, 1/11/24, 1/23/24, and 2/6/24. Tests were not performed the week of 1/17/24 (due to a winter ice storm which prohibited submission of samples to the lab). Although corrective actions were undertaken following the test results when coliforms exceeded 1000 MPN per 100 mL, the overall coliform test results not fall below 1000 MPN per 100mL between 1/2/2024 and 2/9/24. Water quality is important for maintaining marine mammal health. High levels of coliform bacteria may indicate poor water quality which could be harmful to animal health.

Correct by 3/28/24 by maintaining water quality in accordance with the Animal Welfare Act regulations. At the time of the inspection, the facility had already completed major renovations to their water quality systems.

3.106(b)(3)

Water quality.

Coliform testing was not conducted from December 20, 2024 to January 3, 2024 (13 days). Facility staff stated that the commercial laboratory where this testing is performed was not open during this time period.

Weekly coliform testing of marine mammal water is important for ensuring that water quality is in compliance with the Animal Welfare Act (AWA) regulations and is not harmful to the animals.

Correct by 3/28/24 by ensuring that marine mammal water is tested as required by the AWA regulations, to include weekly testing for coliform bacteria.

3.126(a)

Critical

Facilities, indoor.

The facility self-reported that on January 28th, 2024, some Naked Mole Rats (NMRs) died as a result of accidental overheating in their enclosure. The NMR colony enclosure is a collection of boxes and tubes with ventilation openings on the tops of the boxes. The heater in the building where the animals are housed (the nocturnal building) had stopped working prior to the incident, so the facility was using a new temporary heater to keep the building warm. The temporary duct bringing warm air into the building was located near the NMR enclosure. Although facility staff had placed 3 temperature monitors within the building, there were no temperature monitors in the NMR enclosure. Upon discovering the issue, the facility immediately took corrective actions to provide care for the remaining animals and to control the temperature of the building. Unfortunately, 15 out of 24 adult NMRs passed away and necropsy results showed signs of hyperthermia (abnormally high body temperature). At the time of the incident, the temperature was measured by facility staff and was found to be 102 degrees Fahrenheit on the surface of the glass at the front of the enclosure and 94 degrees Fahrenheit within the animal enclosure. The facility also added additional temperature monitors throughout the building including in the NMR enclosure.

Indoor enclosures that are not adequately heated and/or cooled may cause discomfort or adverse health effects for the animals within.

Prepared By: DIANA CARE

USDA, APHIS, Animal Care

Date:

28-MAR-2024

Title: VETERINARY MEDICAL
OFFICER

Received by Title: Facility Representative

Date:

28-MAR-2024



Inspection Report

Correct by 3/28/24 by ensuring that temperatures in indoor housing facility are sufficiently regulated by heating or cooling to protect animals from temperature extremes and to provide for animal health and comfort. Corrected prior to the inspection.

3.131(d)

Sanitation.

There is evidence of widespread rodent activity in the giraffe and rhino holding areas. Although facility staff diligently clean these facilities on a daily basis, there was a large accumulation of rodent droppings on top of some heating ducts in the giraffe barn, as well as a smaller amount of droppings in some walkways. In the rhino barn, there are rodent droppings under some furniture/equipment and on some horizontal shelves/beams. There was also a large amount of small plastic shavings beneath a large hard plastic toy which an employee stated was due to rodents chewing on the toy.

Pests including rodents can spread disease and may contaminate enclosures.

Correct by 4/28/24 by maintaining a safe and effective program to control insects, ectoparasites, rodents, and other pests so as to promote the health and well-being of the animals and reduce contamination by pests in animal areas.

3.158(d)

Critical

Cleaning, sanitization, housekeeping, and pest control.

There is evidence of widespread rodent activity in the tropical bird aviary, especially behind the gunite walls that make up the "Center Flight" aviary. In this area there is an excessive accumulation of rodent droppings on the floors and horizontal structures. On 2/24/24, one female Pompadour cotinga bird (20A001) and one male white-tailed trogon/green backed trogon (23528) were missing and presumed dead after feathers and the cotinga's leg band were found in nest box 14 in the "Center Flight" aviary. Additionally, 8 small birds from the center flight aviary have gone missing over the past 3 months.

Pests including rodents can spread disease, contaminate enclosures, and may injure or predate birds.

