Intro

[sound of child at zoo: "Wake up, lion!"; lion roar]

RUSSO: The zoo is one of America's most popular institutions. Millions pass through its gates every year. And the best zoos say they're more than a good time.

BOYLE: As we urbanize more and more, as we lose species, zoos are playing a very important role in connecting people to nature.

RUSSO: I'm Christina Russo, and this is "From Cages to Conservation—American Zoos: Inside Out." Top zoos say they provide great animal care, are big conservationists and inspire visitors to save wildlife. But critics aren't buying it.

FARINATO: All it means is you've got a bunch of people going through the gate, looking at what you put in front of them, and walking out the gate.

RUSSO: In the next hour: just who are zoos serving—the public, the animals or themselves? "From Cages to Conservation—American Zoos: Inside Out" is next. First, this news.

Part I

RUSSO: This is a special report from WBUR Boston. "From Cages to Conservation—American Zoos: Inside Out." I'm Christina Russo.

[Oakland zoo carousel ambience; children and calliope music]

RUSSO: Going to the zoo—it's one of America's favorite pastimes: peanuts, a merry-goround, and some Sunday afternoon family fun with the animals.

[Oakland zoo carousel ambience; children and calliope music cont'd]

RUSSO: There are 2700 zoos and other animal exhibitors across the country. They range from tiny ramshackle attractions to modern facilities hundreds of acres in size. They can be found in most major cities, and on the side of small-town roads.

[cartoon music and ambience; voiceover: "Here we are at one of the country's most interesting zoos..."]

RUSSO: But for a select group of these zoos, the days of merely being outposts of entertainment are over. About 200 of them are accredited by the Association of Zoos and Aquariums.

[music: U2, "Zoo Station"]

RUSSO: Think zoological *crème de la crème*. 175 million people visit A.Z.A zoos every year—more than all major sporting events combined. And these zoos say they're different from the rest, they provide cutting-edge animal care, are on the frontlines of global conservation, and are actually inspiring visitors to help save wildlife with those close animal encounters.

COOK: There is nothing more powerful. You see it in people faces. And we can connect what they see in front of them to the bigger picture, to how we need to save those animals in the wild.

RUSSO: For the next hour, we'll dig deeper into one of America's most popular institutions.

[music: U2, "Zoo Station," cont'd]

RUSSO: We'll take stock of the battle over keeping elephants in captivity, and find out what innovative techniques accredited zoos use to keep their animals happy—have you ever seen piñatas for wolverines? We'll examine why one gorilla has been living alone for ten years, and why, in an age of twenty-four/seven animal TV, zoos say they're still "king."

GRESHAM: When you're standing in front of the lion and he roars, you can feel it in your sternum. It's not something you can get from Animal Planet.

RUSSO: We'll explain why zoos call themselves conservation leaders, and we'll hear from those who say otherwise.

RICHARDSON: It is a myth to think we're going to breed these animals and then we're going to turn them back loose in the wild. It's an absolute myth.

RUSSO: But we'll begin this hour far from the controversy, with reporter Diane Toomey on the sidewalks of New York City:

[music decays into New York ambience; subway sound]

TOOMEY: Not far from a Bronx subway stop, a group of seventh-graders saunters off to school.

[street ambience, students chanting: "Slide to the left, ay, slide to the right..."]

TOOMEY: But these students aren't heading into a classroom. They're going to "Madagascar."

["Madagascar" exhibit ambience; teacher: "So ladies and gentlemen, Madagascar, if you did not know, is an island off the coast of Africa, and the big thing with this exhibit is we want visitors to know how unique and special Madagascar is..."]

TOOMEY: This "Madagascar" is at the Bronx Zoo, and these students attend the Urban Assembly School for Wildlife Conservation. It's a New York City public school that teaches all subjects through the prism of conservation, and it's formed a partnership with the zoo. So when the students come here, it's not a field trip—it's class time.

["Madagascar" exhibit ambience; teacher: "...you're going to see the Coquerel's sifaka exhibit followed by the crocodile. Think about which one you want to do, and then analyze the exhibit with your sheet, okay?"]

TOOMEY: A math lesson means calculating the caloric needs of a bison herd. And science class includes the study of exhibit design.

["Madagascar" exhibit ambience; teacher: "...here's Madagascar, that's where it is on the map..."]

TOOMEY: The "Madagascar" exhibit is teeming with geckos, crocodiles and hissing cockroaches. And with clipboards in hand, the students analyze the components of each animal's display.

["Madagascar" exhibit ambience; teacher: "Leaning over the edge with your clipboard is asking for a disaster..."]

TOOMEY: Kenny Guzman stands in front of the lemur enclosure. Asked if he cared about wildlife before he attended this school...

GUZMAN: Not, not really. Now I care a lot more about 'em. I tell even my family members about the school, like how it's teached [sic] me to appreciate more about the environment and other animals.

TOOMEY: The Bronx Zoo's partnership with the Urban Assembly School is the only one of its kind in the country. But all zoos accredited by the Association of Zoos and Aquariums are required to educate the public about wildlife. At the Oakland Zoo, a keeper talks about the challenges of caring for meerkats:

[Oakland zoo ambience; child and zookeeper:

Kid: Do they bite?

Keeper: They do bite...a very, very mean bite. That's why the boots I'm wearing have steel toes.

