



ANIMAL WELFARE ASSESSMENT CONTEST 2020



Cheetah Scenario

Animal Welfare Assessment Contest 2020

NOTES

1. THESE ARE FICTITIOUS FACILITIES. They have been created using pictures and information collected from multiple sites, as well as realistic, yet fabricated information. *Neither facility actually exists as presented here.*
2. Please use the images provided throughout the presentation as well as text when making your assessment.

Overview

Zoo A

- Located in a temperate climate region
 - Average temperatures = 2°C (35°F) – 17°C (63°F)
 - Average precipitation = 762 mm (30 in)
- 26 hectares (64 acres)
- ~140 species of animals
- Located at edge of a city
- 200,000 people visit annually

Zoo J

- Located in a dry climate region
 - Average temperatures = -3°C (27°F) – 33°C (92°F)
 - Average precipitation = 203 mm (8 in)
- 179 hectares (443 acres)
- ~200 species of animals
- >10 km (5 mi) from nearest town
- 1.5 million people visit annually



Personnel

Zoo A

- 2 full-time keepers dedicated to cheetahs, 1 does all training
 - Keepers each have over 15 years experience with carnivores and more than 10 with cheetahs specifically
 - One has BS in animal science
 - Have been at the zoo for 2 and 18 years (trainer)
- 6 other keepers in Africa area of zoo also regularly assist with cheetahs

Zoo J

- 3 full-time trainers for work with all cheetahs, overseen by training coordinator
 - All have trained cheetahs for more than 3 years
 - All have BS and one has MS in zoology
 - Newest trainer arrived 4 years ago from training at another zoo
- 2 interns and 2 seasonal keepers April-Oct when shows are occurring
- Training coordinator creates training courses for all AZA zoos

Population – Zoo A

- 1 female, 12 years old, raised by dam
 - Arrived at Zoo A 6 months ago
 - Transferred from another zoo that closed
 - Housed alone
- 2 males (siblings), 6 years old, hand raised
 - Have been at Zoo A since they were 2 years old
 - Transferred from a breeding facility
 - Housed together

Zoo A Female



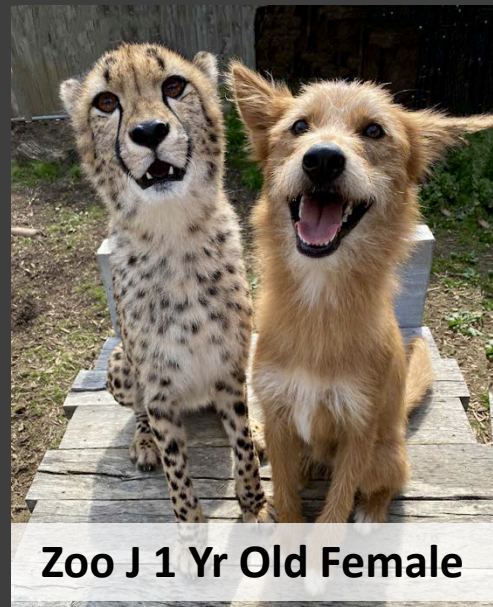
Zoo A Males



Population – Zoo J

- 5 females
 - 3 from one litter, 5 years old
 - 1 hand-reared, 1 year old
 - 1 dam-reared, 10 years old
- 3 males, all castrated
 - 2 from one litter, 4 years old
 - 1 hand-reared, 7 years old
- 7 have been at Zoo J for over 3 years
 - Hand-reared female arrived after being rejected by dam and was raised here
- All are in animal ambassador program
- Social groups:

- 3 Sisters usually together
- Older male and female often together
- 2 Brothers usually together, sometimes individually with canine companions
- Young female with canine companion



Zoo J 1 Yr Old Female



Zoo J 5 Yr Old Females

Housing Overview

Zoo A

- Housed in Africa area of Zoo A
 - Outdoor exhibit, off-exhibit yard, and 3 indoor rooms
 - Cheetahs rotated between exhibit and yard every other day
- Lion exhibit is behind east rockwork, gazelles and zebras visible across moat, hyenas are visible west of yard
- Zoo train runs along south side of exhibit and yard (up to 3x/hour in summer)