Correct by 4/28/24 by maintaining a safe and effective program to control insects, ectoparasites, rodents, and other pests so as to promote the health and well-being of the birds and reduce contamination by pests in animal areas.

This inspection and exit interview were conducted with facility representatives.

Prepared By: DIANA CARE

USDA, APHIS, Animal Care

Date:

28-MAR-2024

Title: VETERINARY MEDICAL
OFFICER

Received by Title: Facility Representative

Date:

28-MAR-2024



Species Inspected

Cust No	Cert No	Site	Site Name	Inspection
3059	63-C-0004	001	MEMPHIS ZOO AND AQUARIUM	26-MAR-2024

Count	Scientific Name	Common Name
000002	<i>Didelphis virginiana</i>	VIRGINIA OPOSSUM
000003	<i>Orycteropus afer</i>	AARDVARK
000001	<i>Lasiorhinus latifrons</i>	SOUTHERN HAIRY-NOSED WOMBAT
000004	<i>Nomascus leucogenys</i>	WHITE-CHEEKED GIBBON
000006	<i>Pan paniscus</i>	PYGMY CHIMPANZEE / BONOBO
000003	<i>Mandrillus sphinx</i>	MANDRILL
000003	<i>Colobus guereza</i>	EASTERN BLACK-AND-WHITE COLOBUS / GUEREZA
000007	<i>Trachypithecus francoisi</i>	FRANCOIS'S LANGUR
000002	<i>Echinops telfairi</i>	LESSER MADAGASCAR HEDGEHOG TENREC
000005	<i>Loxodonta africana</i>	AFRICAN ELEPHANT
000001	<i>Tolypeutes matacus</i>	SOUTHERN THREE-BANDED ARMADILLO
000003	<i>Choloepus didactylus</i>	LINNAEUS'S TWO-TOED SLOTH
000003	<i>Tamandua tetradactyla</i>	SOUTHERN TAMANDUA
000001	<i>Otolemur garnettii</i>	SMALL-EARED BUSHBABY / NORTHERN GREATER GALAGO
000002	<i>Symphalangus syndactylus</i>	SIAMANG
000004	<i>Varecia rubra</i>	RED RUFFED LEMUR
000003	<i>Varecia variegata</i>	BLACK-AND-WHITE RUFFED LEMUR
000003	<i>Nycticebus pygmaeus</i>	PYGMY SLOW LORIS
000002	<i>Perodicticus potto</i>	POTTO
000002	<i>Aotus lemurinus</i>	GRAY-BELLIED NIGHT MONKEY / LEMURINE NIGHT MONKEY
000003	<i>Cercopithecus petaurista</i>	LESSER SPOT-NOSED GUENON
000003	<i>Erythrocebus patas</i>	PATAS MONKEY
000006	<i>Macaca nigra</i>	SULAWESI CRESTED MACAQUE
000013	<i>Heterocephalus glaber</i>	NAKED MOLE-RAT
000004	<i>Gorilla gorilla</i>	WESTERN GORILLA
000005	<i>Cynomys ludovicianus</i>	BLACK-TAILED PRAIRIE DOG
000001	<i>Dasyprocta leporina</i>	BRAZILIAN AGOUTI
000065	<i>Desmodus rotundus</i>	COMMON VAMPIRE BAT
000370	<i>Carollia perspicillata</i>	SEBA'S SHORT-TAILED BAT
000004	<i>Pongo abelii</i>	SUMATRAN ORANGUTAN
000002	<i>Erethizon dorsatum</i>	NORTH AMERICAN PORCUPINE
000003	<i>Hystrix africaeaustralis</i>	CAPE PORCUPINE
000002	<i>Panthera onca</i>	JAGUAR
000002	<i>Panthera pardus</i>	LEOPARD
000003	<i>Coendou prehensilis</i>	PREHENSILE-TAILED PORCUPINE
000002	<i>Hydrochaeris hydrochaeris</i>	CAPYBARA
000034	<i>Rousettus aegyptiacus</i>	EGYPTIAN FRUIT BAT
000002	<i>Acinonyx jubatus</i>	CHEETAH
000001	<i>Prionailurus viverrinus</i>	FISHING CAT
000131	<i>Noctilio leporinus</i>	GREATER BULLDOG BAT
000003	<i>Caracal caracal</i>	CARACAL
000003	<i>Panthera leo</i>	LION
000001	<i>Arctictis binturong</i>	BINTURONG
000003	<i>Puma concolor</i>	PUMA / MOUNTAIN LION / COUGAR
000004	<i>Panthera tigris</i>	TIGER
000003	<i>Uncia uncia</i>	SNOW LEOPARD
000003	<i>Ursus americanus</i>	NORTH AMERICAN BLACK BEAR
000003	<i>Ursus arctos</i>	BROWN BEAR
000003	<i>Genetta tigrina</i>	LARGE-SPOTTED GENET