Kid: How do you make them bite?

Keeper: I don't make them, but they're still wild animals...]

TOOMEY: The A.Z.A. believes these moments inspire children—and adults—to take action on behalf wildlife. And you can hear that on its website:

[A.Z.A. promotional clip; music and voiceover: "...and most of all, by establishing a long-lasting bond between people and animals in our care, accredited zoos are building a strong and growing conservation movement..."]

TOOMEY: Paul Boyle is the senior vice president for conservation and education at the A.Z.A. He says even the smallest of zoo encounters can be life-changing,. like when a child gets close to an elephant.

BOYLE: It changes the way they think about elephants. It changes the way they think about the place where elephants live. It changes their thinking about their place in the world. It, over time, builds their sense of respect for wildlife.

FARINATO: Show me the figures, show me the money.

TOOMEY: Richard Farinato worked in zoos for more than fifteen years, holding various positions including assistant director of the Greenville Zoo in South Carolina. He now works for the Humane Society of the United States.

FARINATO: If the zoo were so effective in its conservation message, more people would be out there doing conservation in their daily lives and thinking about conservation and supporting conservation with money.

HANCOCKS: I used to think that zoos had education as their central purpose.

TOOMEY: David Hancocks is the former director of Seattle's Woodland Park Zoo, and has worked for zoos in the U.S. and abroad for nearly four decades.

HANCOCKS: I'm convinced now that all these claims that zoos make about we inspire people to take action or change their lifestyle or make a contribution to conservation, no evidence at all, none at all, that that's having any effect.

TOOMEY: Hancocks is right about the evidence: no research has ever looked at whether a zoo visit inspires people to help save wildlife. But a few studies have examined whether zoos educate their visitors, and the results suggest zoos are struggling. A study done by the Association of Zoos and Aquariums itself found that only ten percent of zoo-goers surveyed learned anything during their visit. And an independent study found that the average time visitors spent at an exhibit was ninety-nine seconds—and only about one-quarter read the signs.

[music: Lincoln Park Zoo jingle, Oakland zoo ambience, man at zoo: "We're here 'cause, uh, it's my day off and I want to maximize my time with kids, and want them to run around and exercise and it's better place to be outdoors enjoying the nature rather than staying inside watching TV and being bored." Jingle ends]

HYSON: The public doesn't necessarily want to learn when they come to a zoo.

TOOMEY: Jeff Hyson is a history professor at Saint Joseph's University in Philadelphia and an expert on American Zoos. He says since the first one—the Central Park Menagerie—opened its doors in the mid-1800s, educating the American public has always been a challenge.

HYSON: People walk into a zoo and what they want is to see exotic active animals up close. And to me that has always been the fundamental public idea of what you do at a zoo.

TOOMEY: Indeed, numerous studies have found that most people go to the zoo not to be educated, but to be entertained. And these days, there's an entertaining alternative to the zoo:

[music and sound effects from Animal Planet "Meerkat Manor" commercial; voiceover: "In this world, power belongs to the strongest, the fiercest, and sometimes the most unexpected." Meerkat vocalization and music]

TOOMEY: At any hour of the day, there's a myriad of television channels featuring animals: Discovery, National Geographic, even the Sundance Channel. Here's actress Isabella Rossellini doing her best imitation of a snail searching for a mate:

[ambience from Sundance Channel "Green Porno," Rossellini: "I can produce darts. I use them to inflict pain on my partners before mating. It turns me on!"]

TOOMEY: So if you can see eating, killing and even mating right in your living room, what does the zoo have that TV doesn't? Jennifer Gersham is director of education at Boston's Franklin Park Zoo.

GERSHEM: The animals here are real. They're close. You can watch them, you can smell them, you can hear them. You know, when you're standing in front of the lion and he roars, you can feel it in your sternum. It's not something that you can get from Animal Planet.

TOOMEY: And Paul Boyle, of the Association of Zoos and Aquariums, adds that zoos offer something unique in a time when kids are perpetually plugged-in:

BOYLE: Kids are not playing outside. So these zoo and aquarium experiences of those kids, thinking about and valuing nature is being built by these experiences.

[Detroit zoo exhibit ambience, parents and children, "It caught a fish!"]

TOOMEY: It's hard to deny that when people see an animal at the zoo, something pretty incredible can happen.

[Detroit zoo exhibit ambience, parents and children, "It's so cool! It's polar bear!"]

TOOMEY: This is what happens when polar bears swim by an underwater viewing area at the Detroit Zoo:

[Detroit zoo exhibit ambience, parents and children reacting]

TOOMEY: So even though there's no hard evidence—yet—that you need to see an animal before you'll want to help save it in the wild, doesn't it seem pretty logical? Former Woodland Park Zoo director David Hancocks points to one of the most popular conservation efforts in history, and says, "no."

HANCOCKS: There's a very, very high percentage of people in the western world who believe that it is wrong to hunt whales and are concerned about wanting to save them. But there's a very, very minute percentage of people who have ever seen a whale in its wild habitat.

TOOMEY: Regardless, zoos say when it comes to conservation, they're doing more than just educating and inspiring the public. They're participating in conservation projects, either through breeding programs in the zoo or with dollars worldwide, putting them, they say, on par with environmental powerhouses like the Sierra Club and Conservation International.