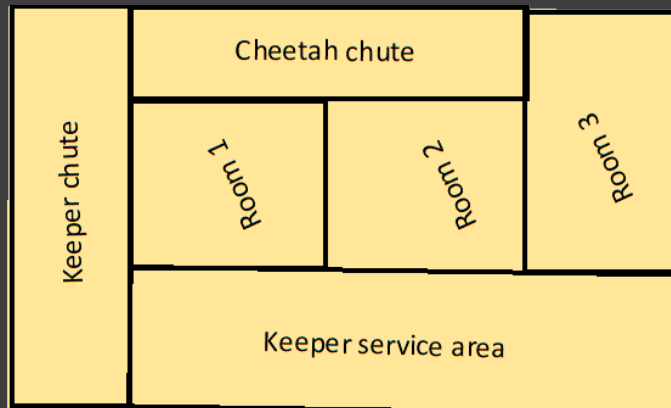
Zoo J

- Housed in area dedicated to ambassador animals
 - Building with indoor/outdoor runs, 2 small yards, and a large yard with lure course
 - Cheetahs can move freely between indoor and outdoor portions of run 24h/day
 - Rotated several times daily to give all access to a yard at least every 24h
- Giraffes, zebras, and gazelles barely visible on north side of lure yard
- Located at edge of zoo with internal service road to south

Indoor Housing

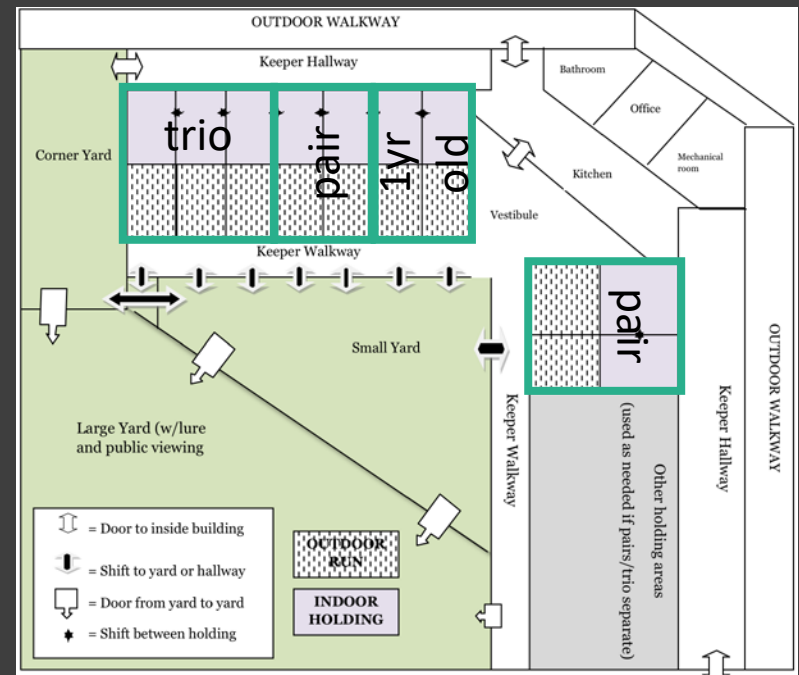
Zoo A

- Housed indoors at night and in inclement weather
- Locked out when on exhibit
- Shift doors left open between 1 & 2 to create bigger space for male pair
- Yard access is via Room 3, where female is housed
 - She shifts preferentially to yard