Species Inspected

Cust No	Cert No	Site	Site Name	Inspection
3059	63-C-0004	001	MEMPHIS ZOO AND AQUARIUM	26-MAR-2024
000005	<i>Canis lupus</i>		GRAY WOLF / GREY WOLF / TIMBER WOLF	
000002	<i>Bassariscus astutus</i>		RINGTAIL	
000002	<i>Ceratotherium simum</i>		WHITE RHINOCEROS	
000002	<i>Ursus maritimus</i>		POLAR BEAR	
000006	<i>Ailurus fulgens</i>		RED PANDA	
000001	<i>Equus quagga</i>		BURCHELL'S / GRANT'S / CHAPMAN'S / PLAINS ZEBRA	
000008	<i>Zalophus californianus</i>		CALIFORNIA SEA LION	
000004	<i>Aonyx cinereus</i>		ORIENTAL SMALL-CLAWED OTTER	
000003	<i>Potos flavus</i>		KINKAJOU	
000002	<i>Madoqua kirkii</i>		KIRK'S DIKDIK / KIRKS DIK-DIK	
000004	<i>Hippopotamus amphibius</i>		HIPPOPOTAMUS	
000005	<i>Elaphurus davidianus</i>		PERE DAVID'S DEER	
000004	<i>Giraffa camelopardalis</i>		GIRAFFE	
000001	<i>Damaliscus pygargus</i>		BONTEBOK / BLESBOK	
000005	<i>Oryx dammah</i>		SCIMITAR-HORNED ORYX	
000003	<i>Tragelaphus eurycerus</i>		BONGO	
000005	<i>Capra hircus</i>		DOMESTIC GOAT	
000009	<i>Ovis aries aries</i>		SHEEP INCLUDING ALL DOMESTIC BREEDS	
000001	<i>Euphractus sexcinctus</i>		YELLOW ARMADILLO	
000005	<i>Cervus canadensis</i>		ELK / WAPITI	
000001	<i>Ailurops ursinus</i>		SULAWESI BEAR CUSCUS	
000002	<i>Potamochoerus porcus</i>		RED RIVER HOG	
000001	<i>Dasypus novemcinctus</i>		NINE-BANDED ARMADILLO	
000002	<i>Hemigalus derbyanus</i>		BANDED PALM CIVET	
000004	<i>Otocyon megalotis</i>		BAT-EARED FOX	
000001	<i>Sus scrofa</i>		WILD BOAR	
000002	<i>Struthio camelus</i>		COMMON OSTRICH	
000001	<i>Corvus albicollis</i>		WHITE-NECKED RAVEN	
000001	<i>Meleagris gallopavo</i>		WILD TURKEY	
000001	<i>Chrysolophus pictus</i>		GOLDEN PHEASANT	
000007	<i>Marmaronetta angustirostris</i>		MARbled TEAL	
000003	<i>Rollulus rouloul</i>		CRESTED PARTRIDGE	
000006	<i>Chalcophaps indica</i>		ASIAN EMERALD DOVE / GREY-CAPPED EMERALD DOVE	
000001	<i>Coua cristata</i>		CRESTED COUA	
000019	<i>Spheniscus demersus</i>		AFRICAN PENGUIN / CAPE PENGUIN	
000001	<i>Tyto alba</i>		BARN OWL / WESTERN BARN OWL / AMERICAN BARN OWL / EASTERN BARN OWL	
000002	<i>Tragopan temminckii</i>		TEMMINCK'S TRAGOPAN	
000004	<i>Oxyura jamaicensis</i>		RUDDY DUCK	
000006	<i>Ptilinopus pulchellus</i>		BEAUTIFUL FRUIT-DOVE	
000001	<i>Parabuteo unicinctus</i>		HARRIS'S HAWK	
000001	<i>Bucorvus abyssinicus</i>		ABYSSINIAN GROUND-HORNBILL	
000002	<i>Anser indicus</i>		BAR-HEADED GOOSE	
000002	<i>Balearica pavonina</i>		BLACK CROWNED-CRANE	
000002	<i>Lophura edwardsi</i>		EDWARDS'S PHEASANT / VIETNAM PHEASANT	
000001	<i>Bucephala albeola</i>		BUFFLEHEAD	
000002	<i>Balearica regulorum</i>		GRAY CROWNED-CRANE / AFRICAN CROWNED-CRANE / GOLDEN CROWNED-CRANE	
000002	<i>Anthropoides virgo</i>		DEMOISELLE CRANE	
000001	<i>Bubulcus ibis</i>		CATTLE EGRET	
000002	<i>Chauna torquata</i>		SOUTHERN SCREAMER / CRESTED SCREAMER	