[Bronx zoo exhibit ambience; birds]

TOOMEY: At the Bronx Zoo, keepers are gearing up for their day. Over at the snow leopard enclosure, keeper Keri Nugent is hiding some treats among the rocks and leaves before the big cats are released into their hillside exhibit:

NUGENT: Um, last night I made them what we call "bloodsicles," and they like to just play with them, bat 'em around, lick 'em. They do all sorts of stuff so I got a bunch that I'm gonna spread around the exhibit for them.

TOOMEY: The Bronx Zoo exhibited the country's first snow leopard more than a hundred years ago. Today, the zoo has nine of them.

[Bronx zoo exhibit ambience; snow leopards growling]

TOOMEY: Pat Thomas is the general curator, and says the snow leopards here are used in studies that could help their endangered wild cousins.

THOMAS: Here at the Bronx Zoo we have just recently completed a study testing the efficiency of various camera traps using snow leopards. We wanted to see whether digital cameras would operate quickly enough to catch a snow leopard running by.

[Bronx zoo exhibit ambience, snow leopards growling]

TOOMEY: The Bronx Zoo researchers won't keep the results of the studies to themselves—they'll hand them off to the zoo's parent organization, The Wildlife Conservation Society. Some zoos do participate in field projects, but W.C.S. is in a class of its own. It actually runs hundreds of conservation programs in more than sixty-five countries, and it's one of the world's top organizations working to save wildlife. But the Association of Zoos and Aquariums says all its accredited zoos are on the frontlines of conservation. That's because they participate in what are known as S.S.P.s, or Species Survival Plans. S.S.P.s carefully manage the breeding of endangered animals in zoos.

BOYLE: As the species is going toward extinction in the wild, the zoo population literally represents an assurance population that will keep the genes of that species alive into the future.

TOOMEY: Paul Boyle is the senior vice president for conservation at the A.Z.A. He uses the plight of the endangered polar bear as an example of what an S.S.P. could accomplish:

BOYLE: If we have enough of them to protect the genetic diversity, while we figure out the long term problems, there is every reason to believe that polar bears could be released into the wild. And the same for many, many species.

[music: Choo Choo Soul, "Blue Zoo Train"]

TOOMEY: It's thought that the first time a zoo animal was released into the wild was in 1907. That's when the Bronx Zoo loaded up fifteen bison at the Fordham railroad station and shipped them to a wildlife refuge in Oklahoma. Other successful reintroductions include the black-footed ferret, the red wolf and the California condor. But reintroductions are complicated, and rare. A review of an A.Z.A. survey found only about ten percent of all S.S.P. species have ever been successfully released back into the wild. So critics argue that an endangered animal born in a zoo—with little chance of ever being reintroduced—is not conservation:

HANCOCKS: It's all about conserving zoos and not about conserving wildlife.

TOOMEY: David Hancocks, former director of Seattle's Woodland Park Zoo:

HANCOCKS: And I think they're creating a sense in the general public's mind that although they hear and read about awful things happening with loss of species in the wild, I think they tend to say subconsciously that we don't really have to worry about that because the zoo's breeding these animals.

TOOMEY: But breeding isn't the only way zoos contribute to conservation. Kris Vehrs is the Executive Director of the Association of Zoos and Aquariums:

VEHRS: A.Z.A. zoos in last five years have contributed eighty-nine million dollars in 100 countries and 3700 conservation projects.

TOOMEY: But critics say zoo should be doing more worldwide. This question of "how much is enough?" is posed in a climate where some zoos are able to spend millions of dollars—forty, fifty, sixty million—on just one exhibit. Peter Knights is the Executive Director of WildAid, an organization that works to stop the illegal wildlife trade. He says a fraction of this money could make a big difference protecting a nature reserve in Africa:

KNIGHTS: We've supported parks in the past where for a million dollars a year you're basically picking up the entire salaries of the rangers, their equipment and their fuel in keeping the park running so, like everything else, money spent in the developing world can go an awful lot further than it can here in the U.S.

TOOMEY: WildAid works with A.Z.A. zoos on a number of projects, and Knights calls A.Z.A. standards some of the best in the world. But he says if he was given millions to help wildlife, he'd use it differently.

KNIGHTS: It wouldn't be to expand an enclosure. It would be to help safeguard their protection in the wild.

TOOMEY: Whether or not zoos are falling short in their conservation efforts is open to interpretation. But historian Jeff Hyson explains why the stakes for zoos are so high.

HYSON: It's not like a museum or a library that simply has books or artifacts. Obviously this is a very strange institution in that what it displays is alive.

TOOMEY: I'm Diane Toomey.

RUSSO: And I'm Christina Russo.

[music: The Flaming Lips, "Christmas at the Zoo"]

RUSSO: You're listening to a special report from WBUR Boston, "From Cages to Conservation—American Zoos: Inside Out."

[music: The Flaming Lips, "Christmas at the Zoo" cont'd]

Part II

RUSSO: This is a special report from WBUR Boston, "From Cages to Conservation—American Zoos: Inside Out." I'm Christina Russo.

RUSSO: The zoo may be the most popular cultural institution in America. The Association of Zoos and Aquariums says 175 million people walk through its members' gates every year. That's more than attend all major sporting events combined. Over time, this public has become more sensitive about animal welfare, and so has the A.Z.A.