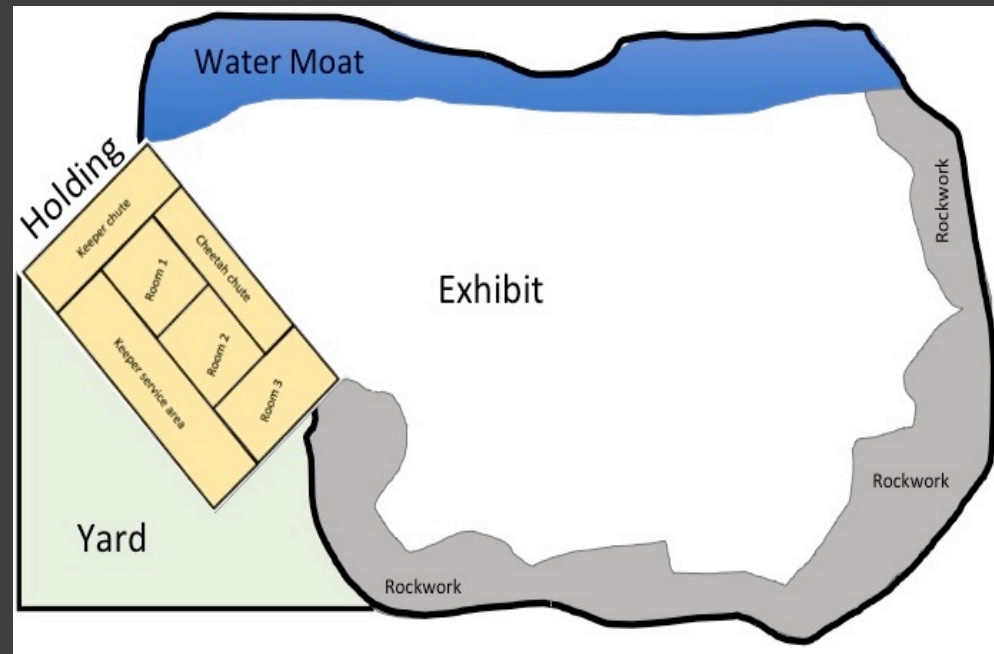
Zoo J

- Doors left open between adjacent runs to create more space for pairs, trio, and cheetahs with canine companions
- Locked out when in yards



Housing – Zoo A

Inside Room



Exhibit



Exhibit



Housing – Zoo J

Inside Run



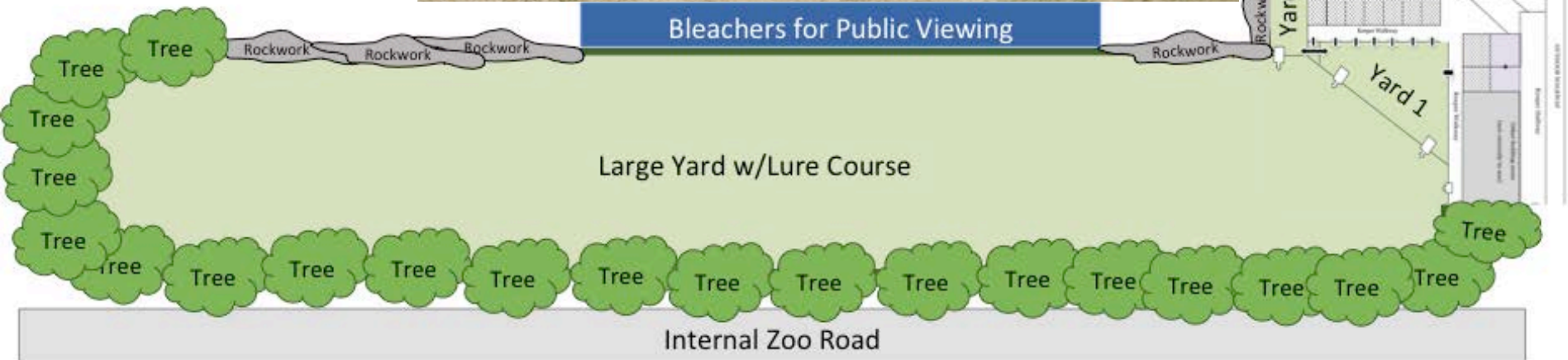
Yard 1



Large Yard



Large Yard



Diet & Feeding

Zoo A

- Fed commercial diet (canine formula) 3x/day
 - Some saved for training
- Bone days 1x/week
 - Given large shank bone/rib cages with some meat
- ~Every 2-3 weeks get whole carcass
 - Frozen rabbit or baby goat
- Monitor condition using BCS (during exams) & weight (monthly)
 - Cheetahs trained to get on scale

Zoo J

- Fed commercial diet (canine formula) 2x/day
 - Some saved for training
- No fast or bone days
- Sometimes get whole carcass
 - Guinea pig or quail
- Ground chicken/beef heart for special training or to give medication
- Monitor condition using weight (quarterly)
 - Cheetahs trained to get on scale