Species Inspected

Cust No	Cert No	Site	Site Name	Inspection
3059	63-C-0004	001	MEMPHIS ZOO AND AQUARIUM	26-MAR-2024
000003	<i>Callonetta leucophrys</i>		RINGED TEAL	
000031	<i>Phoeniconaias minor</i>		LESSER FLAMINGO	
000001	<i>Tockus deckeni</i>		VON DER DECKEN'S HORNBILL	
000003	<i>Lanius melanoleucus</i>		MAGPIE SHRIKE / SOUTHERN GREY SHRIKE	
000010	<i>Dendrocygna viduata</i>		WHITE-FACED WHISTLING-DUCK	
000007	<i>Branta ruficollis</i>		RED-BREASTED GOOSE	
000002	<i>Anas crecca</i>		GREEN-WINGED TEAL / COMMON TEAL	
000003	<i>Glossoptilus goldiei</i>		GOLDIE'S LORIKEET	
000001	<i>Cygnus buccinator</i>		TRUMPETER SWAN	
000002	<i>Oressochen jubatus</i>		ORINOCO GOOSE	
000001	<i>Netta rufina</i>		RED-CRESTED POCHARD	
000005	<i>Caloenas nicobarica</i>		NICOBAR PIGEON	
000002	<i>Ciconia ciconia</i>		WHITE STORK	
000001	<i>Aix sponsa</i>		WOOD DUCK / CAROLINA DUCK	
000001	<i>Anas platyrhynchos</i>		MALLARD	
000001	<i>Querula purpurata</i>		PURPLE-THROATED FRUITCROW	
000001	<i>Aix galericulata</i>		MANDARIN DUCK	
000002	<i>Aythya valisineria</i>		CANVASBACK	
000003	<i>Nettapus auritus</i>		AFRICAN PYGMY-GOOSE	
000002	<i>Alopecoenas xanthonurus</i>		WHITE-THROATED GROUND DOVE	
000002	<i>Antigone vipio</i>		WHITE-NAPED CRANE	
000000	<i>Trogon viridis</i>		GREEN-BACKED TROGON	
000001	<i>Ramphastos sulfuratus</i>		KEEL-BILLED TOUCAN	
000002	<i>Spatula hottentota</i>		BLUE-BILLED TEAL / HOTTENTOT TEAL	
000003	<i>Sibirionetta formosa</i>		BAIKAL TEAL	
000002	<i>Psophia crepitans</i>		GRAY-WINGED TRUMPETER	
000001	<i>Cinnyricinclus leucogaster</i>		VIOLET-BACKED STARLING	
000039	<i>Phoenicopterus chilensis</i>		CHILEAN FLAMINGO	
000004	<i>Cyanocorax chrysops</i>		PLUSH-CRESTED JAY	
000005	<i>Caloenas nicobarica</i>		NICOBAR PIGEON	
000002	<i>Ceratogymna elata</i>		YELLOW-CASQUED HORNBILL	
000003	<i>Bucorvus leadbeateri</i>		SOUTHERN GROUND-HORNBILL	
000002	<i>Trachyphonus erythrocephalus</i>		RED-AND-YELLOW BARBET	
000004	<i>Paroaria coronata</i>		RED-CRESTED CARDINAL	
000002	<i>Ducula bicolor</i>		PIED IMPERIAL-PIGEON	
000001	<i>Buteo jamaicensis</i>		RED-TAILED HAWK	
000006	<i>Haliaeetus leucocephalus</i>		BALD EAGLE	
000002	<i>Euphonia violacea</i>		VIOLECEOUS EUPHONIA	
000002	<i>Otidiphaps nobilis</i>		PHEASANT PIGEON	
000002	<i>Cathartes aura</i>		TURKEY VULTURE	
000003	<i>Megaceryle maxima</i>		GIANT KINGFISHER	
000002	<i>Xipholena punicea</i>		POMPADOUR COTINGA	
000002	<i>Antigone canadensis</i>		SANDHILL CRANE	
000005	<i>Loriculus galgulus</i>		BLUE-CROWNED HANGING-PARROT	
000003	<i>Euplectes nigroventris</i>		ZANZIBAR RED BISHOP	
000002	<i>Scopus umbretta</i>		HAMERKOP	
000002	<i>Urocolius macrourus</i>		BLUE-NAPED MOUSEBIRD	
000003	<i>Pteroglossus viridis</i>		GREEN ARACARI	
000002	<i>Garrulax leucolophus</i>		WHITE-CRESTED LAUGHINGTHRUSH	
000003	<i>Pelecanus erythrorhynchos</i>		AMERICAN WHITE PELICAN	
000001	<i>Athene cunicularia</i>		BURROWING OWL	