Long gone from many top zoos are barren cages, iron bars and cement floors. Now exhibits can look like savannahs, bamboo forests, or the African jungle.

[music and sound effects from Los Angeles zoo commercial, voiceover: "Now the heart of the L.A. zoo beats stronger than ever, and yours will too. Discover the new Campo Gorilla Reserve at the L.A. Zoo, sponsored by Nestlé's Juicy Juice."]

RUSSO: Zoos are also making life inside these exhibits more stimulating; did you know big cats have a thing for Calvin Klein perfume? But critics say the A.Z.A. demands too little of its members. And while some zoos provide a stellar environment, others fall disturbingly short—and it's the animals that are paying the price. Diane Toomey continues our report, this time from the Oakland Zoo:

[sound from Oakland zoo exhibit, lion roars,

kid: A lion!

mom: Lying down, like sideways.

kid 2: Oh yeah, I saw it.

kid: I could, I could see a lion coming.

kid 2: Me too!

kid: See there—wake up, lion!

mom: Shhh, Calvin! I think he needs his rest.]

TOOMEY: It may take a little work to spot the lions at the Oakland Zoo. That's because they can choose to lounge on the other side of a grassy hill, out of public view. Oakland Zoo director Joel Parrott says it's important to give zoo-goers their money's worth—but equally important to give the zoo residents their privacy.

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PARROTT: Visitors come and go, and at the end of the day they go home. But the animals still live here. This is their home, and so they don't have any other place they can go, and so we insist on making their home just as positive as a place for them to live as possible.

[music: Henry Doktorski, "Preparedness March"]

TOOMEY: Exhibits in American zoos have gone through a number of incarnations. Rumor has it, in the 1860s the Central Park Menagerie just tied its African Cape buffalo to a willow tree.

[music: Paul McCartney & Wings, "Zoo Gang"]

TOOMEY: But by the 1900s things got a bit more organized. Zoo historian Jeff Hyson:

HYSON: In early 20th century there actually was a movement for more outdoor exhibits, for artificial rock-moated enclosures, in which the animals would be presented in a barless exhibit.

TOOMEY: Then, in the 1950s, a trend emerged that Hyson calls the bathroom design: white tiled walls and glass-fronted cages. Very clean, but very spare—a little too spare, said animal welfare groups. So in the 1970s another exhibit style emerged:

HYSON: ...where both the animals and the visitors were supposed to feel like they were immersed in the middle of the landscape through various exhibitory tricks that would allow animals to come closer to the visitors, but at the same time give them the flight space that they needed to feel comfortable within their exhibits.

TOOMEY: Since then, the innovations have continued: go to the Oregon Zoo to see the world's first exhibit of free-flying bald eagles. Chimps at Chicago's Lincoln Park Zoo have their own termite mounds. The jaguars at Seattle's Woodland Park Zoo can fish for live trout. And the world's biggest polar bear exhibit is in Michigan.

[sound from Detroit zoo exhibit: ice hitting water]

TOOMEY: It's snack time at the Detroit Zoo. Keepers throw large chunks of fish-filled ice into one of the exhibit's pools.

[sound from Detroit zoo exhibit: ice hitting water cont'd]

TOOMEY: Seagulls hover above the outdoor enclosure, hoping to steal some of the herring. Do the bears ever eat the gulls? Mammal supervisor Betsy Meister:

MEISTER: On occasion. Because this exhibit is nice, big and open and up on a hill we have birds that come and go. Sometimes they don't always leave.

TOOMEY: This exhibit, known as the Arctic Ring of Life, bears little resemblance to the original one built back in 1928. Scott Carter is the director of conservation and animal welfare here:

CARTER: A lot of old exhibits for polar bears in zoos, and our old exhibit was, big rock walls on three sides. It was only open on one side. And that really is kind of sensory deprivation for polar bears. So one of most important elements in the design of the Arctic Ring of Life was this: making it so it's open on all sides and it's up high, making this really important information pathway for them.

TOOMEY: Keeping polar bears in captivity is controversial, because they range over vast distances in the wild. But the Detroit Zoo says it's built an exhibit worthy of the bears. It includes a pool almost half the length of an Olympic-sized one. Carter says it's given the bears some much-needed exercise.

CARTER: They were a little bit fat. Their butts are very buoyant. We put, you know, frozen fish and food in water and it would sink to the bottom and the bears would struggle, and they'd paddle as hard as they could to get to the bottom and they couldn't

do it. As soon as they'd stop paddling their butts would just pull them back to the surface.

TOOMEY: Many other zoos are working hard and paying big to renovate their animal exhibits. Don Moore is director for animal care at the Smithsonian's National Zoo and is an accreditation commissioner for the Association of Zoos and Aquariums.

MOORE: We've gone towards larger and larger naturalistic facilities with larger and larger social groups and animal breeding and if you are an accredited facility you can't live in the past, you have to more toward the future.

TOOMEY: But if A.Z.A. member zoos build larger exhibits, they do so by choice. Except in the case of elephants and marine mammals, there are no minimum size requirements. Here's what A.Z.A. regulations do say, quote: "all animal enclosures must be of a size and complexity sufficient to provide for the animal's physical, social, and psychological well-being," end quote. But are all A.Z.A. accredited zoos meeting even these requirements? Richard Farinato is a former assistant director of the Greenville Zoo, and now works for the Humane Society. He believes that A.Z.A. standards are minimal, vague and far too loosely enforced.