*BCS = body condition score

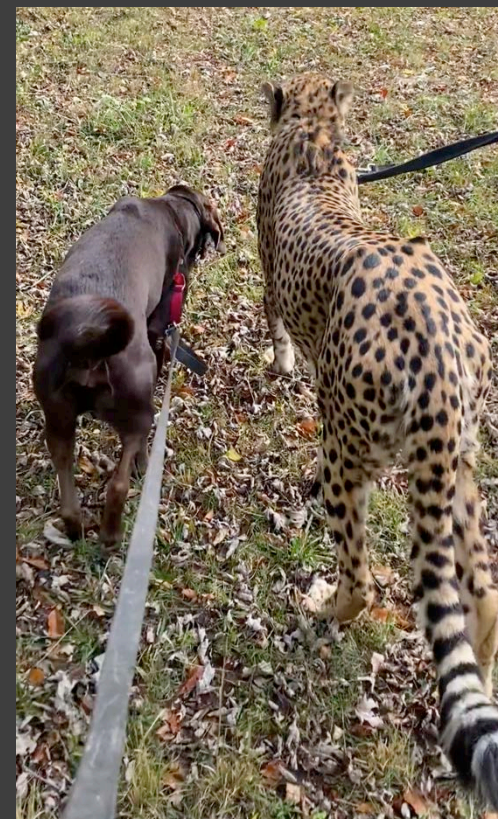
Enrichment – Zoo A

- Enrichment provided daily at the same time
 - Scents, perfumes, spices, dirty bedding from ungulate enclosures
 - Snake sheds, rhino hoof trimmings and bird feathers (after sterilizing)
 - Cardboard boxes
 - Boomer balls, bowling pins
 - Large logs in exhibit & yard
- Keepers working to increase engagement with enrichment
 - Males interact briefly with most types of enrichment
 - Female prefers scents, does not engage with tactile enrichment
- Cheetahs move from indoor room to one outdoor area daily



Enrichment – Zoo J

- Enrichment is provided on a variable schedule
 - Puzzle boxes containing diet (3 cheetahs refuse to use these)
 - TV and recordings of nature sounds
 - Scents—spices, urine/feces from prey, perfumes (most cheetahs explore these)
- All trained to run on lure course
 - Each cheetah runs ~3x/week
 - Youngest female is being lure trained now
- All trained to walk on leash
 - Each cheetah walks ~2x/week before/after zoo is open to public
 - Older male refuses walks ~1x/week
- Cheetahs rotate between 2-3 areas of housing each day



Human-Animal Interaction – Zoo A

- Keepers do not ever enter enclosures with males and only rarely with female
 - Males have shown threat behavior but no physical aggression to keepers
 - Because they cannot be in exhibit, cannot run lure course
- Trained 5x/week using protected contact
 - Positive reinforcement (using food)
 - Trained to weigh, eye exams, open mouth, show paws
 - Female being worked with particularly to allow for blood pressure check, injections and blood collection from tail
 - Males are being trained to paint
 - Cheetahs choose not to train 1-2x/week
- Generally shift well between indoors and exhibit or yard
 - Sometimes female does not want to come in from yard
 - Sometimes males choose to stay in Run 3 on their way to the yard



Eye Exam

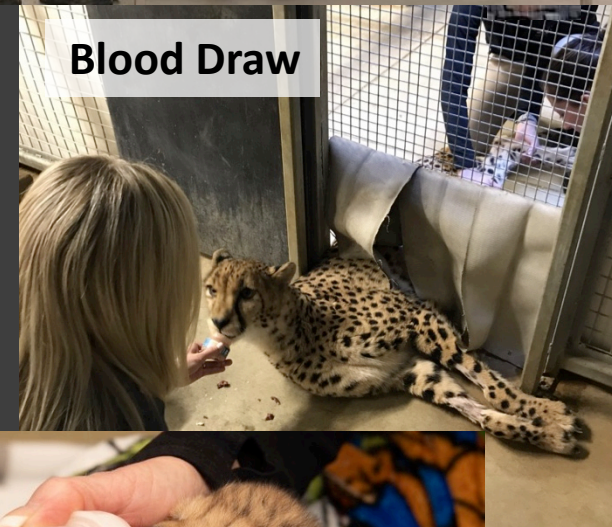


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Human-Animal Interaction – Zoo J