Species Inspected

Cust No	Cert No	Site	Site Name	Inspection
3059	63-C-0004	001	MEMPHIS ZOO AND AQUARIUM	26-MAR-2024
000002	<i>Uraeginthus bengalus</i>		RED-CHEEKED CORDONBLEU	
000002	<i>Tockus erythrorhynchus</i>		NORTHERN RED-BILLED HORNBILL	
000001	<i>Todiramphus cinnamominus</i>		GUAM KINGFISHER	
000002	<i>Icterus icterus</i>		VENEZUELAN TROUPIAL	
000001	<i>Polihierax semitorquatus</i>		PYGMY FALCON	
000001	<i>Ara chloropterus</i>		RED-AND-GREEN MACAW / GREEN-WINGED MACAW	
000002	<i>Ara macao</i>		SCARLET MACAW	
000001	<i>Cyanocorax yncas</i>		GREEN JAY	
000010	<i>Cyanopica cyanus</i>		AZURE-WINGED MAGPIE	
000002	<i>Tangara mexicana</i>		TURQUOISE TANAGER	
000004	<i>Urocissa erythroryncha</i>		RED-BILLED BLUE-MAGPIE	
000004	<i>Lamprotornis iris</i>		EMERALD STARLING	
000002	<i>Lamprotornis regius</i>		GOLDEN-BREASTED STARLING	
000002	<i>Leucopsar rothschildi</i>		BALI MYNA	
000002	<i>Chrysomus icterocephalus</i>		YELLOW-HOODED BLACKBIRD	
000002	<i>Paroaria gularis</i>		RED-CAPPED CARDINAL	
000002	<i>Vidua paradisaea</i>		EASTERN PARADISE-WHYDAH / LONG-TAILED PARADISE-WHYDAH	
000003	<i>Chlorophanes spiza</i>		GREEN HONEYCREEPER	
000001	<i>Cyanerpes caeruleus</i>		PURPLE HONEYCREEPER	
000002	<i>Dacnis cayana</i>		BLUE DACNIS	
000002	<i>Tangara chilensis</i>		PARADISE TANAGER	
000005	<i>Stilpnia cyanicollis</i>		BLUE-NECKED TANAGER	
000002	<i>Ramphocelus carbo</i>		SILVER-BEAKED TANAGER	
000007	<i>Suricata suricatta</i>		SLENDER-TAILED MEERKAT	
000002	<i>Ptilinopus magnificus</i>		WOMPPOO FRUIT-DOVE	
000001	<i>Accipiter cooperii</i>		COOPER'S HAWK	
000001	<i>Strix varia</i>		BARRED OWL	
000001	<i>Falco sparverius</i>		AMERICAN KESTREL	
000002	<i>Neofelis nebulosa</i>		CLOUDED LEOPARD	
000003	<i>Bos primigenius indicus</i>		ZEBU	
000011	<i>Gallus gallus domesticus</i>		DOMESTIC CHICKEN (INCLUDING ALL DOMESTIC BREEDS / TURKIN / COCK / HEN / ROOSTER)	
001180	Total			



Species Inspected

Cust No	Cert No	Site	Site Name	Inspection
3059	63-C-0004	001	MEMPHIS ZOO AND AQUARIUM	26-MAR-2024