FARINATO: There are several things, I think, that are particularly egregious.

TOOMEY: Farinato has just walked through an accredited zoo which we won't identify. Some enclosures were strewn with candy wrappers, glass, and aluminum cans. Others, he says, were situated too close to a busy street. And at the Mexican gray wolf exhibit, Farinato discovered a hole that he could put part of his hand through.

FARINATO: Touching the wolf, if the wolf were there, or having the wolf touch me in a way I didn't want to have him touch me, this is unexcusable (sic). This is, this is crazy.

TOOMEY: Furthermore, A.Z.A. regulations state animals should be displayed, whenever possible, in exhibits replicating their wild habitat. Farinato says some enclosures here aren't meeting that standard.

FARINATO: We saw some beautiful hyacinth macaws and some greater hornbills here, both of which are very large species of bird. In this case, you've got big tropical birds that should be outside, in outdoor enclosures with the ability to fly, in a very small box.

TOOMEY: Farinato also took issue with the exhibit of a cacomistle—a relative of the raccoon. The animal is displayed in a replica of tiny miner's cabin:

FARINATO: That would be fine if the animal were stuffed and this was a museum. This is a live animal that normally lives in the woods who is living his life on boards and shelves. What's the message you're sending, and more so, what's the point in terms of the animal's welfare and care?

TOOMEY: So does this zoo's cacomistle or tropical bird exhibits violate standards? A.Z.A. accreditation commissioner Don Moore says without seeing the enclosures and knowing the animals' routines, he can't definitively comment, nor would he comment on the hole in the wolf enclosure. But he does say that if the public sees infrastructure problems at a zoo, they should speak up.

MOORE: I think, as American citizens, we have a responsibility if we're uncomfortable with something, to report that. We take complaints, if we get them, very seriously.

TOOMEY: The A.Z.A.'s accreditation process involves an on-site inspection every five years. And Moore says he has faith that his colleagues can discern if zoos are not meeting the standards.

MOORE: You know, I think my fellow accreditation inspectors can sniff out when an institution is skating by, or when their governing authority is not providing enough resources.

TOOMEY: And as for the zoo that Richard Farinato assessed, the future of its accreditation remains to be seen.

[music: Class of 3000, "Banana Zoo"]

TOOMEY: Zoo professionals say good care is more than just a good exhibit. One way zoos are required to enhance the lives of their animals is through something called "enrichment." It's a growing scientific field that's used to, well, bring out the "wild" in a wild animal.

[sound from Detroit zoo exhibit, wolverines sniffing and growling]
ARBAUGH: Well, right now they're, they're sniffing and they're kind of stalking.

TOOMEY: Elizabeth Arbaugh is the enrichment coordinator at the Detroit Zoo. She's standing in front of an enclosure where three wolverines are circling a meat-filled piñata resembling a small animal.

ARBAUGH: It's a natural behavior to stalk something like that and then use their claws to tear it apart. So it usually take—doesn't take them long to take it down. [sound from Detroit zoo exhibit, wolverines growling, tearing, ripping] TOOMEY (in actuality): So I can take it that they feel enriched right now? ARBAUGH: Absolutely.

TOOMEY: Other examples of enrichment: the Honolulu Zoo brushes its rhinos' horns and feet, penguins play with frisbees at the Akron Zoo, and at the Minnesota Zoo, tiger enclosures are spritzed with the Calvin Klein fragrance, "Obsession." This entices the cats to roam their enclosure investigating the scent.

[music: Dr. Hook and the Medicine Show, "Jungle to the Zoo"]

TOOMEY: But keeping an animal mentally and physically healthy involves not only appropriate enclosures, appropriate things to do in those enclosures—but also appropriate companionship.

[sound from Franklin Park Zoo gorilla enclosure]

JACKLE: I'm gonna give him a little more juice. There you go, a little apple juice big guy.

TOOMEY: At the Franklin Park Zoo in Boston, assistant curator Jeannine Jackle kneels in front of a metal mesh doorway, and hands a young gorilla, named Little Joe, a paper cup full of apple juice.

[sound of slurping]

JACKLE: He's having it in a little tiny paper cup with dinosaurs on it. It's kind of funny, but that's what they give us.
[sound of slurping cont'd]

TOOMEY: Jackle is leading Little Joe through a training exercise. These routines allow keepers here to perform simple health exams.

JACKLE: All right Joe can you open your mouth for me? Open? Open? Hold. I can get a look at his teeth. Everything looks good. He gets a little reward, a peanut for that. [sound of crunching]

TOOMEY: Little Joe is one of six gorillas at the Franklin Park Zoo. But only five of them are regularly displayed in their indoor exhibit. The dominant male, named Kit, lives alone.

TOOMEY (in actuality) Is this him? JACKLE: That's Kit.

TOOMEY: Kit is short for Kitombe. He lives in a separate, back-room enclosure. Kit was transferred here from another zoo for breeding purposes more than a decade ago. But when he was introduced to the other gorillas, intense fighting broke out. A number of the primates were put on drugs to calm them down. Zoos use pharmaceuticals like Xanax, Zoloft and Valium for a range of problems, including compulsive behaviors like pacing, head-bobbing and self-mutilation. But in this case, the drugs didn't work, and eventually Kit was taken off exhibit and put into his own indoor enclosure. He's been in solitary—separated from the other gorillas, including his mate and two offspring—for the last ten years.