- Two cheetahs were hand-reared at the zoo (1 year old female, 7 year old male)
- Staff is able to enter enclosures with cheetahs to train, run lures, prepare for walks, clean, etc
 - Cheetahs work well with all trainers
 - Cheetahs approach and purr when staff are present
 - No threat behaviors observed
 - When playing with dog during walk, a female swiped a keeper's leg and left scratches
- Cheetahs are trained with free contact
 - Staff carefully observe cheetahs for any signs of stress to adjust/end sessions
 - Positive reinforcement (food & interaction)
 - Cheetahs are trained to assist with exams, allow blood collection, blood pressure, walk on leash and lure run
 - Cheetahs rarely choose not to train
- Cheetahs participate in educational presentations at zoo and other venues



Health Care

Zoo A

- Most routine health care done without anesthesia or restraint
 - Daily observation by keepers of behavior
 - Health checks during training
 - Weights on scale monthly
 - Blood collected 1x/year for males, every 6 mo for female (and blood pressure taken)
- Full health and dental exams and vaccines under anesthesia by vet every 2 years
 - Rabies, feline herpes virus
- Fecal exams every 3 months

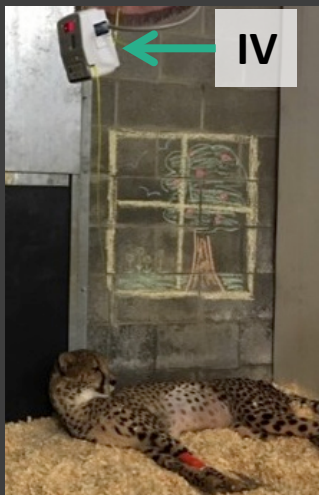
Zoo J

- All routine health care done without anesthesia or restraint
 - Daily observation by keepers of behavior
 - Health checks during training
 - Weights on scale every 3 mo
 - Blood collected yearly and vaccines given as needed (rabies, feline respiratory virus, feline herpes virus (killed))
- Full exams and dental under anesthesia by vet every 2-3 years or if warranted based on other signs
- Fecal exams every 6 months

Health Outcomes

Zoo A

- Males are slightly over ideal body weight and BCS
- Female has lost weight since arriving and is being managed for early stages of renal failure
- One male treated for gastritis 3x in last 2 years
 - Given antibiotics and gastric protectants
- 3 years ago, outbreak of herpes virus
 - Managed with fluids and antibiotics via IV, L-lysine in diet
 - Corneal ulceration resulted in eye of one male



Zoo J

- Weights and BCS are ideal for most of the cheetahs
 - Oldest female had an abscessed tooth, she lost weight prior to it being pulled last month
- One of the brothers broke bones in a hind paw during lure running 2 years ago
 - Following recovery he does not limp and is lure running again



Social Environment – Zoo A

- Males have been housed together since birth
 - Typically found together in same area of housing
 - Lie close together, particularly on elevated surfaces or at night
 - Allogroom regularly
 - Play together infrequently
 - Share enrichment as though hunting together, no overt aggression
- Female has been housed alone since arriving at zoo
 - Avoids side of room nearest males when indoors
 - She is slow to enter areas after males have been there and explores cautiously



Social Environment – Zoo J

- Cheetahs housed together are typically found together
 - Sometimes choose to separate from group/pair to other areas of run or yard
 - Regularly allogroom
 - Play together occasionally
 - Separated for training and walks
 - Lure run together
- Cheetahs with canine companions treat them as siblings (play, groom, etc)
 - Brothers sometimes choose to spend time with dogs rather than each other



Behavior – Zoo A

- Cheetahs spend most of their time sleeping or resting and watching
- Female uses exhibit features to screen herself from visitors and hyenas
- Males do not avoid visitor viewing areas
- Female walks a fixed route ~10% of her time awake

Female



Male



Female




Males



Behavior – Zoo J

- Cheetahs spend most of their time in enclosures resting and watching, little evidence of pacing, rarely seen hiding
- Active behaviors include walking around yards (investigating as they go), lure running, walking in zoo, training



1 Yr Old Female



5 Yr Old Female



7 Yr Old Male

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Behavior – Zoo A

Males



Males
Listen!

Behavior – Zoo J



4 Yr Old Male



1 Yr Old Female

Listen!