JACKLE: He's not very friendly, he's more standoffish; he doesn't like to be that close to people.

TOOMEY: When the zoo closes, the rest of the troop is brought into an enclosure next to Kit's. The gorillas are able to touch each other through a metal mesh fence. And assistant curator Jackle says Kit regularly saves some of his dinner so he can eat it with the others. Today, in Kit's cement-floored enclosure there's a small pile of hay, a hammock, and a round piece of heavy plastic:

JACKLE: You know, they're part of his enrichment, just some things for him to toss around. Male gorillas like to display, as you might've seen with—don't get too close, he'll come over and charge at you if you get too close!

TOOMEY: Keeping Kit in solitary this long was not the intention of the Franklin Park Zoo. As the breeding silverback, he should be with his troop. So how did this all happen? John Linehan is the president and C.E.O. of Zoo New England. He says the decision to transfer Kit to Boston was made a by a committee of A.Z.A. gorilla experts.

LINEHAN: They had made a number of genetically-based breeding recommendations but didn't consider the sort of emotional and psychological development of young males.

TOOMEY: Linehan explains the fighting occurred because Kit was simply too young to be leader of the troop:

LINEHAN: So it was like taking an eighteen year-old boy and putting him in charge of a family.

TOOMEY: But is Kitombe's isolation wearing on him after all these years? Linehan doesn't think so:

LINEHAN: No, he's doing really well.

LUKAS: I can tell you the situation Kit is in is exactly the situation I'd want to put an animal that had to be housed solitarily for a while.

TOOMEY: Kristin Lukas is the curator of conservation and science at Cleveland MetroParks Zoo. She chairs the committee that oversees gorilla care for the Association of Zoos and Aquariums. She says solitary gorillas in A.Z.A. institutions are rare—only nine out of 170. And besides, Lukas says, being alone for a male gorilla is not uncommon; it happens in the wild.

LUKAS: It may live on its own or on the periphery of their group forever. It may join up with other males and form an all-male band. And eventually, it may go off on its own and try to acquire females and so on, but living in a solitary way not an unnatural state for a gorilla.

KING: The solitary males do interact with other gorillas.

TOOMEY: Barbara King is an anthropology professor at the College of William and Mary in Williamsburg, Virginia. She studied gorillas at the National Zoo for a number of years and believes, if cared for correctly, they can have a stimulating life in captivity. Like Lukas, King has never seen Kit's enclosure, but she says solitary gorillas in the wild live a far different life than the ones in the zoo:

KING: The interactions may be aggressive, but the gorilla is out there with sun and sky over its head making a choice day by day whether to be solitary or not.

[music: Don Byron, "Theme from 'Hatari!'"

KING: This cannot be considered a reasonable analogy to what has been described for me for Kitombe. My estimation of the situation with Kitombe, is that there's urgency involved.

TOOMEY: The Franklin Park Zoo says it's planning another reintroduction attempt of Kitombe. It's uncertain what will happen if it fails. I'm Diane Toomey.

RUSSO: And I'm Christina Russo. Suitable enclosure space, enrichment and appropriate companionship—each can enhance the lives of captive wildlife. But critics say that for one animal in particular, nothing will ever be enough:

[sound of elephant vocalizing; music continues]

RUSSO: You're listening to a special report from WBUR Boston. "From Cages to Conservation—American Zoos: Inside Out."

Part III

RUSSO: This is a special report from WBUR Boston, "From Cages to Conservation—American Zoos: Inside Out." I'm Christina Russo. There's probably no place at the zoo that gets people talking like the elephant exhibit.

[sound from Oakland zoo, unidentified visitors

man 1: My whole life I've totally loved elephants, me and my grandmother. The New York zoo probably was the first time I saw elephants in captivity, but I've always collected them, little glass-blown elephants and stuff, and so I just love 'em, how sensitive they are, they are just a deep animal.

man2: I went to Africa to see them in real habitat so I know them. 'Cause I saw them, like twenty elephant in one group, and running, taking care of their baby, and I was the one in the car, I was the one in the cage. Here it's more like they're in the cage, so I feel sad for them.]

RUSSO: In 2005, an elephant at the Bronx Zoo named Happy stood in front of a "Jumbo"-sized mirror, lifted up her trunk, and touched a paint mark on her forehead. This small gesture proved something pretty big: that elephants, like humans, are self-

aware. The finding, which was published in a prominent scientific journal, became ammunition for those who oppose elephants in zoos. These critics say there's no way an animal this large, intelligent and emotionally complex belongs in captivity. And some zoos have agreed, making the decision to close their pachyderm exhibits. But most zoos are committed to keeping their elephants—even spending millions of dollars so they can house more of them. Who's right? And what does the fight over elephants in zoos say about the future of zoos, themselves? Diane Toomey continues our report:

[ambient sound from Milwaukee zoo elephant training video]

TOOMEY: In 1993, a video was leaked to the public.

[sound from Milwaukee zoo elephant training video, elephant bellowing]

TOOMEY: It shows a female elephant at the Milwaukee Zoo tied to the ground by all four legs with block-and-tackle. A keeper repeatedly drags a bullhook—a two- to three-foot-long rod with a sharp curved end—over the elephant's back. As he does so, she struggles against her restraints.

[from video, sound of elephant bellowing and keepers shouting, "Get her in line for a stretch. You gotta keep her stretched first...Move over! Move over!"]

TOOMEY: A second keeper walks to the other side of the elephant and swings his bullhook at the animal.

[from video, whopping sound, clanking sound, keeper shouting, "Move over! Move over! Move over!" elephant bellowing]

TOOMEY: The video was made for training purposes. The Milwaukee Zoo practiced a method of elephant management still in use at some zoos today. It allows the keeper to be in the same enclosure as the animal, which is particularly useful for zoos that offer visitor interactions with elephants. Proponents of this kind of training say it should never involve abuse—and the local D.A.'s office and the Association of Zoos and Aquariums found none at the Milwaukee Zoo. Still, the public outcry pressured the zoo to transfer the elephant to a sanctuary in San Andreas, California. It's run by The Performing Animal Welfare Society.

[sound from P.A.W.S. sanctuary, wind]

STEWART: Every time I see that tape I think, "Why doesn't she kill me, everybody?"

TOOMEY: Ed Stewart is the co-founder of P.A.W.S.

STEWART: She should. Most elephants should want to kill everybody. I don't know how they put up with what they've been through.

TOOMEY: The elephant, named Annie, now spends her days roaming a forty acre grassy enclosure.

STEWART: I have to call her so she doesn't get startled. Annie, banana, Annie banan-y! Good girl, Ann!

TOOMEY: Stewart says her favorite pastimes are swimming in ponds, bathing in the mud, and munching on carrots.

[sound from P.A.W.S. sanctuary, elephant eating and drinking]

TOOMEY: Besides Annie, P.A.W.S. cares for a number of former zoo elephants. Pat Derby, who once had a career as a Hollywood animal trainer, is the co-founder. She says its central philosophy is built around choice.

DERBY: I think the choice issue is the most important. If Annie chooses to sleep in the lake, she can stay there. If Minnie doesn't want to go out, she doesn't need to go out. They can do whatever they choose.

TOOMEY: Choice, independence, lots of land, and no pressure to be on exhibit; it's this kind of life that some say all zoo elephants deserve.

sound of Derby talking and elephant vocalizing: "Do you want a bath? You do? Let's have a bath! Okay! You're a good girl. Yes, you are.]

TOOMEY: In the past few years, there's been a push for elephants to be transferred to sanctuaries like P.A.W.S. These days, city councils, major newspapers, scientists and even celebrities are weighing in. Here's actress Lily Tomlin adding her voice to a recent protest:

[sound from KABC-TV report, Los Angeles, 12/3/08, Tomlin: "To continue building a habitat that is inadequate and irresponsible towards elephant's well-being is just unconscionable."]

TOOMEY: Tomlin and others wanted the Los Angeles Zoo to send its lone elephant to a sanctuary; instead the zoo wants to expand its exhibit and add more animals. But Tomlin points to an issue at the center of the debate: do zoos provide enough space for elephants? Kris Vehrs is the Executive Director of the A.Z.A. She maintains, its space requirements are both well-researched and sufficient.

VEHRS: Our elephant experts, who have hundred of hours in managing elephants, got together and discussed this for weeks on end, determining, you know, what do elephants need for good care and they came up with that particular standard.

DOYLE: The A.Z.A. standards for elephants are a joke.

TOOMEY: Catherine Doyle is the elephant welfare specialist with In Defense Of Animals, an animal welfare organization that opposes keeping elephants in zoos.

DOYLE: You are talking about minimum standards outdoors for keeping an elephant is 1800 square feet. That's the size of a three-car garage. Indoors, they can be kept in a pen as small as twenty by twenty feet.

TOOMEY: Space is no small matter for an elephant.

RICHARDSON: Those feet were made for a purpose. And if you don't allow that purpose to occur then the elephant suffers from it.

TOOMEY: Mel Richardson is the veterinarian at the PAWS sanctuary and has worked at a number of zoos across the country. He says that small enclosures can cause arthritis and foot infections, a common problem that can then lead to euthanasia.

RICHARDSON: They are put to sleep because they can't get up, they can't move. They can no longer stand the pain.

TOOMEY: These kinds of foot problems aren't seen in the wild, says Joyce Poole. She's a long time elephant researcher who led the Amboseli Elephant Research Project in Kenya.

POOLE: Our older elephants walk the same as younger elephants, okay they are bit slower, they don't have that bounce in their gait, but they aren't limping along like many elephants you see in captivity.

TOOMEY: A small number of A.Z.A. zoos, for a variety of reasons, have either shut down or are phasing out their elephant exhibits. The Detroit Zoo was the first. Director Ron Kagan explains why he sent his elephants to the P.A.W.S. sanctuary in 2005:

KAGAN: We didn't see a way that we in Detroit could give them a good quality of life, that we could provide them with lots of social partners, that we could truly insulate them from the harsh winters, that we could really give them enough space and enough options so that they could roam around and do what they wanted to do.

TOOMEY: But the A.Z.A.'s Kris Vehrs maintains the animal belongs in zoos.

VEHRS: Elephants should be in zoological environments. We only take care of what we love and what we know. And we provide our elephants with great care, we love them, and they are wonderful conservation ambassadors.

TOOMEY: One accredited zoo that believes it's on the road to exceptional elephant care is the Oakland Zoo.

[sound from Oakland zoo exhibit, Husey: "Good steady, good stretch. Good steady, good stretch. Good steady, good stretch...]

TOOMEY: Animal keeper Chris Husey leads an elephant named Lisa through her daily routine. She stretches out her 9000-pound body in an open-air holding pen. The pen sits at the base of the zoo's hilly six-acre exhibit, one of the biggest in the country. Jeff Kinzley is the elephant manager here. He says it takes plenty of staff—keepers, interns and apprentices—with loads of energy to care for its four elephants:

KINZLEY: The rest of our day after we get done with our morning routine is feeding and providing more enrichment to the elephants all day long. And that goes throughout the night.

[sound from Oakland zoo exhibit, keepers: "Come on Mae, come on. Good girl, Mae! Come on M'dunda, foot! C'mon, Mae!"]

TOOMEY: A female elephant named M'dunda is now in the holding pen. She lifts her foot through the steel bars to be scrubbed.

[sound from Oakland zoo exhibit, water spraying and brush scrubbing]

TOOMEY: Oakland uses a system of elephant management in which the keeper is never inside the animal's enclosure and never carries a bullhook. And when the elephant is asked to do something—like lifting its foot to be scrubbed—it's free to turn down the request. So how do keepers get their elephants to cooperate? Food, of course. And what's the treat today?

KINZLEY: Watermelon. And she loves watermelon! [sound from Oakland zoo exhibit, keeper: "All right, Mae. Switch!"]

TOOMEY: Half the elephants in A.Z.A. zoos are managed this way. But Oakland was one of the first to adopt this system. Director Joel Parrott says he saw a real difference in his elephants when the bullhook was taken out of the equation.

PARROTT: They were no longer required to do anything. They no longer had to be disciplined. They no longer had to be dominated, and it just was a profound awakening for us to see how important that was to the happiness of the elephant.

TOOMEY: Oakland's program is considered one of the top in the country. But some remain adamant: elephants do not belong in zoos. So, is there a middle ground? A way for zoos to exhibit their elephants but provide them a life comparable to one in the wild? Perhaps. Elephant researcher Joyce Poole says if zoos must keep their elephants, they should place them in large—really large—enclosures, where they could live a fairly autonomous life. Think safari in North America.

[music: MC Yogi, "Elephant Power (featuring Bhagavan Das)"]

POOLE: To drive up and sit and watch elephants doing their own thing is just a glorious experience. And you don't have to constantly be adjusting and controlling their behavior to appreciate elephants.

[music, MC Yogi, "Elephant Power (featuring Bhagavan Das)" cont'd]

TOOMEY: Poole recognizes her idea is pretty radical for the zoo industry. She hopes in time there can be a compromise.

POOLE: But it's just very polarized right now.

[music, MC Yogi, "Elephant Power (featuring Bhagavan Das)" cont'd]

TOOMEY: No matter the criticisms flung at zoos, they are deeply entwined in American culture, and few are predicting their demise. But some zoo leaders do see certain shifts. Ron Kagan of Detroit says the willingness of zoos to stop exhibiting elephants is a sign of what's ahead.

KAGAN: I do think that this quality issue-over-quantity is emerging. and whether it's elephants or polar bears or frogs I think you're gonna see fewer places that are pockets of excellence. You know, not everyone is gonna try to do everything.

TOOMEY: Other leaders think specialty zoos are on the horizon, exhibiting animals appropriate to the local climate: bye-bye penguins in Pensacola. Some predict smaller zoos will close, due to financial constraints—especially in this economy. And others believe that with wildlife in such a state of peril, the zoos of the future will have no choice but to put effective conservation work front and center.

COOK: I think the Wildlife Conservation Society has established the direction of where zoos are going.

TOOMEY: Bob Cook is the senior vice president of the Wildlife Conservation Society, which oversees both the Bronx and Central Park zoos.

COOK: The larger institutions are starting to commit to conservation of species not only in zoos, but in free-ranging habitats throughout the world. It's bigger than me; it's bigger than the Wildlife Conservation Society, and it's something that all of humanity has to embrace.

TOOMEY: Few zoos, if any, are doing work comparable to W.C.S. But David Hancocks, former director of Seattle's Woodland Park Zoo, is convinced most zoos can't make a real contribution to conservation—or wildlife education—until they do some serious self-reflection.

HANCOCKS: I think zoos have to go right back right to their basic fundamental sense of, "Why are we here? What do we want to do?"

TOOMEY: But historian Jeff Hyson says zoos, no matter how hard they try, will never be able to satisfy everyone.

HYSON: Right now, we're understanding zoos through the lens of greater media access to images of animals in their habitat, and a growing global concern with environment problems. A generation from now, there may yet be a different set of cultural influences and we might look back and say, "What were they thinking?"

[theme music]

TOOMEY: Or, put another way, zoos—with all their flaws and winning qualities, successes and misguided notions, complex histories and unknown futures—will always reflect us.

[theme music cont'd]

ANNOUNCER: "From Cages To Conservation—American Zoos: Inside Out" was written and reported by Christina Russo and Diane Toomey. The program was edited and produced by Anna Bensted and George Hicks.

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